

Traffic and Road Safety Advisory Panel AGENDA

DATE: Tuesday 25 June 2019

TIME: 7.30 pm

VENUE: Council Chamber, Harrow Civic Centre, Station
Road, Harrow, HA1 2XY

MEMBERSHIP (Quorum 3)

Chair: Councillor Jerry Miles

Councillors:

Peymana Assad
James Lee
David Perry

Christopher Baxter
John Hinkley
Ameet Jogia

Advisers:

Mr N Long
Dr Anoop Shah

Mr A Wood

Reserve Members:

- | | |
|---------------------------|------------------|
| 1. Kairul Kareema Marikar | 1. Vina Mithani |
| 2. Phillip O'Dell | 2. Lynda Seymour |
| 3. Kiran Ramchandani | 3. Ramji Chauhan |
| 4. Sasi Suresh | |

Contact: Daksha Ghelani, Senior Democratic Services Officer
Tel: 020 8424 1881 E-mail: daksha.ghelani@harrow.gov.uk

Useful Information

Meeting details:

This meeting is open to the press and public.

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Agenda publication date: Monday 17 June 2019

AGENDA - PART I

1. ATTENDANCE BY RESERVE MEMBERS

To note the attendance at this meeting of any duly appointed Reserve Members.

Reserve Members may attend meetings:-

- (i) to take the place of an ordinary Member for whom they are a reserve;
- (ii) where the ordinary Member will be absent for the whole of the meeting; and
- (iii) the meeting notes at the start of the meeting at the item 'Reserves' that the Reserve Member is or will be attending as a reserve;
- (iv) if a Reserve Member whose intention to attend has been noted arrives after the commencement of the meeting, then that Reserve Member can only act as a Member from the start of the next item of business on the agenda after his/her arrival.

2. DECLARATIONS OF INTEREST

To receive declarations of disclosable pecuniary or non pecuniary interests, arising from business to be transacted at this meeting, from:

- (a) all Members of the Panel;
- (b) all other Members present.

3. APPOINTMENT OF VICE CHAIR

To appoint a Vice-Chair of the Panel for the Municipal Year 2019/20.

4. APPOINTMENT OF ADVISERS (Pages 5 - 8)

Report of the Director of Legal and Governance Services.

5. MINUTES (Pages 9 - 16)

That the minutes of the meeting held on 26 February 2019 be taken as read and signed as a correct record.

6. PUBLIC QUESTIONS

To receive any public questions received in accordance with Executive Procedure Rule 49 (Part 4D of the Constitution).

Questions will be asked in the order in which they were received. There will be a time limit of 15 minutes for the asking and answering of public questions.

[The deadline for receipt of public questions is 3.00 pm, 20 June 2019. Questions should be sent to publicquestions@harrow.gov.uk

No person may submit more than one question].

7. PETITIONS

To receive petitions (if any) submitted by members of the public/Councillors under the provisions of Executive Procedure Rule 47 (Part 4D of the Constitution).

8. DEPUTATIONS

To receive deputations (if any) under the provisions of Executive Procedure Rule 48 (Part 4D of the Constitution).

9. INFORMATION REPORT - PETITIONS (Pages 17 - 34)

Report of the Corporate Director of Community.

10. PARKING MANAGEMENT AND ENFORCEMENT STRATEGY (Pages 35 - 102)

Report of the Corporate Director of Community.

11. INFORMATION REPORT - TRANSPORT LOCAL IMPLEMENTATION PLAN, ROAD SAFETY STRATEGY AND SUSTAINABLE TRANSPORT STRATEGY (Pages 103 - 404)

Report of the Corporate Director of Community.

12. INFORMATION REPORT - TRAFFIC AND PARKING SCHEMES PROGRAMME UPDATE - 2019/20 (Pages 405 - 452)

Report of the Corporate Director of Community.

13. ANY OTHER URGENT BUSINESS

Which cannot otherwise be dealt with.

AGENDA - PART II - Nil



**REPORT FOR: TRAFFIC AND ROAD
SAFETY ADVISORY
PANEL**

Date of Meeting:	25 June 2019
Subject:	Appointment of (non-voting) Advisers to the Panel 2019/20
Key Decision:	No
Responsible Officer:	Hugh Peart, Director of Legal and Governance Services
Portfolio Holder:	Councillor Varsha, Portfolio Holder for Environment
Exempt:	No
Decision subject to Call-in:	Yes (following consideration by the Portfolio Holder)
Wards affected:	None
Enclosures:	None

Section 1 – Summary and Recommendations

This report advises Members about the appointment of advisers to the Panel for the Municipal Year 2019/20. Members are requested to consider the report and agree the nominations for the 2019/20 Municipal Year.

Recommendations: That the Panel recommend to the Portfolio Holder for the Environment that the nominations for Advisers to the Panel set out in the report be agreed.

Reason: (For recommendation)

To appoint advisers to the Panel for the Municipal Year 2019/20, to assist in the work of the Panel.

Section 2 – Report

- 2.1 Rule 35.4 of the Executive Procedure Rules of the Constitution provides for the appointment of advisers to assist in the work of the Panel either generally or on specific matters.
- 2.2 The Panel appointed advisers to assist with its work for the Municipal Year 2018/19 and this term has now expired. Existing advisers have been contacted and asked to confirm whether they wish to continue to act as advisers to the Panel for the Municipal Year 2019/20.
- 2.3 The following advisers have confirmed that they wish to continue as advisers to the Panel and nominations for the Municipal Year 2019/20 have been confirmed:

- (1) Mr Anthony Wood, representing the interests of public transport users and nominated by Harrow Public Transport Users' Association (HPTUA)

Harrow Public Transport Users' Association (HPTUA)

Established group looking after all public transport users' interests within the Borough of Harrow.

Further info - <https://www.careplace.org.uk/Services/4632/Harrow-Public-Transp>

- (2) Dr Anoop Shah, representing cyclists interests and nominated by Harrow Cyclists

Harrow Cyclists - The Harrow Cyclists are a cycle campaign group whose aim is to encourage cycling in North West London. The group organise the following activities: a rides calendar; social nights; working with the Council to make Harrow roads more bike friendly; helping with bicycle maintenance.

Website - <http://www.harrowcyclists.org.uk/>

- (3) Mr Nigel Long, nominated by the Harrow Association of Disabled People

Harrow Association of Disabled People – Works to promote and bring about inclusion and equality for all disabled people in all areas of life.

Website - <http://www.had.org.uk/>

Options Considered

Not to appoint any advisers.

Ward Councillors' Comments

N/A

Financial/Legal Implications

2.4 There are no financial or legal implications arising from this report.

Performance/Environmental Issues

None.

Risk Management Implications

2.5 If not appointed, the Panel may not have access to external expert advice from suitably qualified persons when conducting its business.

Equalities Implications/Public Sector Equality Duty

2.6 It is anticipated that appointing the proposed advisers will support the Council in meeting its Public Sector Equality Duty based on the advice they will be able to contribute.

Corporate Priorities

2.7 Contributes to the following Corporate Priority: 'Building a Better Harrow' and 'Protecting Vital Public Services' in a general sense by enabling more people to actively engage in sporting activities in ways that improve health and creating transport infrastructure that supports economic growth.

Section 3 - Statutory Officer Clearance

Name: Sharon Daniels	<input checked="" type="checkbox"/>	on behalf of the Chief Financial Officer
Date: 17 May 2019		
Name: Samrah Jaffrey	<input checked="" type="checkbox"/>	on behalf of the Monitoring Officer
Date: 22 May 2019		

Section 4 - Contact Details and Background Papers

Contact: Daksha Ghelani, Senior Democratic Services Officer
Tel: 020 8424 1881

Background Papers: The Council's Constitution

<http://www.harrow.gov.uk/www2/ieListMeetings.aspx?CId=1092&Info=1&bcr=1>

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TRAFFIC AND ROAD SAFETY ADVISORY PANEL MINUTES

26 FEBRUARY 2019

Chair:	* Councillor Jerry Miles	
Councillors:	† Jeff Anderson * Christopher Baxter * Sarah Butterworth	* John Hinkley * Ameet Jogia David Perry
Advisers:	† Mr N Long * Dr Anoop Shah	* Mr A Wood
In attendance: (Councillors)	Phillip O'Dell	Minute 37

- * Denotes Member present
- † Denotes apologies received

The audio recording of this meeting can be found at the following link:

[http://www.harrow.gov.uk/www2/ieListDocuments.aspx?CId=260&MId=64457
&Ver=4](http://www.harrow.gov.uk/www2/ieListDocuments.aspx?CId=260&MId=64457&Ver=4)

26. Attendance by Reserve Members

RESOLVED: To note the attendance at this meeting of the following duly appointed Reserve Members:-

Ordinary Member

Councillor David Perry

Reserve Member

Councillor James Lee

27. Declarations of Interest

RESOLVED: To note that the following interests were declared:

All Agenda Items

Councillor Sarah Butterworth declared a Non Pecuniary interest in that she was Ward Councillor for Harrow on the Hill. She would remain in the room the room whilst the matters were considered and voted upon.

Councillor Christopher Baxter declared a Non Pecuniary interest in that he was Ward Councillor for Headstone South. He would remain in the room the room whilst the matters were considered and voted upon.

Councillor Simon Brown declared a Non Pecuniary interest in that he was Ward Councillor for Harrow on the Hill. He would remain in the room the room whilst the matters were considered and voted upon.

Councillor James Lee declared a Non Pecuniary interest in that he was Ward Councillor for Edgware and lived in Canons Park. He would remain in the room the room whilst the matters were considered and voted upon.

Councillor Jerry Miles declared a Non Pecuniary interest in that he was Ward Councillor for Roxeth. He would remain in the room the room whilst the matters were considered and voted upon.

Agenda Item 10 - Parking Management Schemes programme 2019 / 20

Councillor Ameet Jogia declared a Pecuniary interest in that he owned a property on White House Drive. He would leave the room the room whilst the matter was considered and voted upon.

28. Right of Members to Speak

RESOLVED: That in accordance with Executive Procedure Rule 38.1, the following Councillor, who was not a Member of the Panel be allowed to speak on the agenda item indicated:

Councillor Philip O'Dell – Agenda item 11: Any Other Urgent Business

29. Minutes

RESOLVED: That the minutes of the meeting held on 31 October 2018 be taken as read and signed as a correct record.

30. Public Questions

To note that two public questions had been received and responded to.

31. Petitions

RESOLVED: To note the receipt of the following petitions which were referred to the Corporate Director of Community for consideration:

1. Petition from residents of Warwick Avenue, Harrow, requesting improvements to the road and paving, containing 88 signatures.
2. Petition from residents of Wildcroft Gardens, Edgware, requesting the implementation of a controlled parking zone, containing 13 signatures.
3. Petition from residents of Whitchurch Gardens, objecting to the double yellow lines on Whitchurch Gardens, Whitchurch Close, and Woodstead Gove, containing 90 signatures.

32. Suspension of Procedure Rule

RESOLVED: That procedure rule 48 relating to Deputations be suspended to allow the Panel to receive a late Deputation.

33. Deputations

RESOLVED: That, in accordance with Executive Procedure Rule 16 (Part 4B of the Constitution), the following deputations be received:

1. A deputation requesting modifications to the proposed Controlled Parking Zone in Harrow on the Hill, in order to encourage retail and restaurant use and hence strengthen the economic vitality of the Hill;
2. A deputation to inform the Panel of residents concerns and issues relating to the current Controlled Parking Zone in Harrow on the Hill.

RECOMMENDED ITEMS

34. TfL Local Transport Fund Schemes Programme 2019/20

The Panel received a report of the Corporate Director, Community, which set out a range of proposed programme options for the Panel's consideration to be funded by the £100k Local Transport Fund LIP allocation in 2019/20.

The Chair advised that his preference would be to allocate £75k towards funding three of the four 20 mph zones identified in option A - Vision Zero and allocate £25k towards a report to investigate the feasibility of a low traffic neighbourhood as identified in Option C, Appendix C Walking and Cycling.

An adviser to the Panel requested that the Option B - Bus Priority & option C – Walking & Cycling be prioritised for funding.

An adviser stated that funding the walking and cycling options would address a number of urgent issues, namely air pollution, noise pollution, climate change, childhood obesity, diabetes, etc. He alluded to the success of the

Waltham Forest mini Hollands scheme and stated that the Mayor of London's cycling fund had been significantly underspent. He requested officers to bid for further monies from this fund with a view to improving and enhancing the walking and cycling network in the borough.

Officers had been promoting modal shift in the borough and had noticed an increase in walking, cycling and the use of public transport in recent years. The Council's new 5-year cycle strategy was in the process of being updated. Traffic officers would seek input from the Panel's cycling adviser in formulating the strategy;

Members voted on the chair's recommendation that £75k be allocated to a part of option A – Vision Zero and for £25k to be allocated towards a feasibility study into a low traffic neighbourhood as detailed in Option C - Walking and Cycling. This amendment was approved by a majority of the Panel. It was further agreed that the chair would work with the officers in consultation with the Portfolio Holder to prioritise which of the three 20 mph zones detailed in option A would be taken forward.

Councillors Simon Brown, Sarah Butterworth and Jerry Miles voted for this option. Councillors Christopher Baxter, John Hinkley and Ameet Jogia voted against this option. The Chair used his casting vote.

Resolved to RECOMMEND: (to the Portfolio Holder for Environment)

That the following programme to be taken forward in 2019/20:

Option A – Vision Zero that £75k be allocated towards the delivery of three of the four 20 mph zones schemes identified in the report. Officers to work with the chair of TARSAP and the Portfolio Holder to prioritise the list of 20 mph zones as detailed in the report to utilise the revised budget.

Option C - Walking and Cycling – that £25k be allocated towards a feasibility study into a low traffic neighbourhood as detailed in Appendix C as detailed in the report.

35. Parking Management Schemes programme 2019 / 20

The Panel received a report of the Corporate Director, Community, which set out information about the identification, prioritisation, development and implementation of parking management schemes in Harrow. It also set out information about requests for parking schemes received by the Council and recommended a programme of work for 2019 /20.

Officers responded to Members' questions as follows:

- the schemes included in the proposed programme for 2019/20 were assessed and were given a score rating, the top eight of these had been prioritised for possible funding in 2019/20 in accordance with TARSAP's agreed process. The proposed schemes had not been ranked in order of when the schemes would be taken forward during 2019/20 and that would be determined once TARSAP had considered

the recommendation and approved a programme. It was clarified that there was no waiting list of schemes and additional schemes would not be added to the work programme later in the financial year because all available funds would already have been allocated;

- the operational hours of a scheme were an important part of the design process. Due to the large number of existing CPZs with very short operational hours, typically 1-2 hours, problems have now been encountered with enforcement. As a consequence for future schemes developed residents will be advised that a minimum period of a 4-hour parking restriction will be required in order to enable effective enforcement of CPZ schemes;
- currently, the Council was required to undertake statutory consultation when introducing or amending parking restrictions and as a consequence of typically strong public opinion the implementation of parking controls in the borough was mainly a customer-driven process. It was important to acknowledge the fact that the introduction of parking controls in one area often led to displaced parking in neighbouring areas and that this was an unavoidable consequence of this type of work;
- response rates to consultations was typically low. Harrow had undertaken a survey with other local authorities which had revealed that the response rate in inner London boroughs varied between 5%-25% and in outer London boroughs it tended to be approximately 10%. In cases where the response rate was significantly low, the matter would be referred to Members;
- parking controls, once implemented, could not easily be reversed. It would be more cost effective and politic to use available funds to implement schemes that were required rather than spend money on removing existing schemes.
- incentivising low emission vehicles through lower parking charges was suggested, it was advised that the Council was already trialling electric vehicle charging points in Greenhill, and motorists would be entitled to free parking while they charged up their vehicles.

A Member back benching suggested that it would be sensible to undertake works on Whitefriars, Graham Road and Handel at the same time.

Resolved to RECOMMEND: (to the Portfolio Holder for Environment)

That:

- (1) the list of parking management schemes for 2019 /20 is as shown in **Appendix B**, subject to confirmation of the capital funding allocation for 2019/20 at Cabinet,

- (2) officers be authorised to carry out scheme design and consultation on the parking management schemes listed in **Appendix B**;
- (3) officers be authorised to implement the parking management schemes listed in **Appendix B** subject to further reports being provided on the outcomes of public and statutory consultation and receiving approval of Portfolio Holder to proceed,
- (4) any substantive new requests received to undertake a controlled parking scheme or review that are not included within the agreed programme or priority list in **Appendices B and C** in this report be referred to the Panel for consideration.

Reason for Recommendation: To recommend to the Panel a proposed Parking Management Schemes Programme for the 2019/20 financial year.

RESOLVED ITEMS

36. Information Report: Petitions

The Panel received a report of the Corporate Director, Community, which set out details of the petitions that had been received since the last meeting of the Panel and provided details of the Council's investigations and findings where these had been undertaken.

It was explained that most of the petitions related to requests for parking controls which were addressed in the Parking Management Schemes programme 2019 / 20 report on the agenda.

RESOLVED: That the report be noted.

37. Information Report: Traffic and Parking Schemes Programme update - 2018 /19

The Panel received a report of the Corporate Director, Community, which set out an update on progress with the 2018 /19 traffic and parking management programme of works.

An officer advised that the scheme for Alexandra Avenue had been amended.

RESOLVED: That the report be noted.

38. Any Other Urgent Business

RESOLVED: That In accordance with the Local Government (Access to Information) Act 1985, the following item was included late on the agenda for the reason set out below:

The Chair advised that a petition from residents of Byron and Warham Roads in Wealdstone, containing 49 signatures, requesting an urgent review of the Controlled Parking Zone (CPZ) in Wealdstone, had been submitted to the Traffic section. The petitioners stated that it had become increasingly difficult

for local residents to park near their homes in the evenings due to displaced parking. The petition was supported by Wealdstone Councillors.

Councillor Philip O'Dell stated that, in his view, residents in neighbouring streets to the new zone J CPZ and Wealdstone Councillors should have been consulted as part of the overall consultation for the zone J CPZ. He added that both he and local residents had hoped that the petition could have been investigated and the petitioners request included in the 2019/20 annual parking management programme. However, this had not been possible. He requested that officers investigate the terms of the petition as a matter of urgency, with a view to referring the matter to the Portfolio Holder for Environment. He added that any necessary works required to resolve the situation could be funded from CIL (Community Infrastructure Levy) monies.

An officer undertook to look into the terms of the petition and carry out an assessment. He added that officers would discuss their findings with the Chair of the Traffic and Road Safety Advisory Panel and the Portfolio Holder for Environment. If the matter was deemed to be a priority, then it may be possible to fund it from CIL monies.

(Note: The meeting, having commenced at 7.30 pm, closed at 9.13 pm).

(Signed) COUNCILLOR JERRY MILES
Chair

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**REPORT FOR: TRAFFIC & ROAD SAFETY
 ADVISORY PANEL**

Date of Meeting: 25 June 2019

Subject: **INFORMATION REPORT**
 Petitions

1. Summit Close , Edgware - Request for Controlled Parking Zone (CPZ)
2. Byron and Warham Road, Wealdstone - Request for parking review
3. Churchill, Gresham and Montgomery Roads - Objection to proposed changes to waiting restrictions.
4. Weston Drive / Wetheral Drive - Vibration – Vibration and speed limits
5. Bluebell Court, Tranquil Lane - Request to remove speed hump
6. Whitchurch Gardens - objection to double yellow lines
7. Wildcroft Gardens - Request for CPZ
8. Harrow on the Hill - Change in proposed hours of CPZ
9. Elmore Drive – Request for double yellow lines
10. 704 / 738 Kenton Road– Request for parking controls
11. 1- 17 Courtenay Avenue – Request for access road
12. Dudley Gardens – Request for one way and parking controls
13. The Ridgeway, Stanmore – Request

for a CPZ
14. Oxford Road and Byron Road –
Request to remove parking
restrictions

Key Decision: No

Responsible Officer : Paul Walker – Corporate Director,
Community

Portfolio Holder: Councillor Varsha Parmar – Portfolio
Holder for Environment

Exempt: No

**Decision subject to
Call-in:** No, report is for information

Wards affected: Edgware, Marlborough, Roxbourne,
Canons, Greenhill, Harrow Weald,
Wealdstone, Belmont, Harrow on the Hill

Enclosures: None

Section 1 – Summary

This report sets out details of the petitions that have been received since the last TARSAP meeting and provides details of the Council's investigations and findings where these have been undertaken.

Recommendations:

None, the report is for information only.

Reason:

None, the report is for information only.

Section 2 – Report

Introductory paragraph

- 2.1 The purpose of this report is to inform the Panel about any new petitions received since the last meeting of TARSAP and the current status of any investigations and findings undertaken.
- 2.2 No updates on the progress made with previous petitions will be reported because officers will liaise with the Chair of TARSAP and the Portfolio Holder directly regarding any further updates.

Options considered

- 2.3 This report is provided only to update members on the status of petitions received by the Council that are within the terms of reference of TARSAP.

Background

Petition 1 – Summit Close, Edgware – Request for controlled parking zone

- 2.4 A petition containing 37 signatures was received by the Council in February 2019. The petition states:

“Summit Close is a small cul-de-sac with 36 maisonettes and no off street parking. Because it’s a narrow road there is parking on only one side and we have a problem parking when non-residents park and go off to work. This was exacerbated when Methuen Road and Methuen Close were made CPZ`s. We as residents therefore request a CPZ and enclose our petition”

- 2.5 The request was added to the list of requests to be presented to the panel in the annual parking management report in February. As members are aware all of the requests for parking schemes received during the year or already on the list for consideration are assessed against standard assessment factors agreed by TARSAP. The schemes are then ranked in order of priority and a suggested programme of schemes presented to the panel for their consideration and prioritisation for the forthcoming financial year ahead.

Petition 2 – Byron and Warham Roads, Wealdstone - Request for parking review

- 2.6 A petition containing 49 signatures was received by the Council in February 2019. The petition states:

“We the undersigned call upon Harrow Council to urgently carry out a review of the Controlled Parking Zone (CPZ) in our area as it is increasing difficult to park in the evenings.”

- 2.7 In line with the agreed action at the last TARSAP meeting in February officers met with the PH and the chair of this Panel to discuss the resident`s petition requesting a parking review in Byron and Warham Road.
- 2.8 Prior to the meeting the request was assessed in line with the agreed TARSAP criteria and attained a score below the top eight sites put forward in the annual parking review programme presented at the February meeting of TARSAP. The site therefore would not have been recommended for inclusion in the 2019/ 20 programme which TARSAP debated and agreed at that meeting.
- 2.9 As councillors maybe aware schemes that are not approved but still justify further review will remain on the priority list for assessment in the following financial year. This request is currently ranked within the top ten sites on the current list and therefore has a high probability of being recommended for inclusion in next year`s programme (2020/21).

Petition 3 – Churchill, Gresham and Montgomery Roads – Objection to at any time restrictions.

- 2.10 A petition containing 52 signatures was received by the Council in February 2019. The petition states:

“We the undersigned deplore the fact that Churchill, Gresham and Montgomery Roads have effectively become a public car park for visitors to the Madonna Hayley Hotel and Trilogy Restaurant in Whitchurch Lane”.

This makes it sometimes impossible for residents to park anywhere in these streets on Friday, Saturday and Sunday evenings and renders our parking permits virtually useless. Those with limited mobility or young children are particularly disadvantaged when unable to park anywhere near to their homes.

We consider the council`s proposals to introduce `at any time `waiting restrictions (double yellow lines) at junctions and bends to be an inadequate response to our problems and call on the council to come up with alternative means of dealing with the present unsatisfactory situation caused by the over expansion of Madonna Haley Hotel and to consult us again”

- 2.11 The zone TB area was included in the parking management programme for 2018/19. Churchill Road, Gresham Road and Montgomery Road are already located within zone TB, which operates Mon – Fri, 10am -11am, and were consulted in July 2018 on proposals to extend these hours of control.

- 2.12 Two options of extended hours were proposed:
- Monday – Saturday 8:30 am -12pm and 2:00pm - 6:00 pm
 - 8:30am – 8:30pm Monday – Saturday.
- 2.13 Both Churchill Road (64%) and Gresham Road (80%) were against any changes to the current CPZ hours whilst Montgomery Road (60%) was in favour of longer hours of control.
- 2.14 Given that the geographical nature of these three roads I that they form a large cul-de-sac the results were considered holistically. The decision taken by the Portfolio Holder was to keep the existing hours of control and not to proceed to statutory consultation regarding any changes.
- 2.15 No further reviews are planned for this area in line with the council's current policy.
- 2.16 Where parking reviews are carried out it is standard procedure to review parking at junctions and bends and propose double yellow lines to improve access and visibility. The double yellow lines proposals in this area are therefore designed to comply with parking guidance as stipulated in the Highway Code.

Petition 4 – Wetheral Drive / Weston Drive – vibration and traffic speeds

- 2.17 A petition / letter containing 14 signatures was received by the Council in February 2019. The petition states:

“Last year my husband contacted Harrow Council for the subject matter but as happens always, they are less worried about local resident’s problems and more concern about expenses that will incur to the council to resurface the road, so it’s time for all residents to get together and sort out this ongoing nightmare for once and all and to do that we have decided to start a signing campaign to make sure, not only Harrow council take vibration problem seriously but resolve it immediately too and fix a 20 MPH speed limit for Weston Road without further delay, which is in their power. Subject campaign will also force Transport for London and Metropolitan Police to fix two speed cameras on Weston Drive (around Whetheral Drive junction) so it force motorists and heavy vehicle to follow road speed or face speed fine which will also lower down ongoing vibration problem too.

I will appreciate if you can kindly sign underneath so I can forward this petition to local MP and councillor accordingly”

- 2.18 The council notes the concerns raised regarding alleged vibration to some properties in the vicinity of the Weston Road / Wetheral Drive junction. It should be noted that it is possible for airborne vibration to be generated by traffic which can cause windows to rattle. This could lead to a subjective impression of structural damage although airborne vibration

is not a cause of actual damage or cracking to buildings as a consequence of vehicle type or speed.

- 2.19 All footways and carriageways are inspected on a periodic routine cyclic maintenance regime, between three and four times a year. As a result of these inspections localised repairs are implemented where a defect exceeds the Council's intervention levels and is considered to be a potential hazard to pedestrians or vehicle users. It should be noted that the Highways Team have carried out a structural survey of the road conditions at this location and found no faults in the road.
- 2.20 In order to as far as is practicable, produce a fair and unbiased programme of footway reconstruction and carriageway resurfacing works, these are based upon a robust scoring system which combines the results from structural surveys carried out by consultants on behalf of the Council with scores based on usage, the risk factor, corporate objectives and impact. The extent of the programme is limited by the available budget and is prioritised on the scores given to each road.
- 2.21 Generally the advice given to residents where they feel that that damage has been done to a property because of traffic noise / vibration is to discuss this with their insurance company, provide evidence to support their claim and submit a claim to the council's insurance team.
- 2.22 For information Weston Drive is classed as a local distributor road and therefore provides access to the main highway network including buses and as a result it is council policy not to introduce 20 mph zone or speed humps on these routes. Introducing speed humps or platforms would affect buses and emergency services operational and response times and may divert traffic to other residential roads.
- 2.23 The council has installed a number of speed activated signs to inform drivers of the speed limit with a message to advise drivers to slow down in Weston Drive and consideration will be given to placing additional "Slow" markings at this location.
- 2.24 The council are not directly involved with the introduction of speed cameras. All speed cameras are installed by the London Safety Camera Partnership (LSCP) and have to meet strict criteria for their installation. Fixed camera sites are located where three or more fatal or serious speed related personal injury collisions have occurred over a previous three year period.
- 2.25 Our most up to date personal injury accident data for Weston Drive shows there have been no killed or seriously speed related personal accident injuries recorded over the most recent 36 months of data available. Therefore the provision of a speed camera in this location cannot be considered because it does not meet the criteria.

Petition 5 – Bluebell Court, Tranquil Lane – Request to remove speed platform

- 2.26 A petition containing 31 signatures was received by the Council in February 2019. The petition states:

“We the undersigned are residents of Bluebell Court, Tranquil Lane, Harrow, HA2 0GS and are very concerned about the state of Rayners Lane Road situated adjacent to our block of flats.

The speed bump located on Rayners Lane opposite Tithe Farm Social Club is working against its designed purpose and causing vehicles to speed more than the set limit of 20 mph. The speed bump is not acting as a deterrent for the traffic and instead encourages vehicles to rush even more thereby resulting in more noise and air pollution. Several complaints have also been lodged with TFL about speeding drivers but this, of course, doesn't address the core issue.

This is having a daily impact on our lives and we have listed detailed reasons for its proposed removal below:

- 1. Massive shake to our block of flats when heavy vehicles such as H12 bus passes through. Vibrations are very strong and can be felt even on the 3rd floor of the building.*
- 2. Long term damage to the foundation of the building due to continuous shake (every 10-15 minutes by H12 bus)*
- 3. The speed bump is also proving to be unsafe and dangerous because vehicles are speeding up while getting and off the speed bump. In the absence of any pedestrian crossing, the specific section of this road is used by the residents to cross and reach the Clitheroe Avenue (J) bus stop located on the opposite side of the road.*
- 4. The blind turn, an intersection of roads (Tranquil Lane and Rayners Lane) and main entry door to block of flats along with an absence of any pedestrian crossing are making it a perfect case for potential accident anytime with an over speeding vehicle.*
- 5. This section of the road including the speed bump has deteriorated to a point where potholes have been reported regally by us over the last year and the potholes come back in no time. This is a complete waste of time and money.*

Council would also appreciate the landscape of this area has changed significantly during last year with young families moving to new block of flats and houses around this road. Thus, the traffic calming measures in this area require an immediate review.

Considering all above, we request your support and ask Harrow Council to please remove the speed bump at the earliest and if needed replace it with better traffic calming measures such as a pedestrian crossing and vehicle activated speed limit warning signs.”

- 2.27 For information the speed platform in Rayners Lane was installed in 2013 and was funded by a developer through a section 106 planning

agreement to mitigate the effects of the new development in the area. The platform forms part of a series of speed humps designed to make the road safer by reducing vehicle speeds. The rationale for the introduction of the speed platform was to create a safer environment in order to encourage more walking and cycling particularly because of its close proximity to the development and bus stops.

- 2.28 The speed limit along this stretch of road is 30 mph and not 20 mph as suggested in the petition. Since their introduction the council's perception is that traffic speeds have decreased.
- 2.29 Officers have checked the Council's personal injury accident database which has shown that there have been no incidents of personal injury in this area within the last three years.
- 2.30 The council notes the concerns highlighted in the petition regarding vibration to properties. It should be noted that on some occasions airborne vibration may be generated by traffic which can cause windows to rattle. This could lead to a subjective impression of structural damage, although airborne vibration is not a cause of actual damage or cracking to buildings as a result of the vehicle type or speed.
- 2.31 Unfortunately the opportunities to review existing traffic calming is limited because there are no funds allocated to undertake traffic calming reviews or carry out any statutory consultations or changes as a result. For information The Traffic and Road Safety Advisory Panel in November 2008 agreed a protocol for considering requests for changes to traffic calming features as follows:
- 2.32 Where consideration is to be given to removing or modifying existing traffic calming measures, then the implications and consequences must be considered very carefully, including:
- the potential legal/liability implications of removing measures that were put in as accident reduction measures (as in the case of the Kingsfield Avenue area have been demonstrably successful)
 - the need to re-consult residents and emergency services, including the cost and the timescales involved.
 - the effect on the highway maintenance budget and programme. (N.B. removal of traffic calming in only part of a street would result in not complying with current legislation)
 - the cost of modifying existing measures, or replacing them with some other form of traffic calming.
 - the view of Transport for London or developers in relation to schemes funded by them.
- 2.33 These are not necessarily in any priority order, nor exhaustive. It was suggested, however, that the accident reduction implications are the most

significant issue and great caution needs to be exercised to avoid the potential for road casualties to increase. Apart from the human and economic costs associated with personal injuries, it is necessary to be conscious of Harrow's very successful and consistent record in reducing casualties. It is important to be careful to not adversely affect accident reduction targets set by the Mayor for London and nationally which Councils are obliged to meet.

- 2.34 We continue to receive requests for traffic calming, whereas the request for removal of road humps is extremely small. Similarly, we get an increasing number of complaints about vehicle speeds and request for measures to deal with these through some form of traffic calming measures. However, in light of the concerns raised we will review the request in line with the above criterion.

Petition 6 – Whitchurch Gardens – objection to double yellow lines

- 2.35 This petition was presented to TARSAP at the meeting in February. The petition stated:

“ We object to the proposed double yellow lines TMO on Whitchurch Gardens, Whitchurch Close and Woodstead Grove as it will simply create more congestion on other parts of our streets, there will be less parking spaces overall, and our street is already a very safe and very quiet cul de sac so it is totally unnecessary, unwarranted and costly proposal. Please therefore reduce the scale of the overall TMO ref DP 2018 -24.”

- 2.36 This petition is a duplicate of the petition already presented at the last panel meeting in February and has already had a report.

Petition 7 – Wildcroft Gardens – Request for a controlled parking zone

- 2.37 A petition containing 13 signatures was received by the Council in February 2019. The petition states:

“We the undersigned, request Harrow Council to implement a controlled parking zone between 11am and 12pm from Monday to Friday. This is to prevent congestion and bottlenecks on the road particularly on weekdays whereby commuters are parking in order to walk to the train station. Furthermore it will help increase visibility so that children in particular can cross the roads safely.”

- 2.38 This request will be added to the list of requests to be presented to the panel in the annual parking management report which is discussed in February. As members are aware all of the requests for parking schemes received during the year or already on the list for consideration are assessed against standard assessment factors agreed by TARSAP. The schemes are then ranked in order of priority and a suggested programme of schemes presented to the panel for their consideration and prioritisation for the forthcoming financial year ahead.

Petition 8 – Harrow on the Hill – Change in proposed hours of CPZ

- 2.39 A petition containing 45 signatures was received by the Council in March 2018. The petition states:

“The reason for this petition is in regards to the parking permits affecting local businesses on Harrow on the Hill. These restrictions will cause great dismay to both the businesses and their customers.”

We the undersigned are concerned citizens who urge our council to act now to instill the parking restriction times of 9am-10am and 3pm -4pm. This will allow our local businesses to successfully operate without risking loss of business and loss of customers. From a business point of view these would be acceptable times for the parking restrictions, safe guarding customer footfall.”

- 2.40 The petition along with all the other comments, representations and objections received during the statutory consultation period were collated and presented to the Portfolio Holder for Environment in May for consideration before deciding on any changes to the proposed scheme.

Petition 9 – Kenton Lane / Elmore Drive – Request for double yellow lines

- 2.41 A petition containing 19 signatures was received by the Council in March 2019. The petition states:

“We the undersigned call upon Harrow Council to install double yellow lines at the junction of Kenton Lane and Elmore Drive, Harrow as the sightline leaving Elmore Drive is extremely poor and is causing a hazard to drivers and pedestrians”.

- 2.42 This request was assessed as a part of the local safety parking schemes programme (LSPP) and has met the criteria and is now being processed in the next batch of waiting restrictions schemes.

Petition 10 - 704 / 738 Kenton Road, HA3 9QX – Request for parking controls

- 2.43 A petition from local businesses containing 10 signatures was received by the Council in April 2019. The petition states:

“We, the business owners of above – mentioned addresses, would like to restrict the use of parking bays for the customers and business owners. NOT FOR COMUTERS.

Please advise on the best course of action be it a restriction on parking times or pay and display.”

- 2.44 This request will be added to the list of requests to be presented to the panel in the annual parking management report which will be included on the February 2020 agenda. As members are aware all requests for

parking controls are assessed against standard assessment factors agreed by TARSAP. The schemes are then ranked in order of priority and a suggested programme of schemes is presented to the panel for their consideration and prioritisation for the forthcoming financial year.

Petition 11 – 1- 17 Courtenay Avenue – Request for access road

- 2.45 A petition containing 8 signatures was received by the Council in May 2019. The petition states:

“We the undersigned, request from Harrow Council an access road for Courtney Avenue 1 -17.

This would be similar to that of the access road adjacent to the main traffic road all along the odd numbered side of Courtenay Avenue. The requested access road is not intended for parking, hence does not need to be as wide.

The access road is for residents of 1-17 Courtenay Avenue to safely drive their cars into their front gardens. This will enable safe access for emergency service vehicles, accessibility and freedom of mobility for disable residents and reduce the parking strain on Secker Crescent and the end of Augustine Road.

At present there is no access for emergency service vehicles and disabled residents must be manually supported a lengthy distance to be able to access vehicles. There is also high parking tension in the area with increasingly poor parking practices being conducted. This is resulting in cars being blocked ad grass verge being damaged.”

- 2.46 Transport policies nationally, regionally and locally in Harrow support the reduction of car ownership and car use in order to address the issues of increasing population and demand to travel, increasing level of traffic on the network resulting in congestion and the adverse affect on air pollution and public health. Therefore schemes that encourage or promote car use such as constructing new roads are not supported or funded.
- 2.47 Not withstanding the Council policies on this matter the conversion of a grass verge area would be very expensive because of the potential need for statutory undertakers plant to be diverted and because of the requirement to comply with carriageway construction specifications and the Department of Transport design standards for Roads and Bridges. In this case this request would not be financially viable or feasible in any case.
- 2.48 The council appreciates that due to the current level of car ownership, demand for on-street parking in the evenings and weekends in this area is usually quite high. Unfortunately the council cannot control the number of vehicles people own and that choose to park on the public highway.
- 2.49 As a point of information the council, as the highway authority, is not required and has no obligation to provide any on-street parking for any

resident or motorist on the public highway. The council, like most local authorities, will allow parking on the public highway where it is safe to do so and does not obstruct access.

- 2.50 It is also worth noting that parking on footways or grass verge is prohibited in the London area including the borough of Harrow. This applies to all roads, subject to any statutory exemptions. Where footway parking is allowed the footway must be constructed as outlined above to take the additional loading and marked out using appropriate signage and lining. Any contraventions could be reported to the Parking Operations team for enforcement action.

Petition 12 – Dudley Road – South Harrow - Request for one way scheme and residents parking permits.

- 2.51 A petition containing 67 signatures was received by the Council in May 2019. The petition states:

“We the residents of Dudley Road, South Harrow, Middlesex, hereby ask that you take note, and remedy several serious concerns that our road is currently experiencing. It is essential that changes are made, as it has become a battle ground for most of the day, and indeed the night. Everyone has had enough. Please look at the issues and proposals below, which have put together to improve the safety and quality of the lives of all Dudley road residents.

We strongly believe that Dudley Road should be a one way road. The direction should be from Shaftesbury Avenue to Roxeth Green Avenue.

There must be double yellow lines on the junction of Dudley Gardens and Wesley Close, including double yellows directly opposite Wesley Close.

Provide resident parking permits and this must include visitor parking permits for all residents. Only permit holders will be able to park between Mon – Fri 10-11am and 2-3pm and Sat –Sun 10-11am.”

- 2.52 The funds available to the council to implement traffic management schemes come directly to us from Transport for London and are primarily intended for delivering the Transport Local implementation Plan (LIP) programme of investment. The council has a set assessment method for considering requests such as these to check their suitability for inclusion in the LIP programme and to help us prioritise our work. The criterion is strongly weighted towards targeting sites where there is a history of personal injury accidents this is in line with the mayor for London’s Vision Zero initiative. This objective method of assessing requests has allowed Harrow to prioritise roads so that the worst accident and traffic problems can be dealt with first.
- 2.53 A check of the council’s most up to date personal injury accident data for Dudley Road indicates that there have been no reported personal injury accidents within the last three years. A three-year period of study is the standard nationally, by which traffic engineers assess the frequency of

road accidents and identify particular accident trends for the purpose of assessing road safety and for making comparisons with other areas. On this basis the request for a one way street is considered a low priority for the council at the present time.

- 2.54 The request for double yellow lines will be assessed as a part of the local safety parking schemes programme (LSPP) using an assessment criteria previously agreed by this Panel. If the threshold score required for intervention is met a scheme will be added to the programme and will be batched and then progressed through design, consultation and the implementation phase. Typically this process takes between 3 - 6 months to complete.
- 2.55 The request for residents permit parking will be added to the list of requests to be presented to the panel in the annual parking management report which is discussed in February. As members are aware all of the requests for parking schemes received during the year or already on the list for consideration are also assessed against standard assessment factors agreed by TARSAP. The schemes are then ranked in order of priority and a suggested programme of schemes presented to the panel for their consideration and prioritisation for the forthcoming financial year ahead.

Petition 13 – The Ridgeway, Stanmore – Request for a CPZ.

- 2.56 A petition containing 57 signatures was referred to TARSAP via Cabinet in April 2019. The petition states:

“We the undersigned residents formally request Harrow Council to prohibit XXXXX from continuing to operate in our road. However we appreciate that, given his past performance, he may still not agree to remove the vehicles with which is associated (either/ by personal / corporate ownership or otherwise) from our road.

Accordingly, we also formally request the Council to make The Ridgeway a Residents Only parking road, with limited parking outside of this permitted say, from 10:00am – 11am and from 2:00pm - 3:00pm.”

- 2.57 The request for residents permit parking will be added to the list of requests to be presented to the panel in the annual parking management report which is discussed in February. As members are aware all of the requests for parking schemes received during the year or already on the list for consideration are also assessed against standard assessment factors agreed by TARSAP. The schemes are then ranked in order of priority and a suggested programme of schemes presented to the panel for their consideration and prioritisation for the forthcoming financial year ahead.

Petition 14 – Oxford Road and Byron Road – Request to remove parking controls

- 2.58 A petition containing 48 signatures was referred to TARSAP via Cabinet in April 2019. The petition states:
- “We the undersigned putting this petition against 24 hours parking restriction on those two above roads. We are the members and associates of London Kalibari which is a Community organisation at 18 Byron Road, Harrow HA3 7ST. The community celebrates socio-religious functions at the centre. We also use the centre every Monday for Senior Citizen Luncheon Club from 12:30pm to 4:00pm and evening meetings. It is very inconvenient for the senior citizen not to park the cars near the centre. There is no need to put 24 hour from Monday to Sunday. Hope you will consider the situation so that we can park near the centre especially on Saturday and Sunday.”*
- 2.59 The introduction of controlled parking zone J with longer operational hours in a large part of Wealdstone between the Leisure Centre and the A409 was introduced following an extensive statutory consultation with all the businesses and residents in 2018.
- 2.60 Residents in many of these streets were either previously within CPZ zone CA or in roads which were not within a CPZ. These residents petitioned the council to be included in a new zone to help deter long term commuter parking caused by the local businesses, shoppers as well as those using nearby bus and train stations.
- 2.61 The suggestions put forward in the petition from London Kalibari to remove the parking restrictions on Oxford Road and Byron Road especially on a Saturday and Sunday that were implemented as a part of CPZ zone J are noted, however, this would simply reverse the situation back to how it was before. TARSAP will recollect that prior to the most recent changes there were significant on-street parking pressures leading to request for a scheme to be considered. Therefore to reverse the scheme to its previous state would disregard the views of a large number of local residents that responded to the public consultation about the original parking pressures. In order to make such a significant change to the scheme would require the same mandate to do so as well as extensive and lengthy public consultation and statutory consultation to be undertaken again. However, it is unlikely that many of the residents who campaigned for the changes in the first place are likely to support this request and currently there are no other local people making similar representations.
- 2.62 It is currently the policy of the panel not to review new parking zones once they have been introduced because the council already has a surplus of requests for new parking schemes on the list and public concerns continue to be expressed that it takes too long to implement parking schemes and that the programme is slow to respond to community needs.

2.63 Whilst we appreciate the comments raised by London Kalibari the Council considers that there is sufficient parking provision within the Wealdstone Town Centre area already. For example there is a large multi-story car park by Canning Road which is a relatively short walk from Oxford Road / Byron Road, parking provision in the Leisure Centre site and there are also “pay and display” parking bays further along Masons Avenue and Headstone Drive.

2.64 A review of CPZ zone J in this area is not recommended.

Ward Councillors’ comments

2.65 No Ward Councillor’s comments have been sought for this report as it is for information only.

Staffing/workforce

2.66 The review of petitions has been undertaken using existing staff resources within the Traffic, Highways & Asset Management Team supported by technical consultants as required.

Performance issues

2.67 The development of any schemes arising from petitions would support the wider aims, objectives and targets in the current Transport Local Implementation Plan (LIP) and help to deliver Harrow’s corporate priorities and in particular building a better Harrow.

Environmental Implications

2.68 The LIP underwent a Strategic Environmental Assessment (SEA). This indicated that there are environmental benefits from delivering the programme of investment. The main benefits are in improving air quality and public health. No negative environmental issues were identified as part of the SEA.

2.69 Key air quality benefits identified were from reducing car travel, encouraging greener vehicles and reducing congestion.

2.70 Key population and human health benefits identified were from reducing casualties, encouraging active travel, health walks and as a result of improving air quality. The benefits associated with increased active travel and health walks are reduced diabetes and obesity levels.

Risk Management Implications

2.71 Risk included on Directorate risk register? No

2.72 The development of any schemes arising from a petition would be subject to separate risk assessments.

- 2.73 There is a requirement to undertake a design risk assessment during scheme development under the Construction (Design & Management) Regulations in order to manage any potential health and safety risks.

Legal implications

- 2.74 There are no legal implications.

Financial Implications

- 2.75 There are no direct financial implications. Any suggested measures in the report that require further investigation would be taken forward using existing resources and funding.

Equalities Implications / Public Sector Equality Duty

- 2.76 The petitions raise issues about issues that affect the traffic and transportation programmes of work as well as identifying new areas of work for investigation. The officer's response to a petition will indicate a suggested way forward in each case.
- 2.77 If members subsequently suggest that officers should develop detailed schemes or proposals to address any of the concerns raised in the petitions these will accord with the Council's current Transport Local Implementation Plan which has been subject to a full Equalities Impact Assessment. These Equalities Impact Assessments have been identified as having no negative impact on any protected equality groups and demonstrate positive impacts on the disability and age equality groups.

Council Priorities

- 2.78 Any findings or investigations in response to petitions detailed in the report support the Harrow ambition plan and will contribute to achieving the administration's priorities listed below:
- Building a Better Harrow
 - Supporting those most in need
 - Protecting vital Public Services
 - Delivering a Strong Local Economy for All
 - Modernising Harrow Council.

Section 3 - Statutory Officer Clearance

Name: Jessie Man	<input checked="" type="checkbox"/>	on behalf of the Chief Financial Officer
Date: 13/06/19		
Name: Patrick Kelly	<input checked="" type="checkbox"/>	on behalf of the Monitoring Officer
Date: 14/06/19		

Name: Paul Walker	<input checked="" type="checkbox"/>	Corporate Director
Date: 13/06/19		

Ward Councillors notified:	NO, as it impacts on all Wards
EqIA carried out:	YES, as a part of LIP3
EqIA cleared by:	Dave Corby, Community - Equality Task Group (DETG) Chair

Section 4 - Contact Details and Background Papers

Contact:

Barry Philips
E-mail: barry.philips@harrow.gov.uk

Background Papers:

Previous TARSAP reports

LIP3

Decision Records

Public and statutory consultation documents highlighted in the report

Petitions

PH Reports

**Call-In Waived by the
Chair of Overview and
Scrutiny Committee**

NOT APPLICABLE

*[Call-In does not apply as the
recommendation is for noting
only]*



**REPORT FOR: TRAFFIC & ROAD
SAFETY ADVISORY
PANEL**

Date of Meeting:	25 June 2019
Subject:	Parking Management and Enforcement Strategy
Key Decision:	No
Responsible Officer:	Paul Walker, Corporate Director - Community
Portfolio Holder:	Councillor Varsha Parmar, Portfolio Holder for Environment
Exempt:	No
Decision subject to Call-in:	No, report is for information
Wards affected:	All
Enclosures:	Appendix A - Parking Management and Enforcement Strategy

Section 1 – Summary and Recommendations

This report provides details of a draft Parking Management & Enforcement Strategy under development which includes parking policies already approved in the third Transport Local Implementation Plan (LIP3).

Recommendations:

This report provides details of the draft Parking Management & Enforcement Strategy under development that including parking policies already approved third in the Transport Local Implementation Plan (LIP3).

Recommendation:

Members are requested to note the contents of the strategy and provide any feedback to the Portfolio Holder – Environment.

Reason: (For recommendations)

The draft parking and enforcement management strategy sets out the Council's approach to parking control and enforcement in the borough and ensures that the parking policies in the approved third Transport Local Implementation Plan will be effectively taken forward to address the significant environmental and economic challenges faced by Harrow residents and businesses. This is required to facilitate Highways Authority functions under the Highways Act 1980.

Section 2 – Report

Introduction

- 2.1 The development and preparation of the third Transport Local Implementation Plan (LIP3) amended many of the existing parking policies and introduced new parking policies. These have all been subject to extensive public consultation and engagement with all relevant stakeholders as a part of the LIP3 consultation process. LIP3 was approved by the GLA Deputy Mayor for Transport on 12th April 2019.
- 2.2 These updated policies have necessitated an update in policies, protocols, operational plans and strategies that are incorporated in current parking management and enforcement activities. The updated Parking Management Strategy attached at Appendix A reflects these necessary updates.
- 2.3 This strategy updates and supersedes the Parking Management and Enforcement Plan (2011) and Parking Enforcement Policy (2015).
- 2.4 The main revisions included in this strategy include:
 - changes to green vehicle policy to prioritise zero emission electric vehicles,
 - introducing vehicle emissions based charging;
 - Introducing a diesel vehicles surcharge,

- expanding the use of tiered charges in line with the London Plan classification of centres,
- revising charges for residents permits and on-street businesses permits in CPZs,
- introduction of traders permits to facilitate short duration business activity,
- formalisation of doctors (GPs) permits, and
- setting some design principles for controlled parking zones (CPZ) to improve parking enforcement operations

Options considered

- 2.5 The strategy is incorporating policies from the third Transport Local implementation Plan which has already been subject to extensive consultation with a wide range of stakeholders and approved by the GLA. To that extent there was no option but to have this updated strategy. However in finalising the recommendations for the charging regimes, there were options considered in terms of variants to emission based charging.

Background

- 2.6 The last Parking Enforcement Policy was prepared in 2015 when the service transferred to the Commissioning and Commercial Directorate. This predominantly covered parking enforcement issues only. The last complete Parking Management and Enforcement Plan was produced in 2011 following the publication of Harrow's second LIP. This revised strategy covers both parking management and enforcement.
- 2.7 The key policy, legislative and other changes that have occurred since the previous plans were produced are:
- The Mayor of London's Transport Strategy 2018
 - Grace periods for enforcement 2015
 - Revisions to the Traffic Signs Regulations and General Directions
 - The introduction of technology that can support virtual parking permits in Harrow during 2019
 - Increased importance of healthy streets and environmental issues
 - The Climate Change Strategy agreed by Cabinet in February 2019
- 2.8 Revised parking and enforcement policies that were agreed as part of LIP3 are provided in **Appendix A**. The most significant policy changes that have affected the development of the strategy are:
- PE16 Review the viability of introducing a revised parking permit structure based on vehicle emissions.

- PE17 Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles.
- PE19 Consider introducing virtual permitting system for most permit types across the borough where practicable and following this remove free parking for motorcycles borough wide.
- 2.9 There are also revised development and regeneration policies that are relevant to parking and were agreed as part of LIP3 as shown in **Appendix A**.
- 2.10 Taking account of these policy drivers new objectives have been developed for the strategy and these are shown in **Appendix A**.
- 2.11 The overall Parking Management & Enforcement Strategy includes:
- The legislative background to parking,
 - New aims, objectives and policies,
 - Approach to environmental issues through parking regulations,
 - Information on how new parking schemes are selected, funded and the parking management programme,
 - Description of different types of parking controls, parking bays and permits used in the borough,
 - Use of cashless parking,
 - Revised electric vehicle parking policy,
 - Green vehicle policy,
 - Design principles for future controlled parking zones ,
 - Enforcement management,
 - PCN information and challenging PCNs,
 - Monitoring.
- 2.12 The new strategy will require a number of structural changes to parking control measures and charging regime which will require separate public consultation. In summary these proposed changes are as follows:
- Residents permits – use of vehicle emissions based charging,
 - Business permits (on-street) - use of tiered charges in line with the London Plan classification of centres,
 - Traders permits – introduction of a new permit to facilitate traders working in CPZs,
 - Doctors (GPs) permits – introduction of a new permit to facilitate parking of emergency call out vehicle at surgeries without off street parking,
 - Diesel vehicles – introduction of a surcharge for more harmful vehicle emissions,
 - Electric vehicles – introduction of subsidised charging for zero emission vehicles.

- 2.13 The proposed changes are described in more detail in the sections below.

Resident parking permits

- 2.14 Resident parking permits are zone and vehicle specific and allow resident permits holders to park in permit bays in the zone of their issue and, where signs indicate, to also park in selected shared use bays.
- 2.15 It is proposed to change the permit structure and cost of resident parking permits to incentivise the use of zero and lower emission vehicles and to encourage reduced car ownership. Charges will be applied relative to engine capacity for vehicles registered prior to 1st March 2001 and by the vehicle emissions rating after that date.

Tiered charges (based on location)

- 2.16 The strategy proposes that the Council revise the cost of on-street Business parking permits and Traders permits and also parking dispensations and suspensions. Charges will vary between different types of town centres to reflect the importance and level of parking demand at different locations. There are currently four different tiered cost rates used for parking in “pay and display” bays and it is explained that these categories are applied to other control measures set out in this report.
- 2.17 The classifications are set according to the local extent of shopping characteristics, available car parks, existing public transport links and existing leisure facilities as set out by the London Plan’s town centre network classifications and Harrow’s Local Development framework. The charges increase with the importance of the economic centre classification because the mix, quality and quantity of retail outlets and community facilities available to the customer become more substantial and there is consequently a greater demand to park. The classifications and locations are shown below:

Type of centre	Locations
Local	Sudbury Hill, Hatch End, Harrow Weald, Queensbury, Belmont,
District	North Harrow, Pinner, Rayners Lane, South Harrow, Stanmore, Wealdstone, Kenton, Burnt Oak, Kingsbury, Kenton
Major	Edgware
Metropolitan	Harrow

Business (on-street) permits and Traders permits

- 2.18 A new category of permit will be created to facilitate short term business activity known as a Traders permit.

- 2.19 Traders parking permits will be zone and vehicle specific and allow permit holders to park in permit bays in the zone of their issue and, where signs indicate, to also park in selected shared use bays.
- 2.20 The new Traders parking permits will enable visits by tradespeople such as electricians, plumbers, builders, window cleaners, landlords, etc. to visit properties in the borough using shorter duration permits that allow a single vehicle to park in a specific street in a CPZ. The permit durations available would be for a day, a week or a month as required subject to meeting the relevant criteria. Traders would need to provide proof of the business and the work activity in order to apply for a permit.
- 2.21 Annual Business (on-street) permits would continue to be issued to vehicles registered with businesses located within a CPZ. Eligibility will continue to be for vehicles required to operate the business e.g. delivery vehicles. The criteria for an annual business are stricter than for Traders permits and require proof of vehicle ownership and business address in the zone to minimise any misuse. An annual business permit would allow users to park at their usual business address in a permit bay.
- 2.22 A tiered system of charging is proposed for both Traders and Business permits as described in 2.16.
- 2.23 Spot checks on misuse of Business permits and Traders Permits will take place to ensure that permits are being used in line with their issue. This will be part of the enforcement regime.

Doctor's (GP) permits

- 2.24 Some Doctors (GP) surgeries without off-street parking are located in places where doctors have difficulty in parking a car used for emergency call out duties and can affect the operation of the service.
- 2.25 The Council considers this to be a critical community service and so will provide a doctors parking bay in close proximity to a surgery subject to complying with strict criteria. A doctor's permit is required to use the bay.

Diesel vehicles

- 2.26 Diesel vehicles can emit up to four times more nitrogen oxide and 20 times more particulate matter than petrol vehicles and these pollutants have been linked to heart and lung diseases, which are major causes of long term illness and even death. For this reason, the council proposes a surcharge for resident, doctor, business (on-street) and traders permits to address the impact of diesel fuel on poor air quality and public health and to encourage a move away from polluting vehicles.

Green vehicle policy and electric vehicles

- 2.27 A review of the existing green vehicle policy has been undertaken and it can be seen in the table below that nearly 40% of all permits are now issued to environmentally friendly vehicles. The current green vehicle policy includes both electric and electric / fossil fuel hybrid vehicles in this classification. The vast majority of these vehicles are hybrid vehicles which are still capable of giving off emissions.

2018/19 Residents permits		
Category	Issued	Percentage
1st vehicle	5940	48.08%
2nd vehicle	1256	10.17%
3rd vehicle	189	1.53%
4th vehicle	38	0.31%
Environmentally friendly vehicle	4931	39.91%
Total	12354	

- 2.28 With transport policies now moving towards the greater use of zero emission vehicles to support improvements in air quality and public health it is now necessary to revise the green vehicle policy.
- 2.29 The Strategy has amended the green vehicle policy to incentivise the uptake of zero emission electric vehicles. Parking permits for electric vehicles will be significantly subsidised compared with conventional vehicles using fossil fuels or alternative fuel sources that give off emissions. It is proposed that permit charges for vehicles that give off emissions, including hybrid vehicles, will be based on the emissions rating for each vehicle.
- 2.30 It is planned to increase the number and spread of electric vehicle charging points in the borough over the next few years through the annual funding provided by Transport for London for the delivery of the Transport Local Implementation Plan. It is necessary to improve access to on-street charging infrastructure in order to support a greater uptake in electric vehicles. Therefore the introduction of these charges may be phased to ensure that the infrastructure is available to support this.
- 2.31 Charging points will have dedicated electric vehicle charging bays marked on the highway. It is proposed that all electric vehicle charging parking bays are used for charging only and that there is a maximum stay of up to three hours implemented. Electric vehicles must be actively charging when parked in a bay. In general three hours is a sufficient period of time to charge the majority of electric vehicles on the market currently.

Parking dispensations and parking bay suspensions

- 2.32 Parking dispensations and parking bay suspensions are generally issued to accommodate exceptional situations and allow a temporary

permit that allows a specific vehicle to park within a controlled parking zone or on a single yellow line during restricted hours or for a regulated parking bay to be suspended.

- 2.33 In many situations, the proposed new Traders permit will be sufficient to facilitate any necessary short term business parking activity and will significantly reduce the number of dispensations likely to be requested.

Electronic permits

- 2.34 The recent procurement of a new cashless parking systems provider will enable the use of virtual electronic permits. This will lead to the elimination of paper based permits and allow residents to park their vehicles without the need to display a physical permit. It will also bring efficiencies in applying for, administering and enforcing permits in the future. It is anticipated that e-permits will be introduced within this financial year.
- 2.35 The changes to permits being proposed in this report would be implemented using e-permits functionality.

Other changes

Essential service permits

- 2.36 The strategy proposes that essential services permits be made available for Harrow council staff. These essential service permits will enable users undertaking essential council business to stay a maximum of two hours only at locations where working requires use of a car to visit sites. Service managers would be required to manage the issue of these permits and there would be an administrative charge for the permit.
- 2.37 In order to avoid misuse of essential service permits, it is explained that these permits will not be eligible for use around the users' usual place of work (e.g. those working at the Council depot will not be allowed to park in the vicinity of the depot and similarly for those working in other Council offices). It is also recommended that the process be reviewed six months after being introduced and that spot checks are undertaken to check compliance.
- 2.38 These permits will not eliminate/mitigate against parking enforcement activities where vehicles are in areas unrelated to the job they perform for the Council.

Development and implementation of CPZs

- 2.39 The strategy sets out the details of how parking schemes are assessed, selected, funded, developed and implemented. It is necessary to set out clear processes and principles to ensure schemes are taken forward consistently, transparently and effectively.

- 2.40 One important issue is the selection of scheme operating hours. There is an extensive amount of variation in CPZ operational hours which can often be confusing to the motorist and has resulted from providing an excessive amount of choice with regard to operating hours. It is therefore necessary to standardise the types of schemes used for the main types of parking problems to provide more clarity and to ensure that schemes use appropriate solutions to address the main types of parking problems encountered in the borough. This will also help to improve enforcement and compliance with the restrictions.
- 2.41 The strategy proposes that in future three basic standard solutions be used as models to solve the main types of parking problems encountered in the borough. These are as follows:
- Commuter / workplace parking – zones that operate for a minimum of 4 hours in the middle of the working day (e.g. Mon – Fri, 10am – 2pm)
 - Commercial centres / local amenities – zones that operate during the working day, typically 10 -11 hours per day, and facilitates business activity (e.g. Mon – Sat, 8am – 6:30pm)
 - Pressures that include and extend beyond the working day in the evenings or weekends, typically 12+ hours per day (e.g. Mon – Sun, 8am – Midnight)
- 2.42 It is expected that some variation will be necessary to adjust to local circumstances. There will also be circumstances where more bespoke solutions are required, however, these will only be progressed where the circumstances do not fit with the standard operating models.
- 2.43 There is a particular problem with the number of CPZs in the borough that operates for only 1 or 2 hours per day. This situation adversely impacts on the operational enforcement of these CPZs and results in poor enforcement coverage within the available resources. The table below provides details of the CPZs in the borough to date and the different operating regimes in place.

Length (km)	%	No. of CPZs	Duration (daily)
131.9	71.33%	34	Very short duration 1-2 hrs
2.62	1.42%	1	Commuter deterrent 4-5 hrs
37.27	20.15%	12	Working day 10-11 hrs
12.36	6.68%	8	Working day / evening >11 hrs
0.77	0.42%	1	Evening only
184.92	100.00%	55	Total

- 2.44 In order to allow the parking enforcement service to carry out its legal responsibilities effectively and efficiently and reduce the burden on the

enforcement of zones it is proposed that any new schemes developed will now need to operate for a minimum of 4 continuous hours during the day, having regard to sections 2.42 and 2.43 above,

- 2.45 Additionally where requests are received to amend or extend an existing zone which already operates for 1 or 2 hours duration per day then any proposals will be taken forward using one of the standard operating hours indicated in 2.41.
- 2.46 Further to this if a review of an existing short duration CPZs is proposed the opportunity to amend the hours will be offered to all roads in the zone in order to try to standardise hours. Any streets interested in changing should then be included within the proposed scheme under development.
- 2.47 It should be understood that residents can only be consulted on the possibility of changing the operating hours and have the choice not to change because this would be subject to statutory consultation. However, this approach does sets out the only possible method for amending these very short duration zones in order to achieve more consistent CPZ operating hours borough wide.
- 2.48 This will be a gradual process because of the need to undertake statutory consultation and the fact that residents will need to agree to changes before they are introduced.

Car parks at leisure facilities

- 2.49 Long stay commuter parking is having an impact on some car parks at recreation grounds and other leisure facilities in town centres managed by the Council. This is adversely affecting residents and leisure users that wish to use these facilities.
- 2.50 Measures introduced in to the Harrow Leisure Centre some years ago resolved this situation by introducing “pay and display” with a three hours free period and it is suggested that a similar type of approach could be adopted with other leisure facilities to improve access and amenity for local leisure users.
- 2.51 The payment options include the use of the cashless parking system to implement a free parking period and “pay and display” charges and /or the use of a maximum length of stay restriction in the car parks. Any scheme implemented would be adapted to suit the local circumstances and therefore although these will not be identical across the borough, they will fall into one of the categories outlined above.

Conclusion

- 2.52 The proposed changes to the parking charges structure will enable a consistent approach to charging for parking permits that will incentivise the uptake of zero and lower emission vehicles in order to

improve air quality and public health in accordance with the policies in LIP3.

- 2.53 An assessment of the charging structure changes has indicated a cost neutral impact on income and expenditure. Detailed options will be developed for the consideration of the Portfolio Holder for Environment.
- 2.54 The implementation of the proposed changes will require both Public consultation and statutory consultation. The table below provides an indicative timetable of events required to implement the changes:

Stage	Timetable
Cabinet to consider Parking Strategy	Jul 2019
Agree charging structure	Jul – Aug 2019
Public consultation (online consultation portal) – 6 weeks	Sep - Oct 2019
Review public consultation results and decide final charging structure	Nov 2019
Statutory consultation (traffic regulation order) – 3 weeks	Dec 2019
Review statutory consultation results and agree final charging structure	Jan 2020
Implement new charging structure	Feb – Mar 2020

- 2.55 The Strategy will be considered by Cabinet in July and consequently TARSAP members are being requested to provide comments and feedback on the strategy in advance of the Cabinet meeting. Any comments on the strategy need to be provided to the Portfolio Holder – Environment.

Ward Councillors' comments

- 2.56 No ward councillor's comments have been sought for this report as the key policies have already been subject to extensive consultation and engagement as a part of developing LIP3.

Staffing/workforce

- 2.57 The changes will all be undertaken by existing staff resources within the Traffic, Highways & Asset Management team and in the Parking & Network Management Team.

Performance Issues

- 2.58 The strategy supports the wider aims, objectives and targets in the current Transport Local Implementation Plan 3 (LIP3).

Environmental Implications

- 2.59 The parking policies are included in the Transport Local Implementation Plan (LIP) which has been subject to extensive

engagement and consultation including a Strategic Environmental Assessment. The Strategic Environmental Assessment (SEA) indicated that there are environmental benefits from delivering the LIP and the main benefits are in improving air quality and public health. No negative environmental issues were identified as part of the SEA.

- 2.60 The parking and enforcement management strategy will help to ensure that environmental issues remain at the forefront of parking decisions in Harrow. Better parking management will help address poor air quality, public health and climate change issues.
- 2.61 Parking policies include incentivising Zero Emission and Ultra Low Emission Vehicles (ULEV) ownership and recommend providing parking discounts to those with greener cars as well as a surcharge for more polluting diesel vehicles.

Risk Management Implications

- 2.62 Risk included on Directorate risk register? No
- 2.63 The main risk involves the public reaction to the proposed changes to permit charges proposed.
- 2.64 This has already been mitigated by the extensive public engagement and consultation that has already been undertaken as a part of the Transport Local implementation Plan which includes all the parking policies and so the core objectives of the strategy are already in the public domain.
- 2.65 However, further specific public consultation on the exact changes to permits and associated charges is recommended and will allow the opportunity to refine proposals based on public feedback.

Legal Implications

- 2.66 The proposed changes to permits and charging structures will require a legal process to be undertaken before they can be physically implemented.
- 2.67 Subject to statutory consultation requirements, the council has powers to amend the operational provisions for CPZs, including permits and charges, under the Road Traffic Regulation Act 1984, The Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996 and The Traffic Signs Regulations and General Directions 2016.

Financial Implications

- 2.68 The parking permit changes proposed in this report will require public consultation. The advertising and implementation of traffic regulation

orders would be taken forward using existing resources within the Traffic, Highways & Asset Management Service.

- 2.69 Following the completion of statutory consultation, any changes to the permit charging structure, including e-permits, would be implemented using existing resources within the Parking & Network Management Service.
- 2.70 Any in-year revision to the 19/20 approved fees & charges or introduction of new charges will require approval by Director of Finance in consultation with relevant Corporate Directors and Portfolio Holders, as per the delegation from Cabinet in January 2019.
- 2.71 The Parking Management and Enforcement Strategy puts emphasis on green vehicles and incentivises permit holders for the use of zero or low emission vehicles. It is planned to facilitate this by increasing the number and spread of electric vehicle charging points in the borough. The cost of installing new charging points will be met from annual funding from TfL as part of LIP.
- 2.72 An initial assessment of the charging structure changes has indicated a cost neutral impact on income and expenditure. Detailed options will be developed for the consideration of the Portfolio Holder for Environment, and the financial assessment including sensitivity analysis for each option will be undertaken to support an informed decision by Corporate Director in consultation with the Portfolio Holder for Environment.

Equalities implications / Public Sector Equality Duty

- 2.73 LIP3 underwent an Equalities Impact Assessment which includes all the policies in this strategy. In preparing the measures adopted in the Parking Management & Enforcement Strategy, the Council has had due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations between persons who share a relevant protected characteristic and those who do not share it as required under section 149 of the Equality Act 2010.
- 2.74 It is considered that the proposals in the Parking Management & Enforcement Strategy will be of benefit to all and particularly the groups in the table below:

Protected characteristic	Benefit
Gender	Mothers with young children and elderly people generally benefit most from controlled parking as the removal of all-day commuters frees up spaces closer to residents' homes. These groups are more likely to desire parking spaces with as short a walk to their destination as possible.
Disability	The retention of double yellow lines at junctions will ensure level crossing points are kept clear. Parking bays directly outside homes, shops and other local amenities will make access easier, particularly by blue badge holders for long periods of the day.
Age	Fewer cars parked on-street in residential roads will improve the environment for children. Parking controls can help reduce the influx of traffic into an area, and therefore reduce particulates and air pollution, to which children are particularly sensitive.

Council Priorities

2.75 The following table show the key inputs from the strategy that will support the Council priorities.

Council Priorities	Parking strategy input
Building a Better Harrow	Improved parking restrictions directly outside homes, shops and other local amenities will make access easier for all, particularly by blue badge holders for long periods of the day.
Supporting Those Most in Need	Improved parking regulations will reduce local conflict and improve access for the mobility impaired.
Protecting Vital Public Services	The use of e-permits will drive efficiencies in the delivery of the parking enforcement service
Delivering a Strong local Economy for All	The provision of a wider range of permits to support businesses and traders will help the vitality of the local economy.
Modernising Harrow Council	The use of e-permits will modernise the customer experience of parking control systems and the delivery of effective parking enforcement.

Section 3 - Statutory Officer Clearance

Name: Jessie Man	<input checked="" type="checkbox"/>	on behalf of the Chief Financial Officer
Date: 13/06/19		
Name: Patrick Kelly	<input checked="" type="checkbox"/>	on behalf of the Monitoring Officer
Date: 14/06/19		

Name: Paul Walker	<input checked="" type="checkbox"/>	Corporate Director
Date: 13/06/19		

Ward Councillors notified:	YES, as a part of LIP3
EqIA carried out:	YES, as a part of LIP3
EqIA cleared by:	Dave Corby, Community - Equality Task Group (DETG) Chair

Section 4 - Contact Details and Background Papers

Contact: David Eaglesham, Head of Traffic, Highways & Asset Management, 020 8424 1500, david.eaglesham@harrow.gov.uk

Background Papers:

Harrow Transport Local Implementation Plan (LIP3)

Parking Enforcement Policy (2015)

Parking Management & Enforcement Plan (2011)

**Call-In Waived by the
Chair of Overview and
Scrutiny Committee**

NOT APPLICABLE

*[Call-in does not apply as the
recommendation is for noting
only]*

**Harrow Parking Management and
Enforcement Strategy
2019**

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1. Introduction

This document sets out the parking management strategy and the corresponding enforcement operations for the London Borough of Harrow. The strategy supports Harrow's third Transport Local Implementation Plan and sets out how parking and enforcement are managed and planned in the borough.

Parking affects many facets of life for residents, businesses and visitors to Harrow. However studies show that the average car is parked at home for 80% of the time, parked elsewhere for 16% of the time and in use for only 4% of the time¹. The time spent looking for parking spaces is often seen as wasted and unproductive. A lack of available parking can also sometimes be the cause of local disputes between neighbours.

There is now an exceptional level of pressure for on street parking places. As the population of London grows, so does the demand for housing and local services. Just to meet demand for forecast growth, at least 66,000 new homes will need to be built in London every single year. In Harrow, the borough needs to build 13,920 new homes by 2028/29² to meet the growing demand. In addition to the increased parking pressure from new developments and more residents, the borough also has very high car ownership compared with much of London, with nearly a third of Harrow's households having access to two or more cars. Population growth, high car ownership and environmental issues have all influenced the development of this strategy.

Parking is not a static situation but dynamic and constantly changing. This is due to changes in the local environment, such as new developments, conversion of dwellings to multi occupancy homes, changes to rail fares or the economic situation. Existing schemes designed over 10 years ago to mitigate the problems at that time are often no longer appropriate for the location. Because of these changes, modifications to parking provision and enforcement are needed.

Parking is integral to the economic success and liveability of the borough. Residents, visitors, local businesses, hospitals and schools, all require appropriate parking to enable them to thrive. Parking controls need to support local regeneration aspirations as well as to balance the parking needs of residents, visitors, businesses and utility companies and in particular also to support those with mobility difficulties many of whom are entirely car dependent.

Introducing parking regulations without the appropriate enforcement will not deliver the sustainable, harmonious and safe environment that is needed in the borough. It also does not address the issue of local disputes. Dangerous and inconsiderate parking affects the safety and convenience of both drivers and pedestrians and this can be addressed through effective enforcement. Enforcement needs to be targeted and also to be proportionate and managed within available resources. It also needs to be an effective and efficient deterrent. Consistent and regular enforcement is the key to ensuring that both on-street and off-street parking facilities provided for residents, businesses and visitors are used appropriately and are respected.

Introducing parking controls can also have a beneficial effect on air quality and public health. Road traffic is the main source of nitrogen dioxide and a major source of fine particle emissions within the borough. Measures to encourage more sustainable transport choices and to restrain unnecessary car journeys are needed to reduce emissions from road traffic and to improve public health issues related to poor air quality. Development control parking restraint measures are used to drive down car ownership and to encourage greater use of sustainable transport modes. This is intended to increase the number of people walking and cycling and lead to more active and healthy lifestyles.

¹ Keeping the Nation Moving, Facts on Parking, RAC Foundation

² Draft London Plan, December 2017

Parking provision in the borough comprises Controlled Parking Zones (CPZs), private and public car parks, unrestricted parking areas and a number of other types of parking provision for different on-street locations. There are also on-street areas of the network that are uncontrolled. This strategy provides more information on all the various types of parking available in the borough, the reasons for the different parking controls, information on available parking permits and how the parking regime is managed and enforced. It also provides further information on how the Harrow parking programme is developed.

Developing this strategy will enable the borough to improve compliance with parking restrictions and contribute to the borough's environmental sustainability.

2. Background

Local parking management controls and regulations need to change to fit current legislation, the local environment and the Council policy direction. The significant change of the Mayor of London publishing his transport strategy in 2018 has precipitated this latest update. The last Parking Enforcement Policy was prepared in 2015. This predominantly covered the management of parking enforcement issues only. The last complete Parking Management and Enforcement Plan was produced in 2006 following the publication of the Mayor of London's first Transport Strategy.

3. Environmental issues

The environmental impact of car use is a key consideration when designing and improving parking management. Climate change is happening because of an increase in greenhouse gases and transport is a major contributor to the problem.

Vehicle pollution is the main source of poor air quality in the borough and is responsible for a range of health issues. In addition to climate change and poor air quality, car dependency is bad for health. Walking and cycling short distances instead of driving, can help to reduce the prevalence of diabetes and obesity in the community. Doing so can also help to promote healthier lifestyles. The Cabinet approved Climate Change Strategy incorporates actions relating to vehicle emission and this strategy supports the achievement of those actions.

Better parking management can help to address all these issues. Any reduction in non-essential car use is an environmental benefit that the whole community needs to work to achieve. This parking management and enforcement strategy will help to ensure that environmental issues remain at the forefront of parking decisions in Harrow.

Parking policies need to incentivise Ultra Low Emission Vehicles (ULEV) ownership and providing parking discounts to those with *greener* cars will help to do this. Further incentives such as permit charges relating to vehicle emissions will also incentivise low emission cars.

4. Legislative background

Parking and enforcement policy is an important element of Harrow's overall transport and planning strategy. The regulations are a matter of direct interest to all motorists. As car ownership increases, demand for parking spaces intensifies. As the local population increases, parking problems can worsen.

Parking regulations across the borough are introduced in line with Government guidelines and in their development have also considered the following strategies:

- Mayor of London's Transport Strategy, 2018
- London Environment Strategy, 2018
- Draft London Plan, Spatial Development Strategy for Greater London, 2017

- Harrow Core Strategy, 2012
- Equality Act, 2010
- Highways Act

Decriminalised parking enforcement was first introduced in London in 1993 as a result of legislation introduced under the Road Traffic Act (RTA) 1991. This gave local authorities the power to take on responsibility for the enforcement of parking regulations as well as to clamp and remove vehicles. Part 6 of the Traffic Management Act (TMA) 2004 replaced the RTA 1991 in April 2008 and forms the majority of the current legislation in London. There is other London specific legislation under the various London Local Authorities Acts which are relevant for parking enforcement.

Key relevant parking and enforcement legislation is described in this section.

4.1 Road Traffic Regulation Act 1984

This requires local authorities to ensure a free flow of traffic on the roads they manage. This is in part achieved by imposing controls on where and for how long vehicles may park using powers in the Road Traffic Regulation Act 1984 (RTA). This Act applies throughout the UK.

Under the RTA, charges for parking are not limited but they must be based solely on the need to manage parking.. If drivers disobey parking restrictions they can be issued with a Penalty Charge Notice (PCN).

4.2 Traffic Management Act 2004

The legislative framework for councils to carry out parking enforcement changed to the Traffic Management Act 2004 (TMA) Part 6 on 31st March 2008. This replaced parts of the Road Traffic Act 1991 (as amended) and the Local Authorities Act 2000 (as amended). The Act introduced a number of changes in connection with traffic law and set the principles for a complete change in direction in respect of parking enforcement in London. The Act provides for the civil enforcement of most types of parking contraventions.

The TMA was introduced to improve public perception of parking enforcement by providing greater consistency of nationwide parking regulations and providing a fairer and more transparent system. The TMA aimed to bring fairness and greater consistency to the parking industry.

The most significant change from the motorists' point of view is that the Act gave councils across the country the power to issue PCNs by post if the Civil Enforcement Officer (CEO) is prevented from issuing a PCN because the motorist acts in a threatening manner or drives away before it can be affixed. This allows enforcement for drive-aways.

4.3 The Civil Enforcement of Parking Contraventions (England) General (Amendment) Regulations 2015 – Grace periods for enforcement

These regulations brought the 10 minutes' grace period for parking enforcement into effect from 6 April 2015. The law now requires that a penalty charge must not be issued to a vehicle which has stayed parked in a parking place on a road or in a local authority's car park beyond the permitted parking period for a period of time not exceeding 10 minutes.

The grace period applies to on-street and off-street parking places provided under traffic orders, whether the period of parking is paid for or free. Any penalty charge during the 10- minute grace period would be illegal, unless the vehicle itself is parked unlawfully (e.g. where the motorist has not paid any required parking fee or displayed a parking ticket where required). Grace periods only apply to designated parking places where a person is permitted to park. A road with a restriction (e.g. single yellow line) or prohibition (e.g. double yellow line) is not a 'designated' parking place either during - or outside of - the period of the restriction or prohibition.

4.4 The Traffic Signs Regulations and General Directions

The management of parking is totally dependent on correct signage, including road markings. These are set down in great details in the Traffic Signs Regulations and General Directions (TSRGD). TSRGD is the law that sets out the design and conditions of use of official traffic signs that can be lawfully placed on or near roads in Great Britain. Signs and lines must be legally compliant, well maintained and regularly checked. TSRGD specifies in precise detail the signs that must be used to indicate parking restrictions. Where there is an unusual or non-standard type of restriction, the Department for Transport needs to be requested to specifically authorise each sign and in some cases its location.

The TSRGD also addresses footway parking. It points out that it is an offence to obstruct the footway and that it is unlawful to drive on the footway; and also states that footway parking can be permitted via a Traffic Regulation Order. There are areas across the borough where footway parking schemes are introduced as they provide the most practical solution to those parking issues. In most instances works to strengthen the footway have to be undertaken before these schemes are introduced.

5. Parking Aims and Objectives

The aim of parking and enforcement controls is to manage on-street and off-street parking spaces effectively. Without regulations, those with disabilities would rarely be able to park close to their destinations; shops and offices would reserve spaces for their own deliveries and service vehicles; drivers would reserve spaces for themselves at key locations and buses, coaches, taxis, motorcyclists and bicycles would all be left to fight for any remaining available street space. Parking regulations are put in place to ensure this does not happen.

Harrow has developed parking management objectives which reflect the timeframe of the Mayor's Transport Strategy (MTS) up to 2041. The objectives have been developed in order to meet the wider demands of the economy, the environment, visitors and residents. The objectives will also do the following:

- Assist in delivering the borough corporate priorities
- Address Harrow's key parking concerns
- Assist in delivering the Mayoral aim for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041

Harrow's corporate priorities are:

- Build a Better Harrow
- Supporting those most in need
- Protecting vital public services
- Delivering a strong local economy for all
- Modernising Harrow Council

Harrow's key parking concerns are

- Increased pressure on kerb space parking
- Population growth adding to the increased pressure on kerb space parking
- Loss of public car parks to development placing increased pressure on kerb space parking
- High and increasing number of households with more than one car

.

The Harrow parking objectives are as follows:

1. Manage and reconcile the competing demands for kerb space through balancing the provision of parking for residents, visitors and local businesses
2. Manage the traffic network to ensure expeditious movement of traffic
3. Meet the needs of people with disabilities, particularly those who are unable to use public transport and depend entirely on the use of a car, and provide appropriate dedicated spaces for disabled drivers
4. Improve the accessibility of public transport services
5. Facilitate traffic flow and access to properties for the mobility impaired, emergency services, healthcare workers and servicing vehicles
6. Ensure that parking in town centres is convenient, safe and secure
7. Support business activity by providing effectively enforced short-stay parking and improving the reliability of servicing
8. Deter long-term on-street commuter parking
9. Reduce the need for car ownership and private parking
10. Support the provision of car clubs
11. Discourage unnecessary journeys
12. Use parking regulations and permit policies to encourage the uptake of more sustainable modes of travel and reduce the use of private cars
13. Reduce the time spent by drivers searching for parking spaces
14. Improve road safety and reduce the frequency and severity of collisions by removing obstructive and dangerous parking and improving visibility for all road users

6. Policies

Harrow's third Transport Local Implementation Plan contains the strategic policies that influence parking management and enforcement within the borough and also development and regeneration policies relevant to parking. These policies have been developed and revised following wide scale public consultation. These high level policies are as follows:

6.1 LIP3 Parking and Enforcement policies

- PE1 In the development and operation of parking schemes and to ensure transparency, the council will follow the guidelines as outlined in the parking management strategy which will be regularly reviewed and updated
- PE2 Promote and secure the adoption of consistent and complementary strategies at national, regional, London, sub-regional and neighbouring local authority levels and through the restraint-based car-parking standards
- PE3 Ensure that charges for parking support the economic vitality of all town centres
- PE4 Support local businesses by giving priority to short stay on-street parking and by discouraging on-street long-stay parking
- PE5 Charges are set to discourage the use of private cars, however where off-street parking is available, ensure that charges for off-street parking:
- Support the economic vitality of all town centres
 - Finance progressive improvements to the standards of the council owned car parks
 - Consider price competitiveness with comparable privately operated car parks
 - Reduce the demand on surrounding on-street long stay pay and display parking
 - Are set with the aim of car parks being 85% full in peak periods
 - Are self financing
- PE6 Where practicable, seek to secure consistent cross-boundary parking charges in conjunction with neighbouring authorities

- PE7 Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion
- PE8 Work with the parking service and police to enforce and promote safe driving and parking in school zones
- PE9 Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority
- PE10 Monitor and review the provision and operation of CPZs in all areas of the borough that are experiencing on-street parking stress and install new CPZs subject to, demand and consultation with the local community
- PE11 For new CPZs, and as CPZs are reviewed, change the operational hours of enforcement to target the busiest times of the location
- PE12 Review the parking regulations in the Opportunity Area to ensure that the needs of planned growth are appropriately addressed
- PE13 In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered
- PE14 Ensure adequate provision of blue badge parking is available in all town centres
- PE15 Provide reduced cost residential and other relevant parking permits for appropriate greener vehicles
- PE16 Review the viability of introducing a revised parking permit structure based on vehicle emissions
- PE17 Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles
- PE18 Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised
- PE19 Consider introducing virtual permitting system for most permit types across the borough where practicable and following this remove free parking for motorcycles borough wide

6.2 LIP3 development and regeneration policies relevant to parking

Development and regeneration can also have a considerable impact on car ownership and car use in the borough. To ensure that these help towards achieving the borough’s aims and objectives, the following strategic development and regeneration policies are included in Harrow’s third Transport Local Implementation Plan. These policies that are relevant to parking and enforcement are as follows:

- R14 Use Section 106 Planning Agreements to secure developer contributions towards the costs of meeting and ameliorating the travel demand generated by development through improvement to public transport, walking and cycling, installing parking controls and, where necessary, creating regulated and controlled public car-parks
- R15 In considering planning applications for non-residential development the council will have regard to the specific characteristics of the development including provision made for:
 - Operational parking and servicing needs
 - Convenient car-parking for people with disabilities
 - Car parking related to shift and unsociable hours working

- Convenient and secure parking for bicycles
 - Needs of parking for motorcyclists
- R16 For new residential developments, parking permits will be restricted for all developments in areas of PTAL 5/6. Permits may also be restricted in new residential developments in areas of lower PTAL rates at the discretion of Harrow Highway's Service. This will not apply to residents with blue badges
- R17 Where accessibility by non-car modes is particularly good or can be made so, the council will actively seek to secure lower levels of car parking provision or even zero provision in developments, and require the completion of a binding agreement to introduce residential permit restrictions on the developments to limit the increase in car use and ensure that any measures necessary to improve accessibility by non-car modes are secured
- R20 In preparing Transport Assessments and Transport Statements to demonstrate sufficient/appropriate levels of car parking provision for location outside of high PTAL areas, trip generation data should be assessed alongside Census travel to work and car ownership data for the relevant ward or Middle Super Output Layer (Office for National Statistics)

7. Parking Management Programme

In Harrow, parking issues are constantly under review and issues are regularly assessed and prioritised to develop an agreed programme of CPZs and parking management schemes to make improvements. There is a very high demand from stakeholders for parking management schemes and reviews borough wide. The main factors that influence the programme are:

- Local residents' demand for improved parking management due to worsening access to parking
- Poor access to local amenities (e.g. shops, parks, etc.)
- Concerns regarding safety and congestion caused by inappropriate parking
- Length of time since a parking review was undertaken (if applicable)
- Coordination with schemes in neighbouring authorities
- Budget and resources available

Reviewing parking controls takes place according to demand. Requests for changes come in from a variety of sources including:

- The Emergency Services
- Refuse collection services
- Social services
- Schools
- Local residents, businesses and members of the public generally
- Local petitions
- Councillors

7.1 Programme development

A programme of new parking management schemes is developed each year by identifying locations where the greatest areas of need can be addressed. The Councils' Traffic & Road Safety Advisory Panel (TARSAP) has this role within its terms of reference and recommends the priorities to be taken forward each year. The developed programme is reviewed annually and changes to the programme are agreed with the Portfolio Holder - Environment to ensure the areas of greatest need are prioritised and to enable greater transparency.

To determine these areas of need, all requests for schemes or actions to tackle parking problems received by the Council are assessed against an agreed set of assessment factors. This allows the

requests to be assessed and prioritised in a consistent and fair manner. This is a formalised process that was recommended at TARSAP in November 2012 and approved by the Portfolio Holder - Environment.

For area parking management schemes such as CPZs, the priority is assessed as follows:

Assessment factor	Typical areas of priority
a) Key stakeholders	Emergency services / Local services / Residents petitions
b) External factors likely to increase demand for parking	Parking displacement, development impact, commercial activity, etc.
c) How long since the location was last considered for the programme	Longer duration since last evaluation
d) Position on the current programme	Longer duration without implementation
e) Number of requests in close proximity within the location	Higher number of requests

The minor localised parking issues programme, cover safety and access issues and the priority is assessed as follows:

Assessment factor	Typical areas of priority
a) Key stakeholders	Emergency services / Local services / Residents petitions
b) Traffic accidents and speed	High numbers of accidents / high vehicle speeds
c) Vehicle flows	High vehicular flows
d) Pedestrian flows	High flow areas like shopping parades, schools
e) Level of accessibility and visibility	Continuous obstruction of sightlines
f) Other local factors with an impact	Adverse impact on bus services, disability issues

7.2 Annual programme and Scheme selection

The council's programme of new CPZ schemes and CPZ reviews is demand led and addresses parking pressures that have been highlighted by elected members, local residents and businesses. The review includes assessments of existing CPZs and requests for new or extended CPZs, including petitions and other representations received during the previous 12 months.

Each year in advance of the new financial year (usually February) all of the assessments are reviewed and ranked and presented to TARSAP who recommend the annual parking management programme for the forthcoming year.

The proposed programme presented to TARSAP is based on selecting the highest priority areas from the assessments. Additional information concerning the extent of works required and costs anticipated for schemes is provided and the number of schemes included in the programme limited to those that can be afforded within the approved annual budget allocations.

Any locations not selected will remain on the list for further consideration and be reassessed for the next annual programme review.

7.3 Programme funding

Borough capital funding is provided for the parking programme and is agreed on an annual basis as part of the wider Council Capital Programme. This capital funding supports the annual grant funding provided by Transport for London for delivering the Transport Local Implementation Plan which includes the parking management programme.

Additional funding is also sometimes available from developer contributions via Section 106 legal agreements. This funding is provided where parking controls are deemed necessary by the borough to facilitate developments in line with local and regional policies and form a part of the conditions of planning permission. To ensure the borough receives this funding, the Council reviews planning applications and takes opportunities to secure contributions from developers in order to address potential parking impacts and/or the public's aspirations for parking controls in the vicinity of development.

7.4 Parking management schemes

The majority of streets in the borough are unrestricted and have no parking controls. In these instances any obstructive or dangerous parking is the responsibility of the Police because the Council can generally only take action where parking restrictions have been introduced.

Where the Council has introduced parking controls these are typically waiting or loading restrictions, permit parking bays, loading bays, pay and display bays and shared use bays and sometimes free bays where appropriate.

Generally parking controls are introduced via two main work programmes. These are wider area based controlled parking zone schemes that address all parking issues in an area or localised parking measures that target a specific location and focus on improving safety and accessibility of the highway.

7.4.1 Controlled Parking Zones

Controlled Parking Zones (CPZs) in Harrow consist of parking bays and yellow line road markings. CPZs cover approximately 48% of the length of roads in the borough's road network and have been developed over the last 25 years across the country in response to increased pressure to park on the highway.

In CPZs, a permit is required in order to park on the road in a parking bay. A CPZ is an area of highway where parking is restricted during a regular period of the day (the operational hours) as specified on signs in and around a defined zone. CPZs allow for parking that is designated by regulation and some of these areas can be designated specifically for residents. Other parking restrictions can also exist within the zone (which may be different from the operational hours), for instance on main roads, which are separately signed.

CPZs are used as they are an effective way of managing parking. Introducing a CPZ provides the following benefits:

- Enables the Council to balance the parking needs of residents, businesses, visitors, people with disabilities, servicing vehicles, health professionals etc. in residential areas
- Enables the provision of easier access for emergency services, deliveries and utility vehicles and ensures safety standards are maintained
- Ensures convenient short term Pay and Display parking is available for shoppers and visitors
- Encourages the uptake of more sustainable means of transport
- Reduces traffic congestion and makes essential vehicle journeys easier
- Allows the introduction of “resident permit restricted” developments
- Can improve local air quality and public health

7.4.2 Local safety parking schemes

There are a large number of locations in the borough where localised parking control measures have been introduced to stop obstructive or dangerous parking. These schemes are generally smaller scale in nature and target specific issues and that fall outside the wider remit of CPZs. They are a valuable initiative primarily targeted at improving road safety and facilitating adequate vehicular access. These schemes mainly use waiting or loading restrictions (yellow lines or kerb strikes).

The borough will continue to introduce a very localised programme of predominantly small scale parking schemes to address the large number of safety and access problems caused by parking (e.g. double yellow lines at junctions and bends) and particularly where refuse vehicles and the emergency services have reported persistent access difficulties. These locations are frequently the subject of site meetings between officers and councillors.

8. Parking controls

Parking regulations need to be enforced, but the authority must ensure that the regulations are suitable and appropriate to each location. Different types of regulations are used to ensure appropriate controls are used for on-street and off-street parking across the borough.

For each different location type, different types of parking permits need to be considered. Further information on parking permits is provided in Section 10. The section provides information on the different types of parking controls that exist across the borough.

8.1 Waiting and loading restrictions

Single and double yellow lines indicate that waiting restrictions are in place. Waiting restrictions are often used to facilitate road safety by keeping sight lines clear at junctions. They also facilitate commercial activity by “reserving” space that can be used for loading and unloading. In addition by preventing parking that would obstruct traffic flow increased locations to load can help to reduce congestion.

Loading restrictions are denoted by yellow kerb strike markings placed on the kerb at right angles to the kerb. Stopping for the purpose of loading and unloading goods is permitted on a waiting restriction (where no loading restriction is present) for up to 40 minutes providing loading/unloading is continuous.

Single yellow lines indicate a restriction that applies to any period less than 24 hours. A time plate shows the times of controls unless the restriction is in a CPZ and the hours of operation coincide with the CPZ operating times. Double yellow lines operate 24 hours a day all year but a time plate is not required.

8.2 Parking bays

Various types of bays are used to best facilitate parking in the borough as described below.

8.2.1 Pay and Display bays

In shopping or commercial areas Pay and Display bays are provided which allow for short term parking for customers and visitors during the working day. A maximum period of stay for these bays ensures a healthy turnover of parking to ensure businesses are supported by a steady flow of customers. These bays may also be available to permit holders if signed as such. Vehicles correctly displaying a valid Blue Badge do not need to pay to park in these bays.

There are four different tiered cost rates for parking in Pay and Display bays. These are set according to the local extent of shopping characteristics, available car parks, existing public transport links and existing leisure facilities as set out by the London Plan's town centre network classifications and Harrow's Local Development framework. The bandings are Metropolitan Centre, Major Centre, District Centre and Local Centre are shown in the table below and indicates how areas are classified.

Type of centre	Locations
Local	Sudbury Hill, Hatch End, Harrow Weald, Queensbury, Belmont,
District	North Harrow, Pinner, Rayners Lane, South Harrow, Stanmore, Wealdstone, Kenton, Burnt Oak, Kingsbury, Kenton
Major	Edgware
Metropolitan	Harrow

The charges increase with the importance of the economic centre classification. This is because the mix, quality and quantity of retail outlets and community facilities available to the customer becomes more substantial and there is consequently a greater demand to park. Costs for each zone are shown on the council website.

Tickets are available from "pay and display" machines located close to the parking bays using coins to the correct value for the parking stay required. Virtual tickets for "pay and display" bays can also be purchased using mobile phone technology thereby facilitating cashless parking.

8.2.2 Permit parking bays

These are bays designed to enable those living and working in the local area to park locally. Permit holders are eligible to park in permit bays. Permits can be issued to a range of different groups including residents subject to eligibility criteria. Without permit parking bays residents would be adversely affected by competition for local parking from people living outside the area. Permits are needed to park in these bays during operational hours. Permits only apply to a single designated zone.

8.2.3 Shared use bays – permits and "pay and display"

For flexibility some parking bays are designated for shared use, which allow them to be used by either permit holders or those with a Pay and Display ticket or other payment methods as designated by the council.

8.2.4 Disabled parking bays

There are over 300 designated on-street disabled parking bays in the borough and around a further 50 designated disabled spaces available at off-street car parks within the borough. Blue badge holders can park indefinitely in all dedicated disabled parking spaces in all council off-street car parks with the exceptions of Queens House and Peel House car parks.

Disabled parking bays are provided specifically in response to individual requests and also at key locations to increase access for disabled people to all amenities across the borough. This includes

provision at shopping centres, key public transport locations, libraries etc. The Council also provides disabled parking bays in all Council run car parks.

The criteria for residential area disabled persons parking place applications are considered on a case by-case basis. Unless the application is for a passenger requiring a disabled person's parking space, all of the conditions listed below must be met in order for the Council to introduce a space. If a passenger requires a disabled person's parking space it can be provided if they meet item three of the criteria below:

1. Applicant must be a current "Blue Badge" holder.
2. The disability must be related to permanent mobility problems that make walking impossible or where the exertion required to walk would constitute a danger to life or a serious deterioration to health.
3. Applicant must be the driver of the Blue Badged vehicle, **or** if the applicant is a passenger of the Blue Badged vehicle it must be shown that:
 - a) The applicant requires physical assistance from the driver of the vehicle and the driver is generally the only person available to assist the applicant. The driver must also live at the same address as the applicant; **or**
 - b) The applicant is sufficiently disabled to require constant supervision by the driver of the vehicle. The driver of the vehicle should be the only person available to provide this supervision and must also live at the same address as the applicant; **or**
 - c) The applicant is between the ages of 2 and 17 years and meets either or both of the criteria stated in sections (a) and (b) above.
4. The applicant's address must have no off-street parking space available (unless the applicant can demonstrate that the facilities are unsuitable for the use of a disabled person due to the nature of their disability or unsuitable for their vehicle).
5. Ability to park on-street is a major problem for most of the day.

There are exceptional situations which don't fit the above criteria. In these cases only, the matter is referred to the Portfolio Holder – Environment to make the final decision.

Annual confirmation of need is required for disabled parking bays introduced in response to individual requests. (This is carried out by the Transportation Section in conjunction with Adult Care Management and Children's Services if necessary).

When disabled parking bays are no longer required, they need to be revoked to free up parking space for other drivers. Before revoking any disabled parking bay, the Council will first attempt to contact the initial applicant that requested the bay to determine if it is still needed. If the bay is no longer needed, the bay will be revoked through the advertisement of a new Traffic Order indicating its removal.

8.2.5 Disabled parking for off-street Council parking places (Housing schemes etc.)

Disabled parking spaces can also be introduced in off-street parking such as car parks, in Council housing estates and in un-adopted roads in the borough. The conditions for introducing these spaces are the same as for on-street disabled parking spaces elsewhere in the borough. Traffic Regulation Orders are needed for off street Council parking spaces wherever enforcement is undertaken by the Council's parking enforcement service. The responsibility for maintenance of the bays, to ensure they are enforceable, may also be with a different Council department than Highways.

8.2.6 Loading bays

The economic viability of many businesses is dependent on the ability to deliver and receive goods. Loading bays are provided to assist businesses to do this. The bays also deter delivery vehicles

circulating roads while looking for suitable space, thereby contributing to traffic congestion and poor air quality.

Loading bays are located where there is strong competition for use of the available on-street space and parking close to the destination without the bays would be difficult. Loading bays operate 24 hours a day unless specifically signed. These bays are not restricted to goods vehicles unless signed as such. Parking is not allowed in a loading bay unless continuous loading and unloading is taking place. When loading or unloading is finished, the vehicle must move to allow other vehicles an opportunity to use the bay.

Vehicles displaying a Blue Badge are NOT allowed to park in loading bays, unless that vehicle is being used for loading and unloading, or the driver is setting down or picking up a passenger.

Continuity of loading/unloading is required to stop in loading bays. However, the Council does accept that the activity can include the time taken to complete paperwork or to store hazardous materials. Parking in loading bays without loading is strictly prohibited and enforced.

8.2.7 Motorcycle parking bays

Motorcycles, mopeds and scooters can offer quick, relatively low cost private transport, do relatively little damage to roads and are more space and fuel efficient than cars, although they can generate relatively more pollution and noise. As motorcyclists are currently not charged for parking in either Pay or Display bays or in resident bays in CPZs, there is no shortage of appropriate parking. Outside the CPZs there is adequate infill space for any necessary parking.

There are currently very few dedicated motorcycle parking bays across the borough because existing marked bays are able to accommodate the existing demand. If the borough does introduce motorcycle parking permits, additional motorcycle parking bays will be provided at appropriate locations and with appropriate charges.

The locations of highest demand for motorcycle parking outside of the CPZ and town centre are motorcycle shops within the borough. These shops provide their own off-street parking spaces for motorbikes.

The borough does liaise with motorcycle groups and responds sympathetically to requests for additional motorcycle parking bays.

8.2.8 Doctors parking bays

Parking bays for doctors (GPs) are provided in exceptional situations only such as where there is no potential for off-street parking and there is a need for the GPs to go out to visit patients and return to the surgery on a regular basis. These are only ever provided in Controlled Parking Zones and only ever implemented for specific situations. Only surgeries with up to date travel plans can be considered for GP parking bays.

8.3 Cashless parking

Cashless parking sessions for Pay and Display bays can be purchased using mobile phone or on line technology.

Removing cash from Pay and Display machines reduces the level of parking machine vandalism and therefore reduces maintenance costs. Enabling drivers to pay from the comfort of their car removes the need to find exact change for parking and also increases the personal perceptions of safety regarding handling cash in the streets, especially at night.

As cashless parking usage increases the extent of Pay and Display machines across the borough will be assessed, with a view to reducing the number of Pay and Display machines and thereby reducing street clutter.

8.4 Electric vehicle parking

The borough provides public electric charging points at key locations and intends to expand the provision of electric charging points across the borough. For all electric vehicle parking places, vehicles need to be charging to use the spaces. There is a maximum stay of up to three hours for charging a vehicle in an electric charging parking space in the borough. To encourage the uptake of electric vehicles, there is currently no parking charge for using these electric vehicle charging locations, however this position will be kept under review.

8.5 Verge and footway parking

Parking on verges and footways anywhere in London is illegal, unless adjacent signs indicate otherwise. Doing so is obstructive to pedestrians, blind people, those with mobility difficulties and to people with pushchairs. It also causes additional maintenance costs, environmental damage and risk of infrastructure damage. Driving onto the pavement or footway (to park or otherwise) is an offence under Section 72 of the *Highways Act 1835*.

The DfT Traffic Signs Manual points out in the context of footway parking, that it is an offence to obstruct the footway and that it is unlawful to drive on the footway. Footway parking can be made legal under a permitted via a Traffic Regulation Order.

There are a few locations across the borough where the high density of parking has unfortunately resulted in regular footway parking. This has been the result of the high number of cars needing to park in the location. These locations will in future be reviewed and where it is agreed necessary will be formalised through the use of Traffic Regulation Orders. Unless the footway parking has been formalised, parking on the footway or on verges remains illegal.

If parking on grass verges is formalised, the verges need to be strengthened to prevent damage to the surface and to protect underground services.

If footway or grass verge parking has been formalised, this will be indicated by appropriate signage at the specific location.

8.6 Car clubs

Car clubs offer the benefit of reducing demand for individual car ownership whilst maintaining access to a car for multiple households. For this reason, the borough supports the introduction of more car clubs.

To discourage private car ownership, both on and off street car clubs are being encouraged by new developments in high PTAL areas such as Harrow town centre. These are being introduced through the planning process in exchange for a reduction in the availability of private parking and are funded by Section 106 legal agreement developer contributions.

8.7 Event day parking

Events can sometimes lead to a temporary increase in demand to park on-street that can detrimentally affect parking amenity for local people. Where this occurs frequently, such as with a sporting venue, it is possible to introduce temporary parking controls in order to mitigate the impact of such events. However, temporary parking schemes do have much higher operating costs than permanent parking schemes due to the need to constantly start and stop controls to suit circumstances and therefore any proposal would need careful consideration.

Requests for event day parking controls, due to major events at Wembley stadium, have been made by local residents living close to Jubilee line stations and some councillors in the borough. This was primarily to consider the additional parking impact of football matches played at Wembley. The Council has undertaken a detailed evaluation of the feasibility of an event day parking scheme

covering the areas around all three Jubilee Line stations at Stanmore, Canons Park and Queensbury including an enlarged area around the existing CPZ at the terminus at Stanmore.

This matter has been considered by TARSAP and it was determined that as the parking impacts are not sufficiently frequent and are of a short term nature it was not considered that they would represent good value for money. In addition the use of resources on an event day scheme would take resources away from other parking schemes in the programme that were considered a higher priority.

To combat the associated additional parking needs of event days, the council has increased enforcement around stations on match days and has introduced some “at any time” double yellow line waiting restrictions at strategic locations.

Any future consideration of event day parking schemes will continue to be assessed on the basis of the scale and impact of any parking problems, the implementation costs of a scheme and any on-going revenue operating costs.

8.8 Pedestrian crossing (zigzag) markings

The approach to, and exit from, pedestrian crossings is marked with zigzag lines. The council (as a Highway Authority) is required by law to install zigzag markings at all controlled crossings. The markings prevent any vehicle from stopping or parking (other than when impeded by traffic).

The purpose of the restrictions is to protect sight lines for motorists (seeing pedestrians on or about to proceed on the crossing) and pedestrians seeing approaching vehicles.

8.9 School “Keep Clear” markings

Harrow Council has introduced “keep clear” markings outside most schools in the borough. The purpose of the markings is to:

- Maintain sight lines for children crossing the road to and from school
- Maintain good access for emergency vehicles
- Prevent any vehicles from stopping

These are shown as yellow zigzag markings directly outside a school. No vehicles should park on the zigzag or even stop to set down passengers whilst the restrictions are in force. Nearby yellow time plates indicate the time of the restrictions.

8.10 Pedestrian dropped kerbs

A dropped kerb for pedestrians is a ramp connecting the street to the pavement and therefore provides easy access to the road surface which is particularly useful for people with wheelchairs or buggies. Parking a vehicle across a pedestrian dropped kerb is classed as an obstruction and either the police or the local council can enforce the contravention.

It is a contravention of the Traffic Management Act 2004 (as amended) to park a vehicle in front of a lowered footway. No part of the vehicle must be in front of the lowered section of footway or kerb (where the footway meets the carriageway). This applies to all lowered footways. Parking a vehicle across a dropped kerb is classed as an obstruction and either the police or the local council can enforce the contravention.

The Highway Code rule 243 advises drivers that ‘Except when forced to do so by stationary traffic, DO NOT stop or park where the kerb has been lowered to help wheelchair users and powered mobility vehicles, or where it would obstruct cyclists.

8.11 Residential and business vehicular accesses

These are locations where the footway is reinforced to take the weight of the vehicle and the kerb is dropped to form a ramp. These are needed if residents or business's require vehicle access to park on their driveways/frontages outside their properties. They can only be built at locations that meet the council's criteria which are shown on Harrow's website.

Vehicle crossing policy guidance and applications are available on line. Before construction, these need to be paid for and approved and then the work will need to be completed by the Council's contractor. These policies were revised in 2018 to allow more flexibility for vehicle crossings.

It is a contravention of the Traffic Management Act 2004 (as amended) to park a vehicle in front of a lowered footway. No part of the vehicle must be in front of the lowered section of footway or kerb (where the footway meets the carriageway). This applies to all lowered footways. Parking a vehicle across a dropped kerb is classed as an obstruction and either the police or the local council can enforce the contravention. Vehicles parking in front of premises with a dropped kerb cause significant inconvenience to those trying to access or leave the premises.

The Highway Code rule 243 advises drivers that 'Except when forced to do so by stationary traffic, DO NOT stop or park:

- where the kerb has been lowered to help wheelchair users and powered mobility vehicles, or where it would obstruct cyclists
- in front of an entrance to a property'

8.12 Vehicle access protection markings

Vehicle access protection markings (H-Bar markings) are used to discourage vehicles from parking across entrances to driveways and garages. The markings highlight the presence of a dropped kerb entrance and inform other drivers that access is required. 'H' Bar markings provide a visible indication to drivers that parking should not encroach upon a vehicle access. H-Bar markings are advisory only and cannot be enforced by the council or the police.

An "H-Bar" marking is an elongated white 'H' which is painted across a vehicular crossing of the verge or footpath where a dropped kerb already exists. The line is white and normally 75mm wide and extends across the dropped kerbs from where each starts to drop down to where the footway is level with the road surface. This does not include tapered kerbs.

The Council provides a chargeable service to provide vehicle access protection markings associated with requests to implement and maintain markings. There are two elements of the application process. An applicant is required to complete a form explaining the reasons for the request and there is a fee for assessing the application and for the Council making a decision if the request can proceed to implementation. This application fee covers officer time to make an assessment of the location and the safety aspect of the proposed marking.

If the application is approved then an implementation charge is applied to cover the cost of materials and installation of the marking. Fees are payable by the applicant in advance at each stage, similar to the process currently in place for the provision of vehicle crossing applications. Fees for implementing "H-Bar" markings are provided on Harrow's website.

For registered disabled applicants this service is provided for free.

The life of the white lining is guaranteed for two years by the Council, after which time any lining renewal would be undertaken at the applicant's request and this incurs a further charge.

8.13 Abandoned vehicles

Vehicles considered abandoned by council officers are issued with a formal notice requiring the removal of the vehicle. This applies to both taxed and untaxed vehicles.

In general an abandoned vehicle will have one or more of the following:

- the windows have been broken or doors left open
- it is clearly not being used, for example, it has dirty windows or debris inside
- it is obviously a danger to the public and/or
- it is causing an obstruction

If the vehicle remains unclaimed after the relevant time period, the vehicle will be removed by the Council's contractor. After the expiry of any valid road tax, class 'A' vehicles - vehicles of no value – are immediately scrapped. In the case of class 'B' vehicles - vehicles of some value -, these are kept for 21 days before being destroyed.

8.14 Untaxed vehicles

The Driver and Vehicle Licensing Agency (DVLA) are responsible for dealing with untaxed vehicles. The DVLA use Automatic Number Plate Recognition (ANPR) to identify untaxed vehicles and may do so on roads across the borough.

Where owners of untaxed vehicles do not pay for the vehicle to be de-clamped within 24 hours, the vehicle may be impounded. After seven days at the pound, the vehicle can legally be destroyed.

8.15 Persistent evaders

Persistent evaders are defined as individuals with three or more recorded contraventions for the vehicle that have not been paid, represented against or appealed against within the statutory time limits, or their representations and appeals have been rejected but remain unpaid.

The majority of persistent evaders are vehicles that are not taxed and the DVLA have no current keeper recorded against them. The Council advises the DVLA on a monthly basis of these vehicles and when requested by the DVLA, provides statements to secure their prosecution. However the problem of persistent evaders cannot be addressed by any Borough in isolation and needs to be tackled through a London-wide co-ordinated activity.

The Council supports the need to actively pursue persistent evaders through participating in London wide methods including contributing to the London Council's Persistent Evader Database.

8.16 Vehicle size limits

Large vehicles can cause obstructions for vehicles and pedestrians, reduce sight lines (thereby increasing accident risk), and detract from the appearance of local streets. For this reason, all new Traffic Regulation Orders are written to allow a maximum vehicle size of height 2.08m, maximum length 5.5m, maximum width 2m or maximum weight of 5 tonnes within marked parking bays. CEOs are able to issue PCNs to vehicles that are clearly larger than the maximum dimensions. These size restrictions do not apply to Pay and Display only bays.

9. Design and implementation of parking schemes

9.1 Area based controlled parking zones

Well designed, legal and enforced parking controls are needed to provide a balanced, fair and consistent parking environment, support the safe and efficient movement of traffic and also contribute to the borough's environmental sustainability. Area based controlled parking zone scheme design and development

In Harrow, CPZs are only introduced following local consultation and after community support has been demonstrated through local consultations.

Some parking bays have an impact beyond just the local residents and the wider impact is always considered as part of the consultation.

In designing a CPZ, the following issues are always considered:

- Safety for all road users
- Projected demands for day-time and night-time residents' car parking
- Convenient car parking for people with disabilities
- Convenient and secure parking for cyclists
- Designated parking for motorcyclists
- The balance between car-parking for residents, visitors and local businesses
- Potential provision for electric charging bays
- Opportunities for and implications for Shared Use bays
- Convenient parking provision for delivery and service vehicles
- Business parking requirements
- Signage
- Restraint on traffic growth by reducing available commuter parking

The main purpose of introducing a scheme is to resolve the main parking problems being experienced in the area and bring about an improvement for the local community. Any measures being developed do therefore need to be relevant to the problems encountered and provide a realistic and appropriate solution. In order to ensure this is achieved there are several stages in developing a new or revised area based scheme as follows:

- Stage 1 **Stakeholder engagement meeting** - officers present to stakeholders group a summary of the actual problems reported, the most suitable options for consideration and also the most appropriate consultation area
- Stage 2 **Public consultation exercise** – standardised model consultation documents and questionnaires are distributed. Consultation includes road layout plans providing indicative layouts and these are also provided at exhibitions and the Council offices for public inspection. Public consultation results analysed – Majority support is assessed on the basis of 60% of road residents support being demonstrated
- Stage 3 **Scheme design** (detailed plans and layouts)
- Stage 4 **Statutory consultation** (draft traffic regulation orders) – Statutory consultation results analysed. Only summaries of the objections and representations provided
- Stage 5 **Implementation and review** - clarifies what happens once the scheme development process is concluded. It focuses on the implementation of the scheme and how any future review will be considered

The Council places a high level of importance on community engagement in order to achieve workable and effective solutions. This usually involves:

- Undertaking extensive public consultation and statutory consultation³ which involves advertising the intended proposal by way of a public notice published in the London Gazette, local press and at diverse visible locations on site where the measures are proposed,
- Seeking majority support for the proposals and,
- Consulting with the Council's Portfolio Holder and local ward councillors.

The stakeholder engagement and public consultation stages are where most residents become aware that a new scheme is being considered in their area. At this stage, residents receive a leaflet explaining what is happening and a questionnaire designed to receive comments via a set of specific questions as well as space to provide individual comments. Consultation material is also displayed or made available for inspection at the Civic Centre and contact details are available on all consultation material to enable further information or clarification to be provided on request.

Results from the consultation are analysed by officers to make recommendations and used by members to make decisions about the proposed scheme and therefore the effectiveness of the consultation material heavily influences the quality and accuracy of the information received. For this reason, a minimum 20% of residents in the designated area being consulted is required to respond in order to consider the consultation to be representative. In the event that this is not achieved then local ward councillors and the Portfolio Holder will be consulted on the way forward.

The analysis of the consultation results is presented to TARSAP and prepared following some basic principles as set out below:

- The general principle is to establish an area for the scheme that reflects where a majority of consultees support particular options. This needs to be one holistic area.
- Roads are analysed on a road by road basis initially to establish where areas of support for proposals are.
- Roads, or a group of roads, that indicate greater than 60%⁴ support are considered to have a majority.
- The results in individual streets are not intended as an absolute decision on whether a street is included in a scheme or not. The information is considered in the context of a wider review of the results in the area to determine where there is majority support for creating a holistic area.
- One response per property is permitted. This is intended to ensure that the spread of responses is consistent and are not distorted by multiple responses per household. Where multiple responses are received, a proportional household response will be counted.
- Because roads vary in length and nature areas of support may also be refined and further identified in part sections of road. This is done by reviewing the exact locations of responses in the road with a location dot map (not for public inspection).
- Area control schemes need to be holistic and so groups of roads and part sections of roads that are grouped closely together and share similar views can be developed into a scheme.

³ This is required by the Road Traffic Regulation Act 1984 and the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996, namely advertising the intended proposal by way of a public notice published in the London Gazette, local press and at diverse visible locations on site where the measures are proposed

⁴ This changed from 50% to 60% following TARSAP meeting of 12 February 2015

- Where a road that does not indicate support is surrounded by other roads that do indicate support then the road will be included in the scheme because otherwise this would expose that road to parking displacement.
- Where the results indicate that a road does not support a scheme but also indicates that they would change their mind if a neighbouring road demonstrated support, then those roads may be included within a scheme. Questionnaires include a question to indicate this preference because it is recognised that parking displacement can occur from neighbouring roads with parking controls.
- The proportion of people responding to the consultation is noted. Response rates vary significantly based on the type of area. Generally there is an aspiration to achieve about a 20% level of response. It is to be noted that decisions are made based on responses provided by those people that choose to respond to consultation.
- If the response rate from a consultation is less than 20% then members will be consulted and will advise if the results should be used, if further consultation is required or if the scheme should be abandoned.
- The general preference is to include whole streets in new area based schemes, when they are less than 300m in length. For longer roads, part roads will be considered.
- An independent quality assurance check will be organised to check the information prepared to ensure that it is accurate where required.

The considerations undertaken to recommend a particular scheme is not an exact science. It is based on a combination of the officer's technical review of the consultation results and the member's discretion in reviewing the information and reconciling their own knowledge and understanding of the community views with the results.

9.2 Minor localised parking schemes development

These schemes are far simpler and smaller in scale and usually involve implementing improvements around a specific point where a problem occurs.

Examples of this type of initiative are where refuse vehicles and the emergency services have reported persistent access difficulties due to obstructive parking and waiting restrictions (double yellow lines) at junctions and bends have been used as remedial measures. These schemes are generally outside of CPZs and are a valuable initiative primarily targeted at improving road safety and facilitating adequate vehicular access.

Implementing these schemes usually includes the following stages:

- Stage 1 **Scheme design** detailed plans and layout developed
- Stage 2 **Localised public consultation** and scheme review – this will involve a local letter drop
- Stage 3 **Statutory consultation** (draft traffic regulation orders) – Statutory consultation results analysed. Only summaries of the objections and representations provided
- Stage 4 **Scheme implementation**

More limited engagement with the public will be undertaken with localised schemes that focuses in the immediate vicinity of the proposed parking control measures. Statutory consultation will be undertaken which involves advertising the intended proposal by way of a public notice published in the London Gazette, local press and at diverse visible locations on site where the measures are proposed. This will usually be supported by distributing information directly to affected premises. Engagement with Local ward councillors and the Portfolio Holder will also be undertaken before finalising schemes for implementation.

9.3 Waiting restrictions only

There are some existing CPZ schemes in the borough which use waiting restrictions only (yellow lines). These have historically been used in situations where there is no demand for on-street residents' parking. Whilst these schemes have the advantage of being cheaper because fewer signs are required (signs don't need to be repeated within the zone where the restrictions are the same as those shown on the entry/exit points) such schemes can disadvantage residents who do need on-street parking for themselves or their visitors.

These types of schemes penalise anyone with a legitimate reason to park in the road including local residents and often generate complaints. There is no difference between a scheme that has yellow lines only and one that includes yellow lines and permit parking bays because the impact on long stay parking is exactly the same. The difference is that a scheme with bays facilitates some parking during the controlled hours to the benefit of residents. In Harrow, scheme options with bays are generally preferred to ensure all residents' needs are catered for.

Any CPZs developed will therefore be developed in a way that maximises parking bay provision.

9.4 CPZs with short duration operational hours

There has historically been a desire to offer as much customer choice as possible with regard to CPZ operational times in order to tailor schemes to local requirements. However, an excessive amount of choice has now led to greater difficulty in enforcing schemes and higher operational costs due to the wide range of variations implemented on the ground.

As a consequence there are a large number of schemes in existence that operate for 1 or 2 hours per day. The rationale for this was simply that such controls can prevent the majority of long stay parking whilst minimising restrictions on local residential parking. In practice, however, it creates a significant problem for undertaking enforcement because there is only a limited resource available to oversee a large area of restrictions in the borough within a limited timeframe. This is very impractical and ultimately leads to areas not receiving sufficient enforcement, higher non-compliance with parking controls and the inefficient deployment of enforcement resources.

Appendix A shows that 72% of all CPZs in the borough now operate for a period of only 1 or 2 hours per day and that the combined length of all these streets is 131km of the network. The logistics of trying to enforce this length of the network is that only about 15% of the network can actually be enforced with the available resources.

In order to effectively manage the enforcement of zones and allow the parking service to operate efficiently within the available resources any new schemes developed will need to be more representative of the times of the day when the parking problems occur and operate for at least a minimum of 4 continuous hours during the day. In respect of CPZs that are intended to tackle long stay parking such as commuter parking at stations this could typically be addressed with a zone operating from 10am - 2pm for example.

Additionally where requests are received from streets to be added to an existing zone which already operates for 1 or 2 hours duration per day then any proposals will be taken forward using one of the standard operating hours indicated above.

Where this situation occurs the opportunity to amend the hours in the existing zone at the same time in order to standardise hours should be offered to neighbouring streets. Any streets interested in changing should then be included within the proposed scheme under development. It is

understood that residents in neighbouring streets across the wider zone can only be consulted on the possibility of changing the operating hours and can opt not to change because this would be subject to statutory consultation. This approach sets out the only possible method for amending these very short duration zones to standardised operating hours.

This will be a gradual process because of the need to undertake statutory consultation and the fact that residents will need to agree to changes before they are introduced.

Any CPZs developed will aim to standardise the operational hours of schemes borough wide and have a minimum continuous time of operation of 4 hours.

9.5 Standardisation of operational hours

There is an extensive amount of variation in CPZ operational hours which can often be confusing to the motorist. Standardising the operational hours for different location types will help to resolve the confusion and also help to address the main types of parking problems encountered in the borough.

The development of a scheme always reflects the underlying parking problem to be solved and the particular characteristics of the area. So a commuter parking zone for example will typically have a station at the centre of the zone which creates the demand to park in that location and operational hours are those necessary to deter long stay parking around the station. Zones focussed around commercial centres where the opening hours of local businesses and amenities are the main factor in determining demand to park are likely to have longer working day controls to control parking during the opening hours. Where there are more extreme pressures to park that cover a longer duration of the day, such as by a Leisure Centre for example, then much longer operational hours extending into the evening may often be required.

There are three basic standard solutions that can be used to solve the main types of parking problems encountered. These are as follows:

- Commuter / workplace parking – zones that operate for a minimum of 4 hours in the middle of the working day (e.g. Mon – Fri, 10am – 2pm)
- Commercial centres / local amenities – zones that operate during the working day, typically 10 -11 hours per day, and facilitates business activity (e.g. Mon – Sat, 8am – 6:30pm)
- Pressures that extend beyond the working day in the evenings or weekends, typically 12+ hours per day (e.g. Mon – Sun, 8am – M’Naught)

As a general policy and operational process all future schemes will be developed around these three operational models and any variation from these will be minimised and will be on an exception basis where the situational analysis requires a deviation. This will ensure that there is an on-going consistency in the schemes designed and will help to minimise any negative impacts of parking displacement between neighbouring CPZ zones. As a result of this, future requests for one hour or two separate hours during the day will no longer be taken forward.

9.6 Zoning and sub zones

Some areas with parking issues experience different types of problems within the same area and therefore need different solutions. The creation of different sub zones within the same zone is one way to allow the containment of parking to a specific area and also to introduce different operational hours and times.

The design of multi zone schemes needs to be carefully considered as these can have unintended consequences such as causing parking displacement or can make understanding the regulations in force more confusing for motorists. Therefore zone segregation needs to be based on a clear rationale that introduces controls that are relevant to the parking problems being encountered and does not cause any detrimental effects on existing CPZs or surrounding areas.

Another consideration is that resident / visitor permits can only apply to one specific zone and so the creation of a number of smaller zones within a scheme limits the size of area that permit holders can park in and prevents them from parking in neighbouring zones. This reduces any flexibility to accommodate variations in parking demand on-street and so very small zones are generally avoided and only used in exceptional circumstances.

The main principle in designing zones is therefore to ensure that these are only used where it is necessary to separate different groups of permit holders in order to avoid parking problems. Typical examples are:

- In residential areas with a station - a small subzone around the station may be created within the wider zone, this prevents resident permit holders from across the wider zone from internally commuting to the station and improves parking access for those residents living close to the station
- Different operational hours are required within a zone – e.g. a large zone comprising of a commercial centre, and a wider surrounding residential area may need to be split into two subzones, the central commercial centre may have working day restrictions and the surrounding residential areas may have shorter duration parking restrictions required to deter workplace parking

Any CPZs developed will use zoning and sub-zoning arrangements that are appropriate for the parking problem relevant to an area and also minimise any detrimental impact on neighbouring zones.

9.7 Safety at road junctions

Dangerous or obstructive parking represents a large proportion of complaints from residents or businesses and continues to be of concern to the emergency services and council refuse collection service. Where these problems occur within CPZs it is typically because operational hours have a limited duration (e.g. 10am – 3pm) and cannot provide controls throughout the busy times of the day or evenings and weekends. To address this, “at any time” waiting restrictions (double yellow lines) are introduced at all junctions within new CPZs and also the immediate surrounding CPZ zones where it is practical to do so.

The Highway Code states that drivers should not park within 10m of a junction and this distance is used as a guide to developing proposals. The actual distance required may be less than 10m and is determined by using a computer simulation programme to determine the swept path of a large vehicle such as a refuse vehicle or fire appliance so that only the necessary space is restricted.

Any CPZs developed will take account of the need to ensure safety at junctions within the zone or at the periphery of the zone.

9.8 Reducing street clutter

The council has implemented an alternative style of signing and lining for CPZs in a number of locations across the borough which is suited to cul-de-sacs and short sections of road. This enables the borough to minimise the signing required by just using signing at the entrance to the road stating that the road is for permit holders only past this point followed by the specified times of operation. In these situations there is no need to mark out bays within the road as residents can

park in unmarked areas when correctly displaying a valid permit. Only areas where parking is not allowed are marked out with yellow lines and in particular some double yellow lines may be necessary to keep certain sections of road such as junctions and bends, free of parked vehicles.

Any CPZs developed will minimise signing and road marking arrangements where practicable.

10. Parking permits

In CPZs or in designated locations eligibility to park is regulated through the issue of parking permits.

There are restrictions in the availability of all parking permits, however they are made available for residents, visitors, carers, health care workers, doctor surgeries and schools.

Dispensations and suspensions are available where there are occasions when the existing regulations are unworkable.

Parking permits do not permit vehicles to park on single or double yellow lines during the hours that restrictions apply.

Parking permits are not required for:

- Vehicles correctly displaying blue badges
- Motorcycles parked in either pay-and-display bays or in resident bays, - however this may change following the introduction of virtual permits

To encourage the use of environmentally friendly vehicles (EFVs) resident permits for such vehicles will continue to be offered at a discount if emissions based charging is introduced

Unpaid Penalty Charge Notices

Owners of vehicles in receipt of 3 or more unpaid PCNs, where the PCN is not subject to challenge, are not eligible for CPZ parking permits. This applies to both resident and business permit applications.

10.1 Permit restricted development

Development control parking restraint measures are used to drive down car ownership in the borough and to encourage greater use of sustainable transport modes. Reduced car use is needed for environmental reasons and also to increase the number of people walking and cycling in the borough which will enable more active and healthy lifestyles.

One way that this is being addressed in Harrow is through 'car free' developments. This is a restriction that is applied to some properties that are either intended to be 'car free' or have a low parking provision and are in areas with good access to public transport. These conditions or agreements are applied at the time planning permission was approved for the development or conversion of a property. Residents in 'car free' developments are not eligible for residential parking permits.

Permit restrictions for new properties will apply in all areas of PTAL 5/6. Permits may also be restricted in new residential developments in areas of lower PTAL rates at the discretion of Harrow Highway Officers. This will not apply to residents with blue badges.

10.2 Virtual permits

In 2019 virtual permits will be introduced for resident parking and also for some other types of permits. This will start on a phased basis by August 2019 and be rolled out across the borough.

10.3 Permit applications

Most types of permits can be applied for using the Council's website. Where supporting information is required to show evidence of place or residency or vehicle ownership, this may be attached to the printout of the on-line application being posted, however, applications may also be made in person at the Civic Centre or at the library for visitor permits only.

10.4 Permit renewals

Permit holders need to renew their permits every year and every three years they need to produce the original documentation to prove that they continue to be the registered keeper of the vehicle and to prove that they continue to reside within the CPZ. This helps to limit fraudulent use of the permit system.

10.5 Green vehicles policy

Greener cars that run on low-emission or alternative fuels are better for the environment. This strategy proposes to revise parking permit charges to incentivise lower emission vehicles. An environmentally friendly vehicle is now classified as a vehicle that is propelled by electricity and has zero emissions. To encourage greater use of greener vehicles, owners are not charged for resident parking permits for first and second electric cars only, however, they still do need to display their permit.

There are vehicles using alternative fuel sources such as compressed natural gas (CNG), methane gas, liquefied petroleum gas (LPG), hydrogen, methanol, ethanol that are better for the environment but still produce some emissions but with lower levels of CO₂ and particulate matter. Hybrid vehicles are also better for the environment and use a combination of petrol or diesel, with electricity but also still produce some emissions. Therefore any permit charging for vehicles that produce emissions will be assessed on the level of CO₂ produced with lower charges for lower levels of emissions.

Diesel vehicles can emit up to four times more nitrogen oxides and 20 times more particulate matter than petrol vehicles and these pollutants have been linked to heart and lung diseases, which are major causes of long term illness and even death. To encourage a move away from polluting vehicles, the council proposes a surcharge for resident and business on-street diesel vehicle permits to address the impact of diesel fuel on poor air quality and health.

10.6 Motorcycles

Currently there is no requirement for motorcycles to display permits when parking across the borough. This is because of the logistic difficulties of motorcycles displaying permits. However the borough may introduce charging for motorcycle parking as the use of available technology increases.

10.7 Residents

Residents living within a CPZ are eligible to apply for a resident parking permit unless their property is permit-restricted. A list of permit restricted properties is available on the Council's website.

Costs of resident parking permits increase for 2nd, 3rd and subsequent cars in order to discourage high car ownership and use. The borough is considering increasing the cost of resident parking permits for those with four or more cars.

Harrow proposes to change the permit charging structure to introduce a new scale of charges based on vehicle emissions. This would see increased permit charges for the most polluting vehicles. The borough is also considering increasing the charges for four or more vehicles per household in order to reduce local kerbside parking pressure. Permits for electric only vehicles will be reduced to encourage the uptake of zero emission vehicles.

Costs of parking in residential areas are made similar to the neighbouring boroughs to discourage displaced parking.

In order to apply for a resident parking permit, two proofs of eligibility are required:

1. Proof of residency; and
2. Proof of vehicle ownership.

A Vehicle Registration Document (VRD) can be used to show both residency and vehicle ownership.

However if a VRD is not supplied the following evidence can be supplied.

Proof of residency is only required if the applicant is not on the electoral register.

(i) Proof of residency – name on the electoral register or:

- Vehicle Registration Document (VRD)
- Driver's licence
- Recent bank or credit/debit card statement
- Recent utility bill

(ii) Proof of vehicle ownership:

- VRD
- Letter from employer confirming that the applicant is the sole user of the vehicle
- Hire/lease agreement
- Bill of sale/invoice
- Valid insurance document

10.8 New residents

Where new residents are unable to meet some or all of the proposed criteria, an option for a single, one-month resident parking permit is provided. Once proof has been substantiated, a full permit can be issued without any financial penalty for the initial purchase. One proof of eligibility should be met from both of the following categories:

a) Proof of residence

- Tenancy Agreement (Estate/Letting Agency only – not private)
- Bank Statement
- Utility bill
- Credit card statement
- Mobile phone bill
- Council/housing Association rent book; or
- Proof of purchase of property (completion letter from Solicitor). NB – this only provides proof of ownership

b) Proof of vehicle ownership

- Vehicle registration document with the change of address section correctly completed; or
- Insurance document – detailing the new address or postal code

10.9 New vehicles

In the event that a new vehicle has been purchased within the last month the applicant may be unable to provide the set criteria. In such instances, the applicant can supply the following proofs of ownership:

- Garage Bill of Sale; or
- New Keeper's Supplement; or
- Vehicle Registration Document AND
- Valid Insurance Certificate showing the applicants name, the CPZ address and the vehicle's registration number

10.10 Temporary vehicles

When a resident reports that their vehicle has been temporarily replaced, the parking attendants are briefed in advance of their beat regarding the temporary vehicle.

10.11 Blue disabled parking badges

Blue badges for people with disabilities are available to some residents to enable them to park closer to shops and other destinations they wish to visit. There are just under 10,000 blue disabled parking badges on issue to borough residents. These are issued through Harrow's concessionary travel team. Recipients of the following benefits that have been in receipt of the benefit for at least 12 months, or are expected to be for at least 12 months, are automatically entitled to a Blue Badge:

- Higher Rate of the Mobility Component of Disability Living Allowance (HRMCDLA)
- Personal Independence Payment (PIP) – providing you have been awarded 8 points or more against the 'Moving around activity'
- Registered blind (severely sight impaired)
- War Pensioner's Mobility Supplement (WPMS)
- Have been both awarded a lump sum benefit at tariffs 1-8 of the Armed Forces Compensation Scheme and certified as having a permanent and substantial disability which causes inability to walk or very considerable difficulty in walking

In addition blue badges can be issued on a discretionary basis. The bulk of blue badges issued in the borough are issued on the discretionary criteria following a doctor's report. Blue badges are valid for a three year period whereupon pass-holders are required to reapply.

Blue Badges issued by the Council remain the property of Harrow Council. If misuse is identified, the badges are taken away. If the criteria for the issue of the Blue Badge are no longer met, or in the event of the death of the holder, the badge must be returned to the Council to prevent misuse.

10.12 Visitors

Visitor permits are available to residents living in any of the Borough CPZs, unless the property is permit restricted. Permits are issued in books of ten. A maximum of two books are issued at any one time, with a maximum of 10 books per annum. Scratching off the relevant day and month validates the permit. The permit must be displayed so that the validation can be seen clearly from the outside of the vehicle, on the dashboard with the scratched panel facing up. Visitor parking permits are provided for single day parking use only.

Senior citizens and visitors in receipt of mobility benefits are eligible for visitor permits at half the full permit price. For the purpose of Harrow visitor permits senior citizens will be classified in line with London Council's eligibility for the Freedom Pass. This is currently set at age 66 and above for both male and female applicants.

In the future, visitor permits will be replaced with virtual permits. Following this, books of permits will no longer be issued and residents will be able to request permits on an as need basis. The limit of 100 permits per annum per household will remain.

10.13 Businesses

For business car parking in off-street car parks see Section 11.3.

Business parking permits on-street are zone and vehicle specific and allow business permits holders to park in resident permit bays in the zone of their issue and, where signs indicate, also to park in selected Shared Use bays. Business parking permits enable visits by workers such as electricians, plumbers and landlords to visit properties in the borough. Costs for permits for each zone are shown on the council website.

The Council proposed to revise the cost of on-street business parking permits to vary between types of centre because of the importance of different locations. This will be in line with Pay and Display bays, where there are four pay bandings, Metropolitan Centre, Major Centre, District Centre and Local Centre. The permit charges increase with the importance of the economic centre classification.

Business permits can be purchased for a day, week, month or yearly basis subject to meeting the relevant criteria.

Shorter duration Traders permits will be introduced (day, week or month) for trades people carrying out works within a Controlled Parking Zone (CPZ) who require their vehicle(s) to be parked close to the address at which they are working. The permit is only valid at one specific street for one vehicle. If you have more than one vehicle or are working at different locations, you will have to apply for a permit for each vehicle and each location. To be eligible evidence of the works being undertaken and evidence of your business would be required.

Landlords and those who own property within a Controlled Parking Zone that they do not reside in the CPZ are also eligible for shorter duration Traders permits because Landlords are not eligible for visitor permits.

Spot checks on misuse of traders permits will take place to ensure that permits are being used in line with their issue. This will be part of the enforcement regime associated with this strategy.

The criteria for an annual business permit are stricter than for the shorter duration Traders permits. This is to minimise any misuse. An annual business permit allows users to park at their usual business address.

In order for a business to apply for an annual permit, the vehicle must be registered to the business, the business must be located in a commercial property and the vehicle must be needed for daily use in conjunction with the business (eg service or delivery vehicle). For shorter term business parking permits, this is not needed.

Business parking permits will be offered at a reduced rate for *greener* vehicles.

Applications for annual business permits are only considered from the business itself; applications from an employee are not accepted. In line with off-street business permits, the following proofs are required:

a) Proof of business address

- Current business rates bill

If the direct responsibility of payment of business rates does not fall with the business or the applicant does not work from 'related business premises' two of the following should be provided:

- Current lease agreement
- Letter from business ratepayer (where the current lease is unavailable)
- Recent business utility bill (not more than four months old)
- Certificate of incorporation for limited companies if the registered office of the business is at the CPZ address
- A recent business bank statement

- Copy of an invoice received at the business address
- Inland Revenue business tax return
- Certification detailing the registration number and zone address for registered charities.

b) Proof of vehicle Ownership

- Vehicle Registration Document and
- A copy of the valid tax and insurance certificate

If the vehicle has been purchased in the last three months and the registration document is not yet available, the following should be produced:

- Garage bill of sale and
- Valid insurance certificate.

Documents that have been submitted as proof of ownership should show the name and address of the company or of an employee and the vehicle's registration number.

In situations where the vehicle is owned, leased or hired by an employee proof of employment should be provided. All payments are required to be made by the company and no personal payments or cash are accepted.

For a shorter term Traders permit, only proof of business activity and evidence of the business (e.g. headed stationery or official ID card) needs to be supplied.

10.14 Schools

Schools do not qualify for on-street parking permits. However, where car parks are available in close proximity to the school then permits can be issued to park in car parks where it supports travel planning initiatives such as "park and stride". This will be applied at the Council's discretion.

A maximum of two permits can be issued to schools so long as they have developed a school travel plan with an action plan that identifies a specific initiative that has been approved by the Council's travel planning team. Where more than one school is situated at a single site only one permit will be issued to each school. These permits are issued at no cost.

10.15 Carers

Where a resident requires regular care from a family member who lives outside the controlled parking zone or borough and there is no off street parking available a Carers Permits can be provided.

This permit is also available to senior citizens who need it. This permit is postcode specific. A doctor's letter is required in order to obtain a carer permit. In the future, carer permits will restrict users to a maximum stay of three hours only.

Following the expansion of virtual parking permits, carer permits will be client based and only eligible to those visiting clients in receipt of care that have been agreed by an appropriate organisation.

10.16 Health Care workers

The Council issues health care parking permits to organisations that employ health care workers to facilitate the care they provide. This is a multi-zone permit and is specifically identifiable as a health care permit. The healthcare parking permits allow holders to park in permit bays in CPZs during the course of their work, but it does not allow them to park on yellow lines or Pay and Display bays. The permit is not to be used where times of visits can be arranged to suit the parking restrictions available and every effort should be made to schedule these visits outside the controlled hours.

These permits will be issued to people who for the majority of their work time meet two or more of the following criteria:

1. Regularly undertake urgent unplanned visits
2. Routinely visit health care recipients where it would be impractical to rely on the client to provide and find their visitor permits
3. Carry drugs etc. which put them at risk of attack if they cannot park close to their destination
4. Lengths of visits are unpredictable and therefore existing parking regulations do not enable flexibility required / Required to carry out visits on an emergency basis
5. Parking problems reduce time made available for patient care
6. Categories of workers that fit the above criteria have been developed and changes to these categories require Portfolio Holder approval. The current categories of positions for inclusion are carers, nurses and GPs who work in the following positions:
 - General practitioner
 - Domiciliary care workers
 - District nurses
 - Specialist nurses
 - Health visitors
 - Children's Services
 - Older people services
 - Learning disabilities services
 - Physical disabilities services
 - Health and Rehabilitation Team
 - Mental Health workers

Health care worker permits restrict users to a maximum stay of three hours only unless otherwise approved and agreed with Parking Enforcement.

Unfortunately, evidence from complaints by residents and businesses followed up by onsite inspections by Council officers have found that some organisations were abusing the use of the permits. As a result, the use of these permits is monitored closely and if a vehicle is found displaying a permit for any of the reasons detailed below, it will be deemed that a Healthcare Visit is not taking place, invalidating the permit and a PCN will be issued to the vehicle.

1. Displaying a Healthcare Permit in a vehicle which is not in a CPZ
2. Displaying a Healthcare Permit in a vehicle in a CPZ more than 1 hour before or after the controlled hours.
3. Parking for more than 2 hours in the same location whilst displaying a Healthcare Permit, without agreement with Parking Operations (Parking.Operations@harrow.gov.uk) in advance that there is a specific requirement for an extended visit.
4. Displaying a Healthcare Permit in a vehicle within 1,000 meters of the address the permit was issued to.
5. Parking in the same location/vicinity on consecutive whilst displaying a Healthcare Permit without agreement with Parking Operations (Parking.Operations@harrow.gov.uk) in advance that there is a specific requirement for regular visits.

Where extended or regular visits are required the Harrow or NHS manager commissioning the visits must be included in the email notification for verification purposes.

Challenges against PCNs issued for any of the above reasons will only be considered if there is evidence to prove that legitimate Healthcare Visits were being undertaken.

If more than 3 PCNs are issued to the same organisation the Council will review the number of permits the organisation are allocated and either reduce that number or may decide to revoke all of

their permits. Should it be decided that further controls are required for the use of Healthcare Permits such as the introduction of time clocks the Council will be forced to increase the admin fee for each permit to cover the costs. It may also be deemed necessary to refer some organisations to our fraud team and in such circumstances prosecutions may be instigated.

There is an administrative charge only for these permits.

There are two different bands for healthcare worker parking permits. Local authority and NHS healthcare parking permits are issued at a considerably reduced rate than those of private healthcare workers.

Following the expansion of virtual parking permits, health care worker permits will be client based and only eligible for those visiting clients in receipt of care and approved by an appropriate organisation.

10.17 Doctors (GPs) surgeries

Some Doctor surgeries are located in places where doctors who are required to be on-call find that the time they spend time wasted on parking their car on return to their surgery that impacts on the time available to effectively treat their patients which is considered by the Council to be a critical community service.

To reduce the time they spend searching for parking spaces at their surgeries, the Council issues GP parking permits. These are only available for GP doctors' surgeries located in Controlled Parking Zones and only issued under specific conditions. Permits are not issued for individual GPs but are shared between all GPs who are on-call at the surgery and are only offered in surgeries where there is no available off-street parking. The permits allow GPs to park in doctors' parking bays on specific streets adjacent to their surgeries between Monday and Friday only. Any permit issued is valid for one year only and needs to be renewed on an annual basis. If there is the possibility for off-street parking at the surgery then vehicle crossover applications are advised in place of GP doctor parking permits and bays.

Doctors (GPs) parking permits are non-identifiable to the public as doctors' permits. To be eligible for a Doctors parking permit, the surgery must do the following:

1. Show that they have actively made attempts to resolve the parking problems for doctors through other means such as developing local travel plans for all their staff and encouraging patients to arrive at the surgery by means other than car; and
2. Show that there is insufficient off-street parking to accommodate the effective working of their surgery. This is demonstrated by comparing how many full time equivalent doctors are registered at the surgery and how many off-street parking spaces are available. Nurses and administrative staff are not be considered eligible for these permits because they do not routinely visit patients at their homes under the same time pressures and these permits are not being issued to facilitate their journeys to their regular places of work.

The number of doctors registered at any surgery is determined either by headed paper counts of doctors listed or by counts of doctors listed on the surgery webpage.

The number of off-street parking spaces available at the surgery will be determined by visits from council traffic engineers.

Reviews of surgeries' travel arrangements take place every three years ensuring that local travel plans are being maintained. If they are not maintained, then permits will be withdrawn. A maximum of 2 permits can be issued per doctors' surgery. Misuse of any of these permits renders all permits to the surgery being withdrawn for at least one year.

10.18 Health Emergency Badge Scheme

Similar to all London Boroughs, Harrow Council participates in the Health Emergency Badge Scheme (HEBS) operated by London Councils. The London Health Emergency Badge (HEB) scheme allows GPs, nurses, midwives and health visitors engaged in urgent or emergency health care in (but not routine visits to) a patient's home to park where there is no alternative:

- Without payment
- In residents' or other reserved parking bays; and
- On yellow lines where loading and unloading is not prohibited (as long as there is not a serious obstruction or other endorserable offence)

The badges are not issued to other paramedical professions such as physiotherapists, chiropodists and occupational therapists.

The aim of the scheme is to assist parking for those persons involved in urgent emergency health care away from their normal base. HEBs allow holders to park on yellow lines only and only for the purposes of urgent emergency health care visits and hence only a limited number of permits are allowed per practice.

The badge can only be used when visiting a patient to provide emergency or urgent healthcare.

Examples of what is considered 'urgent' or 'emergency' are:

- A situation in which a patient needs immediate treatment to avoid possible loss of life or where lifesaving equipment in the home has failed;
- A patient needs immediate treatment to alleviate acute pain or other distressing symptoms;
- Childbirth is imminent or immediate post-natal treatment is required;
- A child is in danger or a person is at risk of violent attack; and
- A patient is suffering a mental health emergency and poses a risk to themselves and/or others

Any use of a Health Emergency Badge outside the terms of these criteria may result in the badge being withdrawn by London Councils; or all the badges issued to a particular site being withdrawn.

Parking in connection with routine non-emergency, non-urgent home visits is not covered by the HEBS. For these visits, staff should park legally, paying the appropriate charges if necessary, and/or walk to their appointment.

Parking near or outside hospitals or clinics is not covered by the HEBS. Displaying an HEB badge does not entitle badge holders to use doctors', ambulance or hospital bays allocated to another user.

The dispensation does not apply if the vehicle is causing serious obstruction, left for an excessive length of time (over an hour) in the same position, or regularly seen in the same place.

The exemption does not apply in the vicinity of the HEB permit holder's place of work.

10.19 Essential services permits

Essential services permits are available for Harrow council staff. These essential service permits will enable users to stay a maximum of two hours only at locations where working requires the use of a car. Service managers will be required to manage the issue of these permits and there will be an administrative charge only to that business unit.

To minimise any misuse of these permits the process will be reviewed six months after being introduced and there will be ongoing enforcement.

In order to avoid misuse, essential service permits will not be eligible for use around the users' usual place of work – those working at the Council depot will not be allowed to park in the vicinity of the depot and similarly for those working in other Council offices.

10.20 Foreign registered vehicles

The Council encourages the owners of foreign vehicles to reregister their vehicles with the DVLA by limiting the length of time of permits issued to foreign registered vehicles. Foreign registered vehicles are only issued with permits for a 6-month period or two 3-month periods. These permits are not renewable unless the vehicle is reregistered in the UK.

10.21 Off-street parking place orders (Housing schemes etc.)

Parking permits are available for off-street parking and car parks in Council housing estates in the borough. These permits will be set at the same rates as on-street parking elsewhere in the borough.

10.22 Parking dispensations and suspensions

Although parking dispensations and suspensions are not a type of permit, they do allow certain vehicles to park across the borough at agreed locations in certain situations. They are issued because there are some occasions when the existing regulations are simply unworkable. In most situations, the Traders parking permit will be suitable to facilitate any necessary parking.

To accommodate exceptional situations, applicants can apply for a **dispensation**. In effect, this is a temporary permit that allows a specific vehicle to park within a controlled parking zone or on a single yellow line during restricted hours or apply for a regulated parking bay to be **suspended**.

Parking Suspension and Dispensation fees are proposed to be structured in line with Pay and Display bays, where there are four pay bandings, Metropolitan Centre, Major Centre, District Centre and Local Centre. The charges increase with the importance of the economic centre classification. There is a daily fee per bay (or per 5.5m length of bay where applicable).

There is also an administration fee which is structured on how many days before the start the application is received. Any vehicle parked in a suspended parking bay during the restricted hours set out in the Traffic Management Order that is not registered to use the bay will be issued with a PCN.

Parking dispensations

Dispensations to parking regulations are issued to the resident or tradesperson for addresses located within a CPZ whose hours of operation are longer than one hour. In locations where dispensations are required for visits less than one hour, business parking permits or visitor parking permits are recommended rather than dispensations.

Dispensations are only issued to facilitate situations that cannot be served by other permit types and in the future they will only be available to enable access to specific properties.

Before a dispensation is issued, a Council Officer must be satisfied that no reasonable alternatives for parking exist.

The dispensation is issued for a particular vehicle for use at a particular location. It is not flexible and cannot be used at any other time or any other location.

Dispensations issued by the borough have been reviewed and will be available on a day, week or fortnightly basis. They may be used for parking in a resident's bay or on single yellow lines and must be clearly displayed in the vehicle to avoid receiving a PCN.

Parking suspensions

Regulated parking bays may also be suspended. This is typically linked to utility works or to facilitate work at nearby premises. Suspensions take a minimum of 5 working days to be issued and are issued at the discretion of a Council Officer. Most suspensions are relatively short in duration.

A vehicle displaying a blue badge is not allowed to park in a suspended parking place and may receive a PCN if doing so.

The cost of dispensations and suspensions is shown on the Council's website.

11. Car parks

11.1 Car parks in town centres

The aim for car park provision is for car parks to be 85% full during the peak periods in order to maximise the use of off-street parking facilities and reduce the demand on surrounding streets.

Parking usage, turnover and charges are reviewed annually and details regarding the borough's car park locations and charges are provided on the Council website. Car parking charges across the borough are set according to the location of the car park. The physical condition of the car parks and their perceived safety is also taken into account. There are four different cost rates across the borough and rates are set depending on the extent of shopping characteristics, available car parks, existing public transport links and existing leisure facilities.

In most car parks off-street business parking permits are available. For these permits, environmentally friendly vehicles are charged at a reduced rate.

The Council's Car Park Manager oversees the smooth running of car parks in the borough. The manager's responsibility includes car park safety and ensuring that upkeep of car parks. Car parks are routinely checked for faults and safety issues are prioritised. Safety issues of paramount importance are smooth surfacing and a reduction in overgrown greenery to stop tripping and prevent hidden spaces emerging, good lighting and in certain locations CCTV.

All council car parks are free for vehicles that correctly display blue badge permits, with the exception of Queens House and Peel House.

To assist local traffic generators such as local hotels, this strategy proposes the introduction of overnight car parking at selected car parks where there is the potential for overnight parking in that area. A new charge for overnight parking will also be introduced as part of the implementation of this policy.

11.2 Car parks at leisure facilities

There are a number of car parks provided for leisure facilities across the borough including recreation grounds and the Harrow Leisure Centre. These car parks are often located in areas with a high demand to park from local residents, businesses, near shops or stations, etc. and long stay parking can occur and prevent easy access for leisure users.

In order to deter long stay parking the leisure centre uses a parking control scheme that offers a three hour free period that facilitates most leisure use and introduces charges for any stay over three hours in line with the borough wide car parks charges. Following previous public consultation on this arrangement three hours is considered a period of time that facilitates most leisure activities.

All car parks which are currently unrestricted will be considered for this type of scheme in order to improve accessibility to leisure and recreation facilities for local residents.

11.3 Business permits for car parks

The Council offers parking permits for various car parks throughout Harrow to local businesses. Permits are only available for businesses located in the vicinity of the car park for which it is issued.

Business Permit Holders may only park in those bays designated for their company where such bays are marked.

Details and applications for business permits for car parks are available on Harrow's website.

12. Parking Enforcement

Traffic law and regulations are put in place to protect road users and support different types of environments such as industrial, commercial, residential etc. Parking enforcement needs to be targeted and to be proportionate to be respected. It also needs to be an effective and efficient deterrent.

Parking policy enforcement is carried out in line with the TMA Network Management Duty requirement to manage the traffic network to ensure expeditious movement of traffic, (including pedestrians and cyclists).

Parking penalty charges in London are set by London Councils' Transport and Environment Committee (TEC). TEC is made up of representatives of the 33 local authorities in London, as well as TfL. Under the terms of the Traffic Management Act 2004, TEC is responsible, subject to agreement by the Mayor of London and the Secretary of State, for setting additional parking charges on London borough roads. Charges are reviewed every four years and set following public and stakeholder consultation. The purpose of penalty charges is to dissuade motorists from infringing parking restrictions. The objective of civil parking enforcement is for 100 per cent compliance, with no penalty charges.

Parking charges in Harrow are set to be proportionate and the enforcement of the regulations provides a means by which Harrow can effectively deliver the wider borough transport objectives.

Dangerous and inconsiderate parking affects the safety and convenience of both drivers and pedestrians and this can be addressed through effective enforcement. Pavement parking is a severe impediment to the movement of those with both mobility and visual disabilities; effective enforcement of bus lanes and bus stops is critical to maintaining an effective and efficient public transport system. This is also necessary to enable buses to effectively compete with the private car and encourage people to change their mode of travel to more sustainable forms of transport.

Ensuring that the right level of enforcement is provided borough wide is a complex process that requires regular reviews. It is important that the level of enforcement introduced at all locations is appropriate to what is necessary to achieve compliance. Just as penalty charges deter people from repeatedly contravening regulations, the presence of enforcement officers or enforcement cameras also acts as a deterrent to illegal parking and hence their visibility is an important factor for enforcement.

12.1 Managing enforcement

Parking enforcement operations are implemented by CEOs using hand held technology as well as mobile and static enforcement cameras. The overall aim of enforcement is to increase compliance with parking traffic regulations.

12.2 Civil enforcement officers

CEOs in Harrow are directly employed by the Council. They are the public face of Civil Parking Enforcement (CPE). In addition, their visibility acts as a deterrent for parking contraventions and as a reminder of drivers responsibilities. To run an effective parking enforcement operation, CEOs are trained to be professional and efficient. They need to be able to be firm, but remain sensitive and tactful, employing common sense and patience in what can be a difficult work environment.

CEOs are required to wear a clearly identifiable uniform to ensure that they are readily distinguishable from those worn by the police and traffic wardens, but still allow easy public

recognition. In London, the Mayor of London provides guidance governing the uniforms to be worn by CEOs. The current requirements are:

- clear identification that the wearer is a CEO
- clear identification of the local authority on whose behalf the CEO is working
- a personal number to identify the CEO

All CEOs in the borough are equipped with Body Worn Videos. These can capture evidence of vehicles that drive away before the PCN is fixed to the vehicle or handed to the driver.

Nobody is pleased to receive a PCN and parking in London can be stressful. Similarly the job of a CEO can be stressful. Unfortunately for CEOs, verbal and physical attacks can take place in response to being issued with a PCN. The Council has provided body worn cameras to its CEOs to support endeavours that ensure that they are polite and accurate in their work and thereby improve the service to residents. CEO's are required to tell residents that these cameras are in place and so the interaction is being recorded.

12.2.1 Civil enforcement officer duties

The main objective of a CEO is to ensure CPE is observed and enforced in a fair, accurate and consistent manner. CEOs issue a PCN where they believe a contravention has occurred and also record daily activity and observations. They are not allowed to cancel PCNs once issued or select not to issue a PCN unless an exemption has been identified.

In addition to these duties, CEOs provide witness statements as and when requested for various parking issues and for parking adjudicators during parking appeals as well as report suspect Blue Badge abuse and report abandoned vehicles.

The performance of CEOs in the borough is not based on the number of PCNs issued. However, all CEOs will be expected to cover their beat patrols sufficiently and carry out enforcement fairly and consistently as laid out in the Secretary of State's Statutory guidance under the Traffic Management Act 2004. Where a beat patrol is showing a high level of compliance, CEOs are expected to inform the supervisor of this so that they can be allocated to another area where compliance levels may be low, with the aim to increase parking compliance in their allocated beat patrol. CEOs will also be measured on the quality of the PCNs issued as part of their training and development.

12.2.2 Supporting Evidence

Photographic images are used by CEOs enable those in receipt of penalties to view their offence over the Internet. These images are usually available within 24 hours of the penalty being issued. CEOs also wear body worn video cameras which improves the personal safety of the CEOs as well as captures supporting evidence of vehicles driving away before the PCN is fixed to the vehicle or handed to the driver. In these circumstances legislation allows for the issuing of the PCN by post.

Hand held computers are carried by the CEOs and are used for the logging of Penalty Charge Notices (PCNs).

12.3 Patrol frequencies

The frequency of parking enforcement patrols varies across different areas in the borough. Patrol routes are regularly reviewed to ensure that the enforcement on the street delivers the aims of this Parking and Enforcement Management Strategy.

Enforcement is targeted to tackle location needs, identified hotspots of parking contraventions, as well as to help in the smooth running of all traffic with buses as a priority. To that end high frequency bus routes are patrolled more often than other roads.

In CPZs, enforcement aims to tackle the busiest times of the day when the zones are operational.

12.4 CPZ enforcement

CPZs need to be financially viable within the current available resources. CPZs which are operational for only one or two hours a day put a considerable strain on borough resources. Simply walking across all roads in an entire CPZ during the hour of enforcement is not always feasible. Even with different hours being selected in different areas this still creates problems in scheduling enforcement activities. To address this issue, for new CPZs, the operational hours of enforcement will be revised to target the busiest times of the location.

A longer enforcement time slot will enable residents that park on-street and commute to work to leave and return outside of the operational hours and a longer operational window will provide an improved opportunity to organise enforcement activities borough wide. This will result in better enforcement with negligible impact on local residents.

12.5 Parking enforcement grace periods

Vehicles that are legally parked in an on-street parking bay or in car parks run by the council and overstay by up to 10 minutes are not issued with a PCN. This is called a parking grace period. It does not apply if the vehicle itself is parked unlawfully, the vehicle has not paid the required fee for parking or the vehicle does not display a parking permit where required.

Grace periods do not apply on roads with a restriction (e.g. single yellow line) or prohibition (e.g. double yellow line) or is not a 'designated' parking place either during or outside of the period of the restriction or prohibition.

12.6 Parking enforcement observation periods

When a vehicle is parked in contravention of the regulations, and depending upon the type of restriction, the Civil Enforcement Officer will observe the vehicle for a certain period of time before issuing a PCN. An observation period is primarily designed to ensure that the vehicle is not engaged in an exempt activity, such as loading or unloading.

12.7 Penalty Charge Notices

A PCN is a Penalty Charge Notice for contravention of regulations. The purpose of issuing PCNs is to dissuade motorists from contravening the regulations.

London Councils' Transport and Environment Committee (TEC) has a statutory role in setting penalty levels for London's legislation and byelaws and publishing the levels set. TEC is made up of representatives of the 33 local authorities in London, as well as TfL, and meets four times a year. Under the terms of the Traffic Management Act 2004, TEC is responsible, subject to agreement by the Mayor of London and the Secretary of State, for setting additional parking charges on London borough roads. TEC always undertakes consultation before doing so. Charges are reviewed every four years.

There are two factors which affect the level of penalty a motorist receives: the location of the contravention, and its severity. In areas where demand for parking is higher, the amount of the charge is higher to act as an increased disincentive. These areas are known as Band A and Band B. Band B covers areas where demand for parking is lower. In Harrow, the levels of PCNs are set at Band B.

Details of the PCN rate for different offences and how to appeal a PCN can be found on the London Councils' webpage⁵.

If a PCN is paid within 14 days of issue, the payment is halved, but if a formal appeal is made and fails, then the penalty will increase by 50% if not paid by the deadline.

Civil Parking Enforcement (CPE) is a means of achieving transport policy objectives.

12.7.1 Informal challenges

An informal challenge can be made after receiving a PCN from a Civil Enforcement Officer. This must be made within 14 days of the contravention date. The PCN will be put on hold until the Council makes a decision on the informal challenge.

If the informal challenge is successful, the PCN is cancelled and no further action is taken.

If the challenge is unsuccessful and rejected, there is a further opportunity to pay at the discounted rate. Those unsatisfied with the decision of the informal challenge must wait for a Notice to Owner to take the case further. The registered keeper can then make formal representation on receipt of the Notice to Owner.

12.7.2 Notice to Owner

If a PCN that is issued on street by a CEO is not paid within 28 days a Notice to Owner (NtO) is sent to the keeper registered at DVLA (regardless who was driving). Legislation requires that it must be served within six months of the issue of the PCN.

The NtO provides the owner with an opportunity to either pay the outstanding penalty or make formal representations against the issue of the PCN within 28 days.

Representations that are made outside of the 28 days may be disregarded by the council unless a valid reason is provided with evidence.

If the NtO is passed to another person and is not paid or challenged then the owner could be liable to an increased charge and lose the opportunity to appeal.

12.7.3 PCN representations

Following the Council considering any representation, the council will either issue a 'Notice of Acceptance of Formal Representations' if they agree with the representation, or a 'Notice of Rejection of Formal Representations' if they disagree.

Following receipt of a 'Notice of Rejection of Formal Representations' the receiver must either pay the penalty or appeal to London Tribunals within 28 days using the appeal form provided with the Notice of Rejection. Failure to do either of these things will result in continuing enforcement and additional charges.

12.7.4 Statutory grounds to challenge a PCN or NtO

Statutory grounds for challenges can be found on the London Councils website.

12.7.5 Environment and Traffic Adjudicator representation

Applicants may only appeal to the London Tribunals - Environment and Traffic Adjudicators after representations to the council have been rejected.

The adjudicators act as a tribunal – their decision is final (subject to an adjudicator's review) and binding on the applicant and the council. There is no opportunity to challenge liability to pay the PCN in court.

⁵ www.londoncouncils.gov.uk

There is no charge for appealing and the penalty will not increase while any case is considered.

Appeals must be made within 28 days from receipt of the 'Notice of Rejection of Formal Representations' or the appeal may not be considered. Late appeals need to explain why they are late, so that the adjudicator can decide whether to accept them.

12.8 Transparency

Greater transparency of public bodies is at the heart of enabling the public to hold politicians and public bodies to account. Where public money is involved there is a fundamental public interest in being able to see how it is being spent, to demonstrate how value for money has been achieved or to highlight inefficiency.

London authorities are required by law⁶ to keep an account of all income and expenditure in respect of designated (i.e. on- street) parking places and their functions as enforcement authorities. London authorities send a copy of the parking account information to the Mayor of London.

12.9 Camera enforcement

Harrow uses CCTV cameras to enforce some traffic contraventions such as driving in bus lanes, stopping on a yellow box junction, performing a prohibited turn, stopping in bus stops and School Keep Clear markings.

Mobile CCTV vehicles are used to monitor School Keep Clear restrictions, which are areas specifically designed for the safe access of pupils, staff and the emergency services to and from the school premises by deterring obstructive and dangerous parking. Vehicles are not permitted to wait, stop or park on a restricted area outside a school at any time during the prescribed hours of restriction.

Automatic Number Plate Recognition (ANPR) cameras are used by mobile CCTV vehicles outside schools on School Keep Clears in Harrow.

12.10 Vehicle clamping

Only authorised bodies can wheel clamp a vehicle - these include:

- the police
- councils
- DVLA
- DVSA (Driver & Vehicle Standards Agency)
- bodies with statutory or other powers (e.g. airports or train stations)

Authorised bodies can also contract out clamping work to private companies.

It is illegal for a landowner to clamp a vehicle that's parked on private land in England, Wales and Scotland.

Harrow do not presently clamp vehicles for parking offences. However when an outstanding Penalty Charge Notice is not paid, the debt is forwarded to the County Court for recovery. The court will pass this debt to an third party enforcement agency for collection who, with the use of ANPR identify a vehicle to be clamped until the debt is paid.

Vehicles are also clamped on borough roads when the DVLA carry out enforcement against untaxed vehicles. Where owners of untaxed vehicles do not pay for the vehicle to be de-clamped within 24

⁶ Paragraphs 2 and 3 of Schedule 7 to the TMA

hours, the vehicle may be impounded. After seven days at the pound, the vehicle can legally be destroyed. This policy will explore introducing clamping and towing of vehicles as an option.

12.11 Blue badge parking

Blue badge holders can park for up to three hours on all yellow lines within the borough. However to ensure that vehicles are parked safely, choosing to park on double yellow lines should be the exception. Disabled blue badge holders are allowed by statute to park free of charge in all parking bays except those designated for a special purpose, such as doctor's parking bays for example. In areas where there is no controlled parking there are adequate spaces for disabled parking. In areas of controlled parking, disabled bays are provided at key locations.

12.12 Vehicles overhanging footways

Vehicles parked in driveways and overhanging the pavements obstruct pedestrians and particularly those with mobility difficulties. This usually happens in residential areas where cars that are too large for private driveways park. Where this leaves less than 1.2m for pedestrians to pass the location, it causes considerable disruption to others. This is illegal and will be enforced as an obstruction under the Highways Act by the relevant authorities.

12.13 Lorry parking

Harrow, as well as all other London Local Authorities, has instituted an overnight ban on lorries parking on borough roads. This is to prevent lorries taking up valuable kerb space in residential areas where they are unsightly and out of scale with the surroundings. The decision to introduce a night-time parking ban for goods vehicles will also cut air pollution, reduce congestion and free up the streets for residents' parking. It is also intended to prevent drivers from using their vehicles as home to work transport – a role for which they are not suited.

In Harrow, the overnight ban affects vehicles over 5 tonnes and extends from 08.00 pm to 6.30 am. The ban requires a Traffic Order and the placing of signs on each side of every road in the areas covered. Additional signage at some locations across the borough is required to enable this to be better enforced.

12.14 Dropped kerbs

Dropped kerbs can enable pedestrians, particularly the elderly, people with disabilities and those with pushchairs to cross the road safely. The council provides dropped kerbs to assist pedestrians to leave and join the carriageway.

Part 6 of the Traffic Management Act 2004 allows the Council to enforce against vehicles parking across dropped kerbs. The Borough uses these powers of enforcement to enforce at drop kerbs at junctions throughout the Borough. They are only enforced where the kerb is level with the carriageway.

It is a contravention of the Traffic Management Act 2004 (as amended) to park a vehicle in front of a lowered footway. No part of the vehicle must be in front of the lowered section of footway or kerb. This applies to all lowered footways, for example:

- access drives
- pedestrian crossing points
- pram crossings

The only exception to this is where the property owner has given permission, giving access to the property. This applies to where the dropped footway is level with the carriageway and it would apply to any part of a vehicle, i.e. part of the wheel adjacent to the lowered footway and any vehicle overhang.

Where a dropped kerb is provided to a single residential property the council will only enforce parking with the consent of the occupier of that property, providing no other restriction applies. Enforcement of this contravention is only carried out at the request of the property occupier who must countersign a copy of the PCN.

Where dropped kerb access leads to a multi-residential property the council can enforce without the consent of the occupiers of the property.

In the case of access to private land (residential or commercial), the enforcement service will only act if the land owner reports the offence and signs a statement, which confirms permission to park was not given. The contravention is to park in front of the lowered footway, whether or not it causes an obstruction.

To enforce these regulations, the CEO will photograph any penalised offenders to aid the resolution of any offence.

13. Monitoring

Each year the borough is required to report to Transport for London (TfL) on progress in delivering the Mayors Transport Strategy (MTS). Measures included in this parking management strategy that are directly associated with delivering the MTS objectives are:

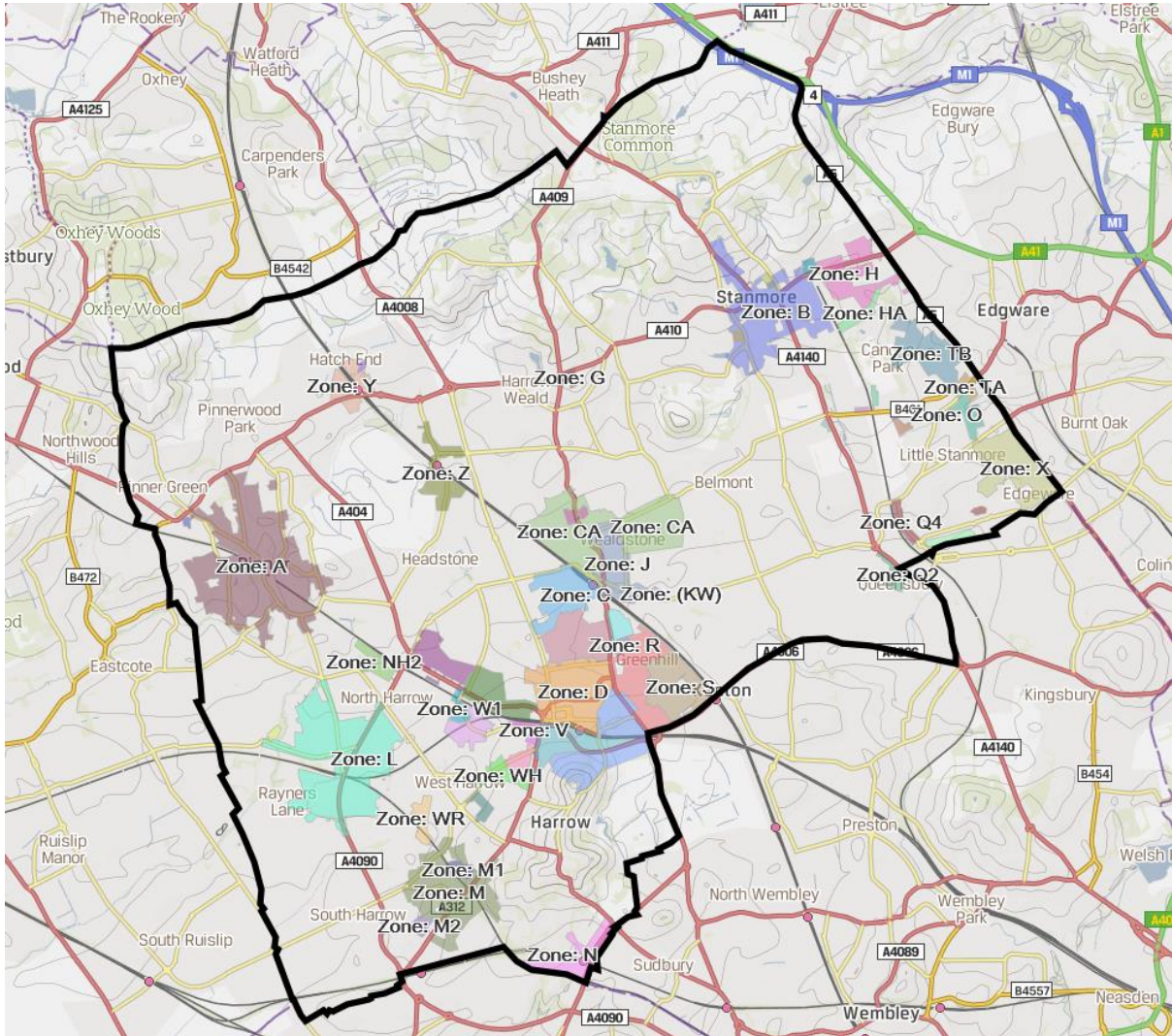
- Electric vehicle charging points installed
- Car club bays implemented
- Number of controlled parking zones introduced
- Number of disabled bays introduced
- Number of parking permit restricted developments

14. Glossary

ANPR	Automatic Number Plate Recognition
CEO	Civil Enforcement Officer
CPZ	Controlled Parking Zone
DfT	Department for Transport
DVSA	Driver & Vehicle Standards Agency
DVLA	Driver and Vehicle Licensing Agency
HEB	Health Emergency Badge
HEBS	Health Emergency Badge Scheme
MTS	Mayor's Transport Strategy
NOF	Neighbourhood Of the Future
NtO	Notice to Owner
PCN	Penalty Charge Notice
PIP	Personal Independent Payment
SPD	Supplementary Planning Document
TARSAP	Traffic and Road Safety Advisory Panel
TEC	Transport and Environment Committee
TfL	Transport for London
TMA	Traffic Management Act
TMO	Traffic Management Order
TSRGD	Traffic Signs Regulations and General Directions
ULEV	Ultra Low Emission Vehicle
VRD	Vehicle Registration Document

APPENDIX A – CPZs information (2019)

Extent of CPZs in Harrow



Summary of types of CPZ schemes in Harrow

Length (km)	%	No. of CPZs	Duration (daily)
131.9	71.63%	34	Very short duration 1-2 hrs
2.62	1.42%	1	Commuter deterrent 4-5 hrs
37.27	20.24%	12	Working day 10-11 hrs
12.36	6.71%	8	Working day / evening >11 hrs
0.77	0.42%	1	Evening only
184.15	100.00%	55	Total

Summary of most common operational hours in short duration schemes

Hour of operation	Length (km)	Number of officer hours required to provide a single enforcement visit
10am - 11am	89.19	44.595
11am-12 noon	29.32	14.66
2pm - 3pm	51.8	25.9
3pm-4pm	27.98	13.99
Total	198.29	99.145

List of all CPZ schemes in Harrow

Area	Operational Hours	Length of roads (km)
Pinner	11am - 12pm Mon - Fri	17.28
Stanmore	3pm to 4pm Mon - Fri	11.87
Bell Close	8am - 6.30pm Mon - Sat	0.09
Buckingham Gardens	2 - 3pm Mon - Fri	0.27
Wealdstone (Royal Estate)	10am - 11am Mon - Fri	4.16
Wealdstone	8am - Midnight Mon - Sun	0.95
Wealdstone	10am - 11am and 2pm - 3pm Mon - Fri	24.78
Canons Park Station	8am - 6.30pm Mon - Sat	0
Cherry Tree Way	10am - 11am & 3pm - 4pm Mon - Fri	0.2
Harrow Town Centre	8:30am - 6:30pm Mon - Sat	9.31
Donnefield Avenue	8am - 6.30pm Mon - Sat	0.24
Dennis Gardens	10am - 11am & 3pm - 4pm Mon - Fri	0.06
Harrow Town Centre	8:30am - 6:30pm Mon - Sat	5.19
Harrow Town Centre (yellow lines only)	8:30am - 6:30pm Mon - Sat	7.8
Harrow Town Centre (east)	8:30am - 6:30pm Mon - Sat	7.43
Fontwell Close	10am - 11am & 2pm - 3pm Mon - Fri	0.41
Stanmore (Station Area)	10am - 11am & 3pm - 4pm Mon - Sat	9.5
Dalkeith Grove	2 - 3pm Mon - Fri	0.72
Stanmore Station	At any time	0.52
Honeybun Estate South	10am - 11am & 2pm - 3pm Mon - Sat	0.93
Leisure Centre	7am - Midnight	5.49
Harrow Town Centre	8:30am - 6:30pm Mon - Sat	4.24

(north)		
Rayners Lane	10am - 11am Mon - Fri	15.23
Laburnum Court	10am - 11am & 3pm - 4pm Mon - Fri	0.04
South Harrow	10am - 11am and 2pm - 3pm Mon - Sat	8.71
South Harrow	10am - 9pm Mon - Sat	1.16
South Harrow	8am - 6.30pm Mon - Sat	0.81
Merton Road	10am-11am & 2pm-3pm & Sat-Sun 10am-11am Mon-Fri	0.5
Sudbury	11am - 12 noon Mon - Fri	2.41
North Harrow (North)	10am - 11am & 2pm - 3pm Mon - Fri	4.79
North Harrow (South)	10am - 11am Mon - Fri	1
Edgware - Methuen Rd & Chandos Crescent	8.30am - 8.30pm Mon - Sat	1.39
Rosslyn Crescent and Froggnal Avenue	8:30am - 8:30pm Mon - Sun	1.4
Pinner Green	8.30am - 6.30pm Mon - Fri	0
Reynolds Drive	11am - 12 noon Mon - Fri	0.55
Honeypot Lane	6pm - Midnight Mon - Sun	0.77
Millais Gardens	11am - 12 noon Mon - Fri	0.17
Turner Road	11am - 12 noon & 3pm - 4pm Mon - Fri	0.54
Woodlands Road	At any time	0.61
Flambard Road and surrounding area	11am - 12 noon Mon - Fri	5.23
Southbourne Close	At any time	0.18
Stanmore Marsh	8am - 6.30pm Mon - Fri	0.1
Edgware	8:30am - 8:30pm Mon - Sat	0.84
Edgware (north)	11am - 12pm Mon - Fri	3.14
Torbridge Close	2pm - 3pm Mon - Fri	0.06
Pinner Road & County Roads	10am - 11am & 2pm - 3pm Mon - Fri	3.19
Vaughan Road	10am - 11am & 2pm - 3pm Mon - Sat	0.95
West Harrow	10am - 11am Mon - Fri	2.14
The Gardens	8am - 6.30pm Mon - Sat	0.63
Walpole Close	10am - 11am Mon - Sat	0.12
Whitmore Road	10am - 1pm Mon - Fri	1.17
Welbeck Road	9am - 10am & 3pm - 4pm Mon - Fri	0.95
Edgware (Burnt Oak Broadway)	10am - 11am & 2pm - 3pm Mon - Fri	6.49
Hatch End	10am - 11am & 3pm - 4pm Mon - Sat	4.82
Headstone Lane	10am to 3pm Mon to Fri	2.62

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**REPORT FOR: TRAFFIC & ROAD SAFETY
ADVISORY PANEL**

Date of Meeting: 25 June 2019

Subject: **INFORMATION REPORT**
Transport Local Implementation Plan,
Road Safety Strategy and Sustainable
Transport Strategy

Key Decision: No

Responsible Officer: Paul Walker – Corporate Director,
Community

Portfolio Holder: Varsha Parmar, Portfolio Holder for
Environment

Exempt: No

**Decision subject to
Call-in:** No, report is for information

Wards affected: All

Enclosures: **Appendix A:** Transport Local
Implementation Plan
Appendix B: Road Safety Strategy 2019
Appendix C: Walking, Cycling &
Sustainable Transport Strategy 2019

Section 1 – Summary

This report updates the Panel regarding the council's Transport Local Implementation Plan, Road Safety Strategy & Sustainable Transport Strategy which were approved by Cabinet in May 2019.

Recommendation:

None, the report is for information only.

Reason:

None, the report is for information only.

Section 2 – Report

Introductory paragraph

- 2.1 This report updates the Panel regarding the Council's Transport Local Implementation Plan (LIP3), Road Safety Strategy & Sustainable Transport Strategy which were recently approved at the Council's Cabinet meeting in May 2019.

Options considered

- 2.2 There are no alternative options under consideration as the LIP3, Road Safety Strategy & Sustainable Transport Strategy have been approved.

Transport Local Implementation Plan 3

- 2.3 The Panel received a report on the draft LIP3 in October 2018.
- 2.4 Members will recall that the LIP3 is a statutory document required by the Mayor of London that shows how the borough will implement the Mayor's Transport Strategy (MTS) locally in Harrow. LIP3 is required to identify how the borough will work towards achieving the Mayor's Transport Strategy (MTS) priorities which are:

- Healthy Streets and healthy people
 - A good public transport experience
 - New homes and jobs
- 2.5 The LIP3 will supersede the previous versions of the plan (LIP2 and LIP1).
- 2.6 Since the Panel considered the content of the draft LIP3 it has been through an extensive consultation and engagement process with the public, key stakeholders, the Overview & Scrutiny Committee, the Portfolio Holder – Environment and Transport for London. LIP3 has now received formal approval from the GLA Deputy Mayor for Transport, Heidi Alexander, on 12th April 2019 and is considered by TFL / GLA to meet the requirements of the GLA Act.
- 2.7 The Council’s Cabinet subsequently received a report on the final version of LIP3 on 30th May 2019 and recommended that full council adopt LIP3 when it meets on 18th July 2019. LIP3 is a statutory plan and under the Council’s constitution it needs to be adopted by full Council.
- 2.8 The final LIP3 document approved by Cabinet is provided in **Appendix A** for information.
- 2.9 The LIP3 programme of investment covers a three year period from 2019/20 to 2021/22. The progress report on the agenda for this meeting provides details of the 2019/20 programme.
- 2.10 Two key themes in the MTS and LIP3 are Vision Zero and Healthy Streets. Vision Zero aims to prevent all road deaths and serious injury collisions in London and Healthy Streets initiatives aims to support an increase the in mode share of sustainable travel in London to 80% by 2041. These are ambitious aspirations and so Harrow has developed two transport strategies to expand on the policies contained in LIP 3 and set out more detail on how these will be achieved in Harrow. These documents are as follows:
- Harrow Road Safety Strategy 2019
 - Harrow Walking, cycling & Sustainable Transport Strategy 2019
- 2.11 These strategies were approved by Cabinet on 30th May 2019 in conjunction with the approval of LIP3 and are explained further in the following sections of this report.

Road Safety Strategy 2019

- 2.12 The development and preparation of the draft third Transport Local Implementation Plan (LIP3) amended many of the existing road safety

policies and introduced new road safety policies. These have all been subject to extensive public consultation and engagement with all stakeholders as a part of the LIP3 consultation process. These updated policies have now all been incorporated into a new Road Safety Strategy which details how the policies will be implemented.

- 2.13 This strategy will set out how the borough delivers road safety improvements through the use of engineering, education, training and enforcement. The strategy also shows that the borough complies with the statutory duties as laid out in the 1988 Road Traffic Act and the Mayor's Transport Strategy 2018 (MTS). This road safety strategy will replace the previous road safety plan that was prepared in 2015.
- 2.14 Vision Zero is a key policy in the London Mayor's Transport Strategy which aims to eliminate all killed and serious injury accidents by 2041. This is a very ambitious target and the Borough has set out its approach to meeting this target in the strategy. The core road safety objectives are to:
- Use engineering and enforcement measures to improve borough road safety
 - Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough
 - Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills
 - Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads
- 2.15 The strategy also sets out a range of targets and outputs to monitor progress. These initiatives will be delivered through the annual TfL grant funding allocation. The amended Road Safety Plan 2019 can be seen in **Appendix B** for information.
- 2.16 This document includes all the approved road safety objectives and targets as detailed in LIP3 as well as information on how these will be delivered. The Road Safety Plan supports all of the council's corporate priorities.
- 2.17 The road safety casualty reduction targets included in the strategy accord with the Transport Local implementation Plan 3 and have been set by the Mayor for London.
- 2.18 The interventions and initiatives set out in the Road Safety strategy will enable the borough to best achieve these casualty reduction targets.

Walking, Cycling & Sustainable Transport Strategy

- 2.19 The Walking, Cycling & Sustainable Transport Strategy sets out the boroughs approach to achieving healthy streets and increasing the proportion of trips undertaken by sustainable modes of transport.
- 2.20 The sustainable transport strategy focuses purely on sustainable modes of transport including walking, cycling, bus and rail and electric vehicles and explains in more detail the different work programmes and initiatives being used to promote and develop sustainable transport systems in the borough. The strategy also explains the way in which these combine to deliver an effective set of measures that will mitigate the impact of transport on the environment and that will contribute to the wider measures being taken to tackle climate change.
- 2.21 The strategy accords with and expands upon the policies set out in the LIP3 and sets out all the different interventions and initiatives necessary to achieve key targets in LIP3 and how they will contribute to sustainability and modal shift. The strategy document can be seen in **Appendix C**.
- 2.22 A central theme of the MTS is to achieve 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041 in order to accommodate growth in London, improve air quality and ensure the economy is not constrained by a reliance on private cars.

The strategy also sets out a range of objectives, targets and outputs to monitor progress and includes:

- Walking – improving crossing facilities and pedestrian routes and targeting switchable trips through promotions and campaigning,
- Cycling – Completing the aspirational cycle network for the borough, supporting dockless bike schemes and cycle hubs and targeting switchable trips through promotions and campaigning,
- Liveable neighbourhoods – developing and submitting bids to improve walking / cycling in key areas of the borough including Wealdstone,
- Public Transport – deliver Wealdstone bus priority scheme and improve network performance on key bus routes (e.g. route 140), lobby for improved step free access at tube stations (e.g Stanmore, South Harrow, Sudbury Hill), improve taxi facilities,
- Low emission / electric vehicles – develop more neighbourhoods of the future and roll out residential electric vehicle charging,

- School sustainable travel – Promote greater participation in school travel planning and STARS to improve accreditation ratings, providing grant support to schools for initiatives in travel plans.

2.23 These initiatives are essential to the wider delivery of LIP3 and will be delivered through the annual TfL grant funding allocation.

2.24 A regular update on progress with delivering the strategies will be provided at future meetings of the Panel and progress with delivering work programmes, outcomes and performance targets will be provided.

Ward Councillors' comments

2.25 No ward councillor's comments have been sought for this report as it is for information only.

Staffing/workforce

2.26 The delivery of schemes and initiatives contained within the policies will be undertaken by existing staff resources within the Traffic, Highways & Asset Management team supported by technical consultants and specialised theatre companies as required.

Performance Issues

2.27 The implementation of schemes and initiatives in the plan will support the wider aims, objectives and targets in the current Transport Local Implementation Plan and help to deliver Harrow's corporate priorities and in particular building a better Harrow.

Environmental Implications

2.28 The current Transport Local Implementation Plan has undergone a Strategic Environmental Assessment (SEA) which has indicated that there are environmental benefits from delivering the road safety schemes and educational programmes.

2.29 Key population and human health benefits include reducing reliance on travel by car, reducing casualties, reducing congestion, encouraging active travel and improving air quality. There are public health benefits associated with increased active travel which can reduce diabetes and obesity levels.

Risk Management Implications

2.30 Risk included on Directorate risk register? No

- 2.31 The development of any schemes arising from a petition would be subject to separate risk assessments.
- 2.32 There is a requirement to undertake a design risk assessment during scheme development under the Construction (Design & Management) Regulations in order to manage any potential health and safety risks.

Legal implications

- 2.33 Section 145 of the GLA Act 1999 requires all London authorities as soon as reasonably practicable to prepare a LIP setting out proposals for implementing the Mayor's Transport Strategy for their area. In preparing its LIP, the Council is required to have regard to the Mayor of London's Transport Strategy and the guidance issued by the Mayor.
- 2.34 The Council is required to revise its LIP if the Mayor's Transport Strategy is revised. A revised LIP is subject to public consultation and approval by the Mayor of London.
- 2.35 Any legal implications relating to individual schemes will be further considered and reported at appropriate times to the relevant decision-making body. London boroughs are required to include adequate measures in their LIPs for the purpose of implementing the Mayor of London's Transport Strategy.
- 2.36 Section 153 of The GLA Act 1999 gives the Mayor powers to issue legally binding directions to the boroughs that they must comply with. A direction may cover any matter relating to how a borough exercises its LIP functions, such as:
- The timetable for completing or revising a LIP
 - The bodies or persons that must be consulted in preparation of a LIP
 - Timetables and dates within the LIP
 - Actions to be taken to implement the proposals in the LIP
 - Steps to be taken to remove the effects of an action that is incompatible with the proposals in the LIP
- 2.37 The Mayor of London can exercise his powers under section 152 of the GLA Act on behalf of the council, the powers that the council has in connection with the implementation of those proposals, where he considers a borough has failed or is likely to fail satisfactorily to implement any proposal contained in a local implementation plan as required by section 151(1)(a) of the GLA Act. Should the Mayor exercise this power he is entitled by virtue of section 152 (7) to recover the reasonable costs of doing so. However, it is anticipated that if this power is exercised it is most likely to be in cases where the borough deviates significantly from its LIP and the Mayor's Transport Strategy, rather than minor programme variations.

- 2.38 It is not a statutory duty to prepare a road safety plan, however, it is an effective way to show that Harrow Council is discharging its duty under the Road Traffic Act 1988 by preparing and carrying out a programme of measures designed to promote road safety and reduce personal injury accidents.
- 2.39 The Transport Strategy is supplementary to the LIP3. Being a supplementary document, it can only expand on and provide details to support the policies in the LIP3 and must be consistent with the policies in the LIP3.
- 2.40 Section 39 of the Road Traffic Act 1988 (“RTA 1988”) places a statutory duty on local authorities to prepare and carry out a programme of measures designed to promote road safety.
- 2.41 The Harrow Road Safety Strategy will enable the Council to discharge its statutory duty under the RTA 1988 and ensure the safety of road users within the borough.

Financial Implications

- 2.42 Funding for the initiatives included in the strategies is predominantly provided by TfL annual LIP funding. There is no guarantee from TfL that the level of funding will be available over the lifetime of the LIP and therefore the figures included in LIP3 are indicative only and/or subject to a separate bidding process. The projects will only be implemented based on funding availability. Lack of funding could result in delayed delivery and/or the risk of not achieving the performance targets.

Equalities implications / Public Sector Equality Duty

- 2.43 An Equalities Impact Assessment has been undertaken for the Transport Local implementation Plan of which the parking management programme is a part. A review of equality issues was undertaken and has indicated no adverse impact on any of the protected characteristic groups. There are positive impacts of the plan for all groups, particularly age and disability (people with mobility difficulties).
- 2.44 It is considered that the proposals in the Harrow Road Safety Strategy will be of benefit to all the people living within the borough and in particular the groups set out in the table below:

Protected characteristic	Benefit
Age (young and old people)	Increased independence from learning to cycle Improved safety for schools journeys from 20mph zones Health benefits from more active travel Safer and more sustainable journeys to school Better air quality particularly around schools Improved safety from road safety courses aimed at older people
Sex (Women in particular)	Women only cycle classes
Disability (People with mobility difficulties)	An improved environment for walking and cycling Reduced road speeds improving safety Cycle training for SEND schools

Council Priorities

- 2.45 The scheme development process detailed in the report accords with the administration's priorities as follows:

Council Priorities	Sustainable transport strategy input
Building a Better Harrow	Sustainable transport support for growth areas, healthy streets, liveable neighbourhoods, walking and cycling infrastructure improvements
Supporting Those Most in Need	Healthy streets, cycle training for vulnerable users, road safety improvements, dropped kerbs, Cycle training for vulnerable users, reduced traffic dominance will improve safety
Protecting Vital Public Services	Healthy streets, sustainable school transport support, 20mph zone extensions, healthy streets, cycle training
Delivering a Strong local Economy for All	Healthy streets, liveable neighbourhoods, electric charging infrastructure, 20mph zone extensions, road safety improvements, pedestrian crossings and cycle facilities, cycle training, road safety training.
Modernising Harrow Council	Improved pedestrian crossings and cycle facilities, electric charging infrastructure Camera enforcement, pedestrian countdown facilities at crossings

Section 3 - Statutory Officer Clearance

Name: Jessie Man	<input checked="" type="checkbox"/>	on behalf of the Chief Financial Officer
Date: 13/06/19		

Name: Patrick Kelly	<input checked="" type="checkbox"/>	on behalf of the Monitoring Officer
Date: 14/06/19		

Name: Paul Walker	<input checked="" type="checkbox"/>	Corporate Director
Date: 13/06/19		

Ward Councillors notified:	YES, as a part of LIP3
EqIA carried out:	YES, as a part of LIP3
EqIA cleared by:	Dave Corby, Community - Equality Task Group (DETG) Chair

Section 4 - Contact Details and Background Papers

Contact:

Barry Philips, Team Leader – Transportation
Tel: 0208 424 1649 (x2649)
barry.philips@harrow.gov.uk

Jeffery Sarpong – Senior Road Safety Officer

Background Papers:

Harrow Transport Local Implementation Plan (LIP3)

Road Safety Plan 2015

Safer Streets TfL

TfL accident data

**Call-In Waived by the
Chair of Overview and
Scrutiny Committee**

NOT APPLICABLE

*[Call-in does not apply as the
Recommendation is for noting
only]*

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Harrow

Transport Local Implementation Plan 2019/20 - 2021/22



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Foreword

We welcome the opportunity to set out Harrow's third Transport Local Implementation Plan. This plan sets out long terms goals and transport objectives for the next 20 years and includes an initial three-year programme of investment to be delivered over 2019/20 – 2021/22. We are pleased that Harrow has now adopted two important and ambitious new approaches to transport and road safety delivery across the borough.

Firstly, Vision Zero, which establishes our intention to eliminate all road traffic deaths and serious injuries by 2041.

Secondly, Healthy Streets, which will help us work towards creating a healthier and more attractive street environment, increasing the number of people walking, cycling and using public transport and changing streets so that quality of life for all people is improved, enabling people to live well and reduce inequalities.

Adopting a Healthy Streets approach to transport in the borough will promote active travel and encourage modal shift. Harrow's ambition is to increase active travel and particularly increase cycling for journeys currently made by car. This will not only improve the health of cyclists, but also improve air quality and reduce congestion which in turn has significant wider health benefits.

This transport plan will also support Harrow's Core Strategy which sets out the Borough development strategy for the next fifteen years. The delivery of the transport plan proposals will help the borough to ensure that where housing and population growth occurs, the population does not become car dependent and that there is a preferred and easy option to choose sustainable travel as an alternative.

This new plan will also refocus our efforts on dealing with local issues and as such it will enable the borough to deliver improved air quality, more liveable neighbourhoods, improved accessibility and increased opportunities for active travel. These initiatives are so important as the borough urgently needs to address the low levels of active travel in the borough as well as the high levels of obesity and diabetes.

The plan has already undergone a wide scale public consultation which has refined the initial plans to deliver improved policies and to ensure that the borough addresses the wider needs of the population.

Through working collaboratively with other organisations and those who live and work in Harrow, we believe we have created a transport plan that will work towards better enabling Harrow to improve and to ensure that it remains an attractive place for all to live, work and spend time in.

Graham Henson - Leader of the Council



Cllr Varsha Parmar - Portfolio holder for Environment



Executive summary

The Transport Local Implementation Plan for the London Borough of Harrow sets out long terms goals and transport objectives for the borough for the next 20 years, proposes a three-year programme of investment starting in 2019/20, and includes a delivery plan for the period 2019/20 - 2021/22. It also includes the targets and outcomes the borough is seeking to achieve.

The plan identifies how the London Borough of Harrow will work towards achieving the MTS priorities which are:

- Healthy Streets and healthy people
- A good public transport experience
- New homes and jobs

The overarching aim of the Mayor of London's transport strategy is for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041. Harrow is committed to supporting these aims and priorities. It is particularly important in the borough where obesity and diabetes levels are high and activity levels are low. Delivering increased active travel and increasing activity levels are key ways to address these issues.

To deliver the Mayor's priorities, policies in Harrow that cover walking, cycling, schools, public transport, road safety, parking and enforcement, social inclusion, public realm, regeneration, freight, highway management, changing behaviour, environmental issues and low emission vehicles and working in partnership have all been considered. Changes were needed to reflect the new Mayor of London's transport strategy and to prepare for the significant projected population growth in London, potentially reaching 10.5 million residents by 2041.

As a result of LIP3, the borough will be able to access significant funding from Transport for London. This funding will enable the borough to deliver healthy streets, improve road safety, better environmental infrastructure and more facilities for cycling.

Included in this plan are ambitious plans to extend 20mph zones, deliver road safety education and local road safety schemes, improve conditions for walking, cycling, accessibility, network performance, bus priority and freight management and in the longer term deliver more liveable neighbourhoods in the borough. As a result of this plan, significant environmental improvements will be made across the borough which will help to prepare the borough to mitigate climate change.

1. Introduction and preparing a LIP

1.1 Introduction

- 1.1.1 The Local Implementation Plan (LIP) is a statutory document prepared under Section 145 of the GLA Act and sets out how the borough proposes to deliver the Mayor's Transport Strategy (MTS) in its area, as well as contributing to other local and sub-regional goals. It has been developed in accordance with the Revised Guidance for Borough Officers on Developing the Third Local Implementation Plan.
- 1.1.2 This document is the third LIP for the London Borough of Harrow. It covers the same period as the MTS (published in March 2018) and it also takes account of the transport elements of the draft London Plan¹ December 2017, and other relevant Mayoral and local policies. The LIP sets out long terms goals and transport objectives for the London Borough of Harrow for the next 20 years, a three-year programme of investment starting in 2019/20, and includes a delivery plan for the period 2019/20 - 2021/22 and the targets and outcomes the borough are seeking to achieve. A more detailed delivery plan is provided for the financial year 2019/20.
- 1.1.3 This LIP identifies how the London Borough of Harrow will work towards achieving the MTS priorities which are:
- Healthy Streets and healthy people
 - A good public transport experience
 - New homes and jobs
- 1.1.4 The Council notes that the overarching aim of the Mayor of London's transport strategy is for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041, compared to 63 per cent today, and there are different targets set for central, inner and outer London. The LIP outlines how Harrow Council will set local priorities and targets in order to assist with achieving these Mayoral priorities.
- 1.1.5 This document also outlines how the Council will work with TfL to assist with delivering the outcomes, polices and proposals of the MTS.

1.2 Local approval process

- 1.2.1 Draft contents of LIP3 (3rd Local Implementation Plan) were agreed with the Portfolio Holder at various stages in its development. A report was brought to the Harrow Traffic and Road Safety Advisory Panel (TARSAP) for consideration during the consultation period.
- 1.2.2 Harrow Cabinet considered the draft LIP3 and delegated final amendments to be made by the Portfolio Holder on 13th September 2018.

¹ The London Plan is the Mayor's Spatial Development Strategy for London. The plan sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years

- 1.2.3 Public consultation of draft LIP3 took place in September/October 2018.
- 1.2.4 The final draft LIP3 was submitted to TfL on 2nd November 2018.
- 1.2.5 Harrow Overview and Scrutiny Committee considered the draft LIP3 and the consultation results and amendments on 15th November 2018.
- 1.2.6 Should amendments to the final draft LIP3 be required, these will be done during April 2019 and in May 2019 Harrow Council will adopt the final LIP3.

1.3 Statutory consultation

- 1.3.1 The borough undertook a six week public consultation on LIP3 between 17th September and 26th October 2018. The consultation appeared on the borough's consultation website, and both LIP3 and the SEA Environmental Report were available for any member of the public to consider.
- 1.3.2 The draft LIP3 consultation and the SEA Environmental Report were also directly sent to the following organisations:
- TfL
 - Metropolitan Police Service
 - Harrow Association of Disabled People
 - London Travel Watch
 - Historic England
 - The Environment Agency
 - Natural England
 - WestTrans
 - London Borough of Hillingdon
 - London Borough of Barnet
 - London Borough of Brent
 - London Borough of Ealing
 - Hertfordshire County Council
 - Three Rivers District Council
 - Hertsmere Borough Council
 - Voluntary Action Harrow
 - Brent and Harrow chamber of commerce
 - London First
 - Pinner Local History Society
 - Harrow Friends of the Earth
 - Harrow Heritage Trust
 - Harrow in Leaf
 - Harrow Natural History Society
 - Harrow Nature Conservation Forum
 - Herts and Middlesex Wildlife Trust

- Harrow Cyclists
- Freight Transport Association
- Road Haulage Association
- The RAC
- The AA
- Living Streets
- London cycling campaign
- London Taxi Drivers Association
- Sustrans
- Harrow BID
- Shopmobility
- British Motorcycle Federation
- Motorcycle Action Group
- ROSPA

1.3.3 The draft LIP3 was also widely consulted within Harrow Council, with the consultation also sent to the following:

- Councillors
- Environmental Services
- Planning Services
- Regeneration
- Public Health
- Economic Development
- Housing
- Education
- Children Services
- Adult Services

1.3.4 Similar to previous LIP consultations in Harrow, the initial response was slow. To encourage increased involvement in the consultation, letters highlighting the consultation were also circulated to all schools and community champions across the borough. The Council also tweeted about the consultation throughout the consultation period and placed an advert on the Council's main website page.

1.3.5 Following the LIP3 consultation, the initial proposed changes to LIP3 were approved at the Harrow overview scrutiny meeting of 13 November 2018. Further changes made following the overview scrutiny meeting were separately agreed with the Portfolio Holder. A consultation summary is included in the overview scrutiny report and is available via Harrow's website²).

² http://www.harrow.gov.uk/info/100011/transport_and_streets/951/harrow_transport_policy_documents

1.4 Statutory duties

- 1.4.1 The borough has taken into account all the statutory duties and processes as set out in the requirements in the GLA Act in the preparation of this LIP.
- 1.4.2 The borough has met its statutory duty and conducted a Strategic Environmental Assessment (SEA) and, as recommended, an Equality Impact Assessment (EQIA) on the contents of LIP3. The LIP3 Outcomes and programmes have been assessed for both purposes, and this process has not identified any necessary changes to LIP3 and. No changes to LIP3 were made as a result of this assessment).
- 1.4.3 The SEA scoping report went out for consultation for five weeks via email to statutory consultees and environmental groups on 6th July 2018 and was available on the Harrow website until 10th August 2018. The consultation was also sent to environmental and planning parts of Harrow Council for internal consideration. The statutory consultees for the SEA are:

Historic England
The Environmental Agency
Natural England

- 1.4.4 The following organisations were also consulted on the SEA scoping report:

Harrow in Leaf
Harrow Friends of the Earth
Harrow Natural History Society
Harrow Nature Conservation Forum
Pinner Local History Society
Herts and Middlesex Wildlife Trust
Harrow Heritage Trust
TfL

- 1.4.5 The following responses were received regarding the SEA scoping consultation

Table 1: Consultation responses to SEA

Source	Change made
TfL	Added to SEA objective: 8. Promote recycling by encouraging responsible sourcing of materials as well as BES 6001 accreditation for appropriate suppliers
Internal Harrow consultation	M ² of increased grass verge baseline measure now changed to Square meterage of removed hard paving to introduce soft landscaping such as grass verges

Source	Change made
Harrow Nature Conservation Forum	<p>Added the following from Harrow's core strategy: Protect the Green Belt, Metropolitan Open Land, and Areas of Special Character</p> <p>And also added overarching policy objectives include:</p> <ul style="list-style-type: none"> • Resist any loss of Green Belt. • Safeguard and enhance Metropolitan Open Land. • Resist any net loss of open space and where possible seek to increase provision

1.4.6 Following the SEA scoping consultation, the SEA Environmental Report was prepared including a non-technical summary of the report. This Environmental Report is available on Harrow's website on the Harrow transport policy documents page of the Harrow website³.

1.4.7 The EQIA will be submitted to Harrow Cabinet along with the draft LIP3 document on 13th September 2018 and will also be available on the transport policy page on Harrow's website.

1.4.8 The SEA Environmental Report, including a non-technical summary, and a draft of the EQIA were available on the borough's website during the consultation period. Suggested changes to the Environmental Report and LIP3 will be considered and if appropriate included in the documents following consultation. The Environmental Report, Environmental Statement and the final EQIA will remain on the transport policy page of Harrow's website.

1.5 LIP approval

1.5.1 The draft Harrow Transport Local Implementation Plan (LIP3) was submitted to the Mayor on 2nd November and approved by the Mayor on 12th April 2019.

2. Borough Transport Objectives

2.1 Introduction

2.1.1 This chapter sets out the local policy context for the third round of LIPs. It covers the borough's detailed interpretation at a spatial level and the local policies and proposals which will help deliver the MTS. The chapter also considers the link between the LIP and other key frameworks against which the borough plans and delivers local services.

2.1.2 This LIP firmly demonstrates that it is informed by evidence and analysis of local needs and issues and that it is shaped by the wider context of the MTS vision, the MTS Healthy Streets Approach and the MTS policies, proposals and outcomes.

³ http://www.harrow.gov.uk/info/100011/transport_and_streets/951/harrow_transport_policy_documents

2.2 TfL City planner tool

2.2.1 TfL has developed a city planner tool that has been used as a source of information throughout this plan. The tool includes 200 datasets of information that have been aggregated to form the basis of the TfL city planner tool. The tool uses 6 million different pieces of data and is based on a hex-based analytical grid. Each hex, or “walkable neighbourhood” is 350 metres across and all the relevant transport planning data is aggregated onto the grid. This data has been used extensively this plan.

2.3 Local context

2.3.1 Harrow is an outer-London borough situated approximately 10 miles to the north-west of central London with a land area of some 5,047 hectares (50 sq. kilometres or 20 sq. miles). It is the 12th largest borough in London by area but 21st in terms of size of population. Neighbouring local authorities are the London boroughs of Barnet, Brent, Ealing and Hillingdon, and to the north Hertsmere Borough Council and Three Rivers District Council in Hertfordshire. Figure 3 shows the borough in the London context.

2.3.2 Harrow town centre is one of 12 Metropolitan centres in London but has not kept pace with growth experienced by neighbouring centres and is in need of some renewal. Harrow has unique strengths, in terms of its diverse, highly skilled and entrepreneurial population that provide the opportunity for the borough to carve out a clear role for itself in support of west and outer London’s wider economic offer. Figure 4 shows the metropolitan, major, district and local centres in the borough.

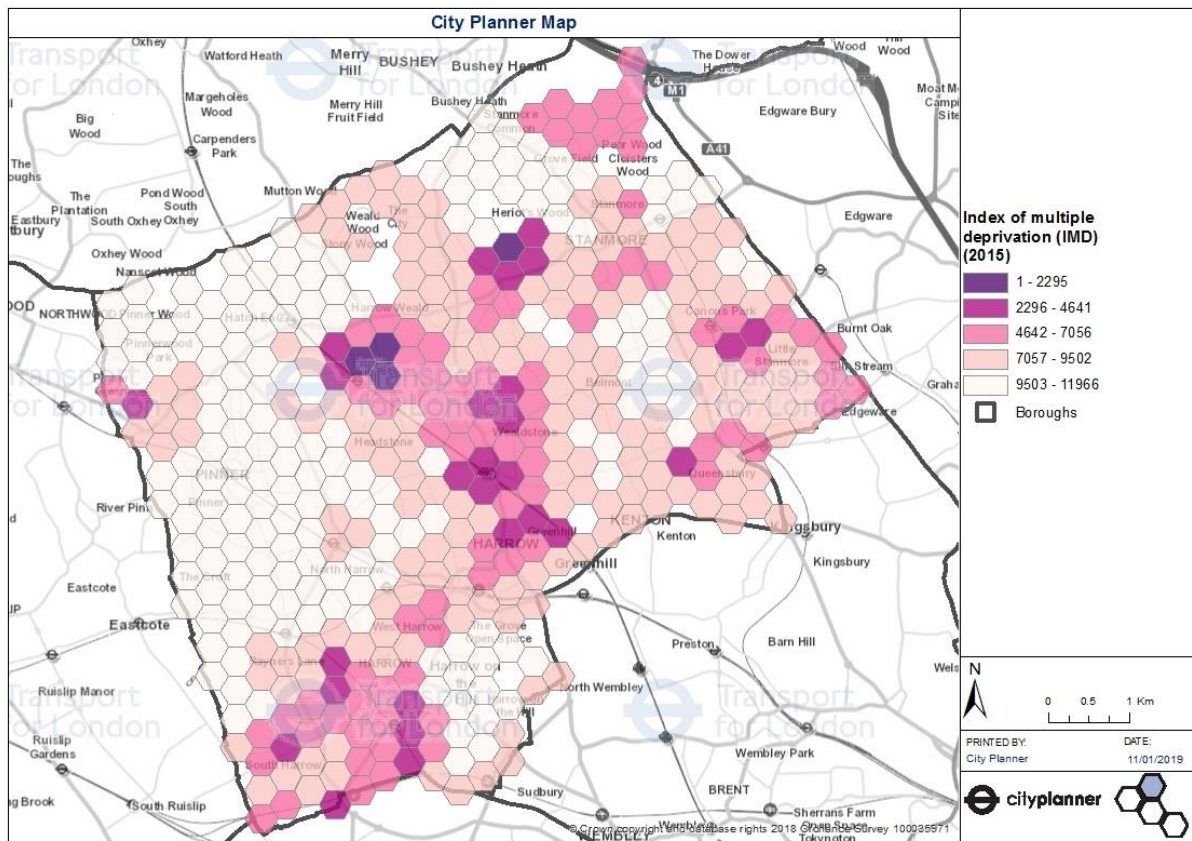
Deprivation

2.3.3 The English Indices of Deprivation 2015 is a tool for identifying the most deprived areas in England at the small area level (LSOA). The data is provided by the Department for Communities and Local Government. Figure 1 shows the City Planner index of multiple deprivation summary for the borough.

2.3.4 The Index of Multiple Deprivation (IMD) 2015 is a measure of multiple deprivation based on combining together seven distinct domains of deprivation. This data has been aggregated to hexagon cells through a dasymetric mapping approach as per the IMD guidelines. The metric is disaggregated to within each output area and weighted by population. The weighted metric is then aggregated to hex cells by summing for postcodes within each hex cell and dividing by the total weighting. This process distributes the IMD metric to areas with postcodes to approximate distribution. The resulting metric is then ranked for the GLA. The data is sorted descending with the highest rank (1) and highest percentile (1) assigned to the cell with the greatest relative deprivation. When multiple hex cells are combined the lowest value (highest rank (1)) is displayed.

2.3.5 The map shows that Harrow has some areas with the highest deprivation in the country. These areas occur in the wards of Roxbourne, Stanmore Park, Hatch End, Harrow Weald, Pinner, Edgware, Harrow on the Hill and Kenton East.

Figure 1: City Planner index of multiple deprivation summary



Population

2.3.6 London faces significant projected population growth (70,000 every year), reaching 10.5 million in 2041. This means that just to meet demand, at least 66,000 new homes need to be built in London every single year. In Harrow, the borough needs to build 13,920 new homes by 2028/29⁴ to meet the growing demand.

2.3.7 In addition to population growth, the demographic of the population is forecast to change, including an increase in ethnic minority groups, one person households, lone parents and multi occupation households.

2.3.8 Harrow residents enjoy good life expectancy (82.7 years for men and 86.1 years for women) resulting in a disproportionately high increase in the proportion of older residents and adults living alone. Forecasts show these trends are set to continue with an increasing number of people aged over 85. At the opposite end of the age spectrum, the borough will also see a growth in the under 15 age group (9.8%) reflecting Harrow's role in providing suburban family accommodation. It is expected that the number of residents aged 65 plus will increase by 42% and those aged 85 plus could increase by 62% by 2029⁵.

⁴ Draft London Plan, December 2017

⁵ 2014-2029, 2014-based Sub-National Population Projections, ONS

2.3.9 Harrow is already one of the most diverse boroughs in London and the most religiously diverse in the UK. A significant proportion of Harrow's residents are of Indian origin and overall around 53% of the population are from minority ethnic groups with this figure being higher in certain parts of the borough (e.g. Kenton East) and in the school age population.

2.3.10 There are around 84,300 households in Harrow; the average household size in the borough is estimated to be about 2.8 persons (higher than the London average) while the proportion of one-person households is estimated to be lower than the London average.

Employment

2.3.11 There are just over 10,000 businesses in Harrow; 78% of these are small businesses employing less than 4 people and 91% employ 10 people or less. However there are 38 businesses employing 200 people or more and these account for 25% of the borough's employment; Public administration, education and health is strongly represented in Harrow's economy while banking, finance and insurance is under represented.

2.3.12 In recent years there has been strong growth in new business formations in the 'legal, accountancy and other business support' and 'construction, personal, community service, retail trade and repairs' sectors.

2.3.13 Employment forecasts project a net increase of 4,000 jobs in the borough over the period 2009-2026; growth sectors include hotels and restaurants, business services and other services, however contraction is expected in the manufacturing, construction, wholesale, public administration, health and education sectors.

2.3.14 Around 31% of Harrow's residents work within the borough, 22% commute into central London, and about 25% work in the neighbouring boroughs of Brent, Hillingdon, Barnet and Ealing; there is also significant in-commuting into the borough most notably from south Hertfordshire (Watford, Hertsmere).

Health

2.3.15 One in five children in Harrow is overweight at age 5 rising to more than one in three by the time they are 11. Two thirds of Harrow adults are estimated to be overweight. Obesity increases the risk of developing heart disease, stroke, cancer and long term health conditions such as diabetes and hypertension. In 2016/17 there were 19,637 people aged 17 years or older with diabetes. The total prevalence of people in Harrow with diabetes, diagnosed and undiagnosed, is estimated to be 10.5% of the population; this is the second highest local authority prevalence in England. Wealdstone has the highest level of diabetes in the borough.

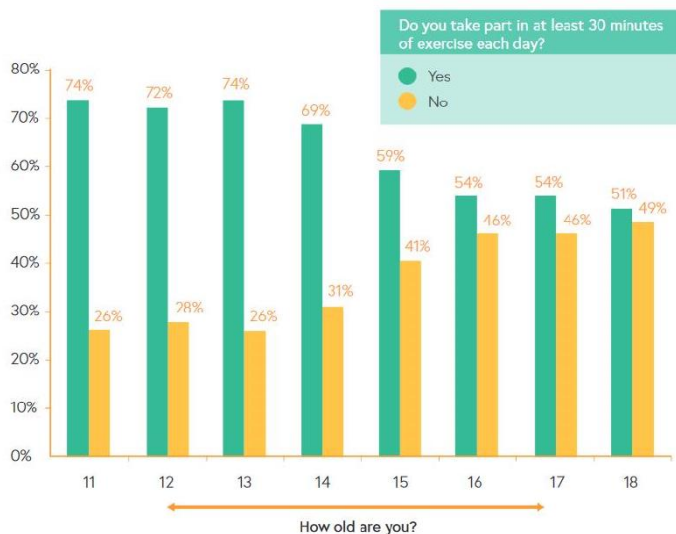
2.3.16 People with diabetes are at a higher risk of having a heart attack or stroke. In Harrow, people with diabetes were 100.5% more likely than people without diabetes to have

a heart attack compared to 86.9% nationally. Also, people with diabetes in Harrow were 44.5% more likely to have a stroke, compared to 58.5% nationally. For people with type 2 diabetes, 23.3% are of white ethnicity and 72.0% from a minority ethnic group⁶. Encouraging active travel is one of the key ways of improving the health of those with diabetes and also a way to support effective and sustained weight loss.

2.3.17 Harrow is less active and more inactive than London and the nation as a whole: Nearly one in three (31%) of the adult population in Harrow is classed as physically inactive falling into the Chief Medical Officer’s “high risk” health category. This means that 31% of the adult population in Harrow do less than 30 minutes of moderate intensity physical activity per week. This is higher than for London (27%) and the national (27.7%) level of inactivity.

2.3.18 In 2016, a joint approach between Harrow Council and the voluntary sector undertook a large scale project to develop a picture of what local young people in the borough are going through. The project is known as *This is Harrow*. This work included 51 charities directly involved, heard from 4,358, young people, partnered with 8 schools and directly worked with Harrow Council departments including, Health, Harrow Clinical Commissioning Group (CCG), Harrow Local Safeguarding Children Board (LSCB), and also London Metropolitan Police. Participants represented 15% of the Harrow 10 – 19 year old population. The results of the study were published in 2018. The study showed that only 51% of 18 year olds take 30 minutes of exercise each day compared with 74% of 11 year olds. Figure 2 shows the amount of exercise children of different ages do each day.

Figure 2: Children exercise level in Harrow⁷



⁶ [https://fingertips.phe.org.uk/profile/diabetes-ft/data#page/13/gid/1938133138/pat/46/par/E39000018/ati/153/are/E38000074%20\(PHE%20Fingertips%20online%20accessed%2027/6/18\)](https://fingertips.phe.org.uk/profile/diabetes-ft/data#page/13/gid/1938133138/pat/46/par/E39000018/ati/153/are/E38000074%20(PHE%20Fingertips%20online%20accessed%2027/6/18)).

⁷ This is Harrow survey, 2018

2.3.19 Only 76.9% of people in Harrow do any walking at least once a week which is below the England average of 80.6%. Harrow has the 2nd lowest levels of walking in London. Premature mortality can be significantly reduced through doing more physical activity. It is estimated that around 14.2% of the new Type 2 diabetes cases in Harrow could be prevented if adults were 100% more active, and 5.6% prevented if adults were 50% more active.⁸

The Environment

2.3.20 Over a quarter of the borough consists of designated open space; residential gardens provide private or communally accessible spaces. Harrow's land area includes 1,088 hectares Green Belt and a further 313 hectares Metropolitan Open Land. Statutorily protected assets include 2 Sites of Special Scientific Interest, 28 Conservation Areas, over 300 listed buildings, four historic parks and gardens, and 9 scheduled ancient monuments. Figure 5 shows the key environmental features in the borough.

2.3.21 In 2002, Harrow designated the whole borough an Air Quality Management Area and therefore has an action plan to improve air quality to within National Objective levels. Across London, there has been a gradual reduction in NO₂, PM₁₀ and PM_{2.5} concentrations at background sites in both inner and outer London and at outer London roadside sites. It is estimated that around half of nitrogen oxides (NO_x) emissions come from road transport sources. Air quality is expected to improve across Harrow as motor engines become more efficient.

2.3.22 Harrow's carbon footprint is calculated at 11.41 tonnes of Carbon Dioxide (CO₂) per capita, which is higher than the London average but lower than the national average at 11.28 and 12.10 tonnes of CO₂ per capita respectively. The domestic sector (i.e. Housing, and more specifically the electricity, gas and other fuels used in the home) is responsible for the highest portion of emissions, accounting for 53% of the CO₂. In total, Harrow contributes 2.1% of all the CO₂ emitted across London. This puts the borough in 28th position out of the 33 London boroughs.

2.3.23 The Green Flag Award scheme recognises and rewards well managed parks and green spaces, setting the benchmark standard for the management of recreational outdoor spaces across the United Kingdom and around the world. Harrow had achieved the 'Green Flag' quality status for five of its public parks: Canons Park, Harrow, Recreation Ground, Pinner Memorial Park, Roxeth Recreation Ground and Kenton Recreation Ground.

2.3.24 Rights of way in Harrow including footpaths, bridleways and byways mainly run through the borough's countryside, which comprises greenbelt, open spaces and parks. In the entire borough there are just over 28km of rights of way. The existing rights of way are grouped around Harrow on the Hill and Greenhill wards in the south

⁸ Healthwatch Harrow 2018, Diabetes care report

of the borough, throughout the greenbelt in the north of the borough and also through Pinner Park Farm, Stanmore Golf course and Canons Park open space.

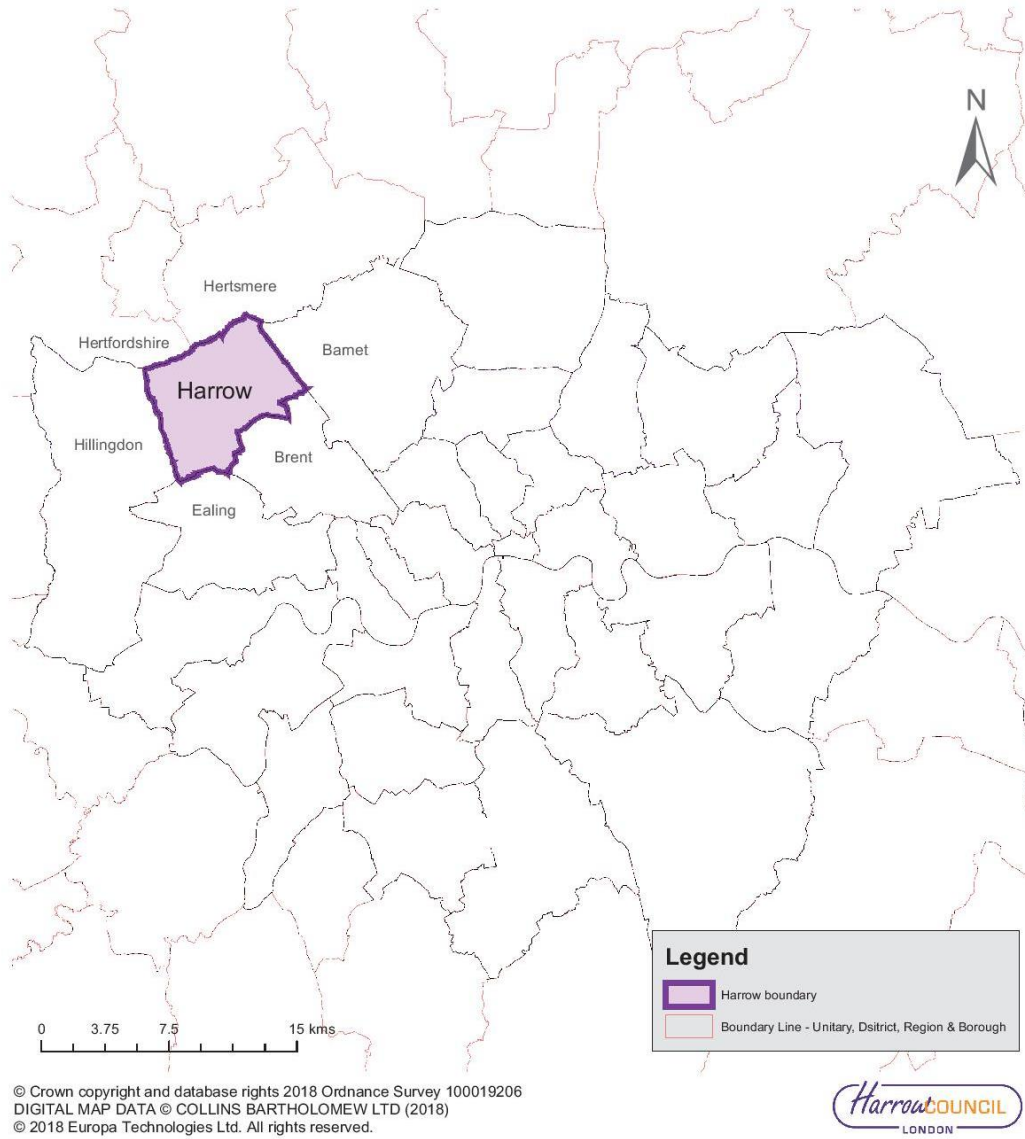
- 2.3.25 Harrow has a composting and recycling rate of 46%, one of the highest in London, and has signed up to the Nottingham Declaration (2007) to reduce carbon dioxide emissions.
- 2.3.26 In 2018, Harrow's Headstone Manor was one of six projects in London to be awarded funding for green space improvements – as part of the Mayor of London's push to make London the world's first National Park City. The additional funding will introduce new and attractive wetlands at the historic grounds, which will also help preserve a 14th century moat. As a result there will be new ponds, improved water quality, better and protected river networks and increased biodiversity.
- 2.3.27 Daily water consumption in Harrow is 170 litres per person per day (higher than the national average of 150 litres).
- 2.3.28 Much of the lighting in Harrow is near its end of life and therefore needs replacing. Replacing existing lighting will ensure structural integrity and provides an opportunity for lighting to be upgraded. Lighting is being improved by a change to LED, to ensure that the levels of lighting wherever needed across the borough are brought up to the necessary standards. This will also drive a reduction in the volume of energy consumed and ensure that the borough can meet the Government's and the Mayor of London's green agenda.
- 2.3.29 The borough is located at the upper reaches of the Thames basin, tributaries of the Crane, Colne and Brent Rivers rise in Harrow. Consequently, some parts of the borough are susceptible to fluvial and surface water flooding.
- 2.3.30 The borough is one of the safest in London, consistently in the top five lowest crime rates across the capital. Despite this, fear of crime remains high, and is one of the main concerns for residents.

Existing borough transport

- 2.3.31 Four London Underground lines serve Harrow: the Metropolitan, Bakerloo, Jubilee and Piccadilly lines; in addition the Edgware branch of the Northern line runs close to the eastern borough boundary and the London Overground network provides services in the borough which supplement the Bakerloo line. Mainline rail services connect the borough to London termini at Marylebone and Euston, and to Clapham Junction, Watford Junction, Aylesbury and Birmingham. Figure 6 shows the rail and road transport surrounding the borough.
- 2.3.32 Evidence shows that there is currently adequate carrying capacity on Underground services in the borough; however the provision of step-free access remains an issue at many of the borough's stations including the busiest, Harrow-on-the-Hill Station.

- 2.3.33 The A40, M40 and M4 motorways are close to the southern boundary while the M1, A1 and A41 are close to the north; the M25 provides the major orbital route to the north and west while the A406 North Circular Road is to the south east.
- 2.3.34 Harrow is unique in London having no roads that are part of the Transport for London Road Network. This means that Harrow is responsible for the maintenance, management and operation of all non-motorway roads in the borough.
- 2.3.35 TfL is responsible for most of London's public transport services, including the London Underground, London Buses, London Overground, TfL Rail, and also for all traffic lights across London. TfL is also responsible for the TfL road network and has a regulatory responsibility for the strategic road network (SRN). Changes needed to TfL public transport services, traffic lights and the TfL / SRN road networks are discussed with TfL as and when required.
- 2.3.36 The condition of the road network is an issue of high concern for Harrow residents. It is also a high political concern for Councillors. This is a National issue and not more relevant to Harrow than other areas.
- 2.3.37 There are 37 bus routes, including 5 night bus services, serving areas within the borough and links to neighbouring boroughs; however Harrow bus station is operating over capacity.
- 2.3.38 A network of cycle routes provides a total of 41km cycle lanes in the borough. This is around 10% of the Harrow road network. Figure 7 shows the existing cycle routes through the borough.
- 2.3.39 According to the 2011 census, around 76% of households in Harrow owned a car and nearly a third of households recorded that they had access to two or more cars at home. This is higher than car ownership nationally which is around 74%.
- 2.3.40 Public Transport Accessibility Level (PTAL) is a way of measuring connectivity to public transport. The PTAL value combines information about how close public transport services are to a site and how frequent these services are. The highest level of connectivity has a PTAL of 6b and the lowest has a PTAL of 0. Figure 8 shows PTAL levels across the borough.

Figure 3: Harrow in London



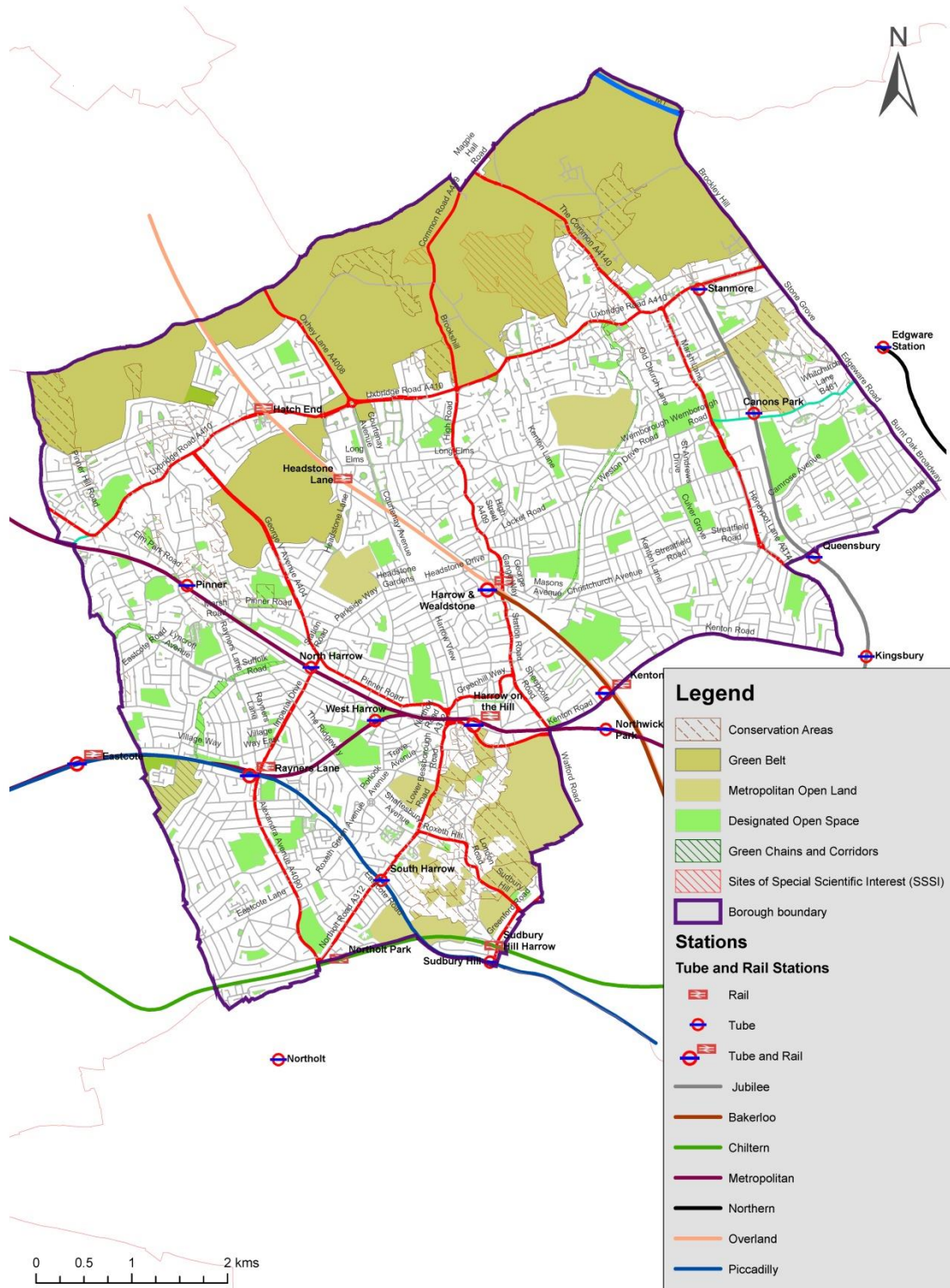
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Figure 4: Borough metropolitan, major, district and local centres



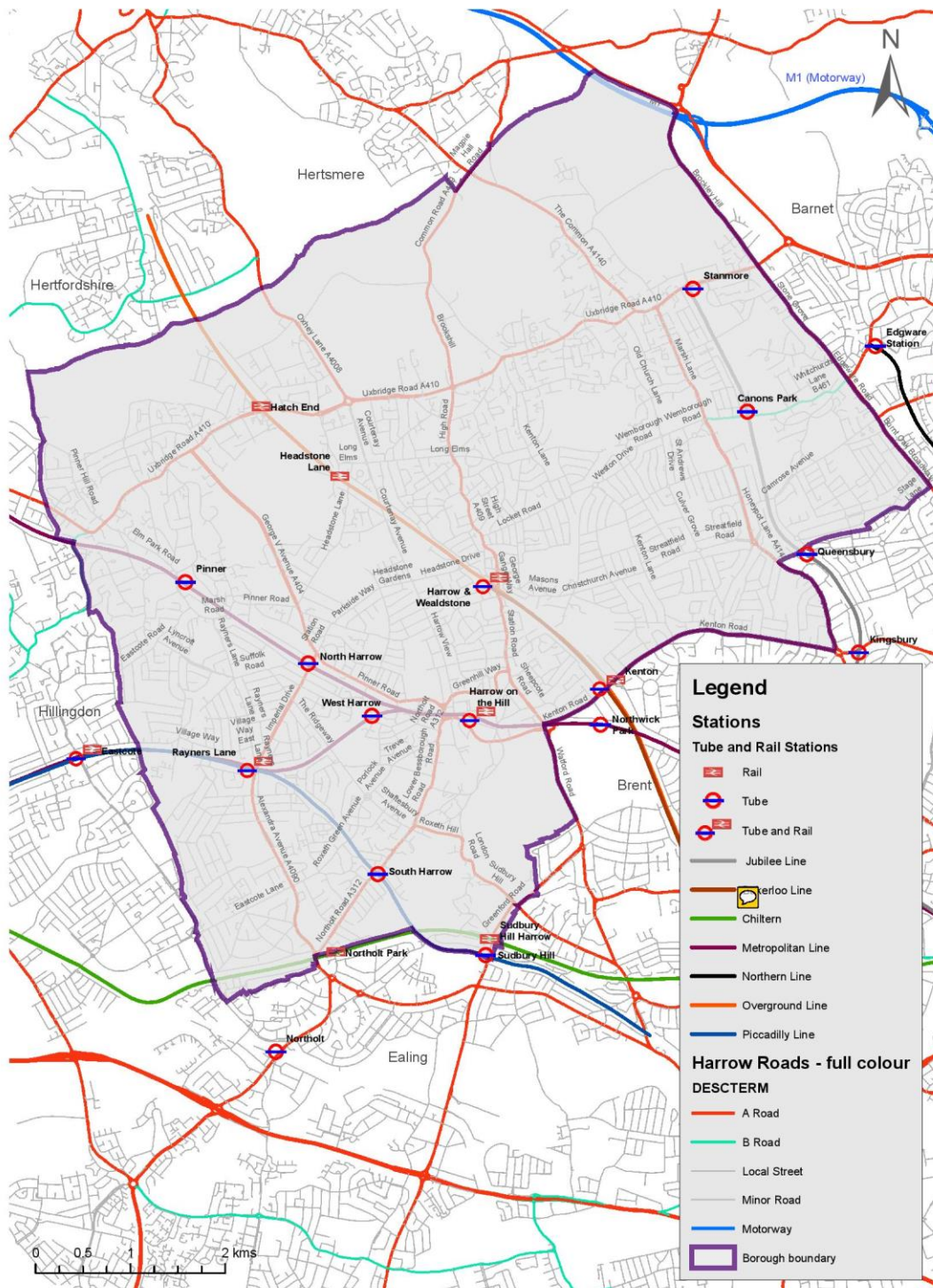
Figure 5: Harrow key environmental features



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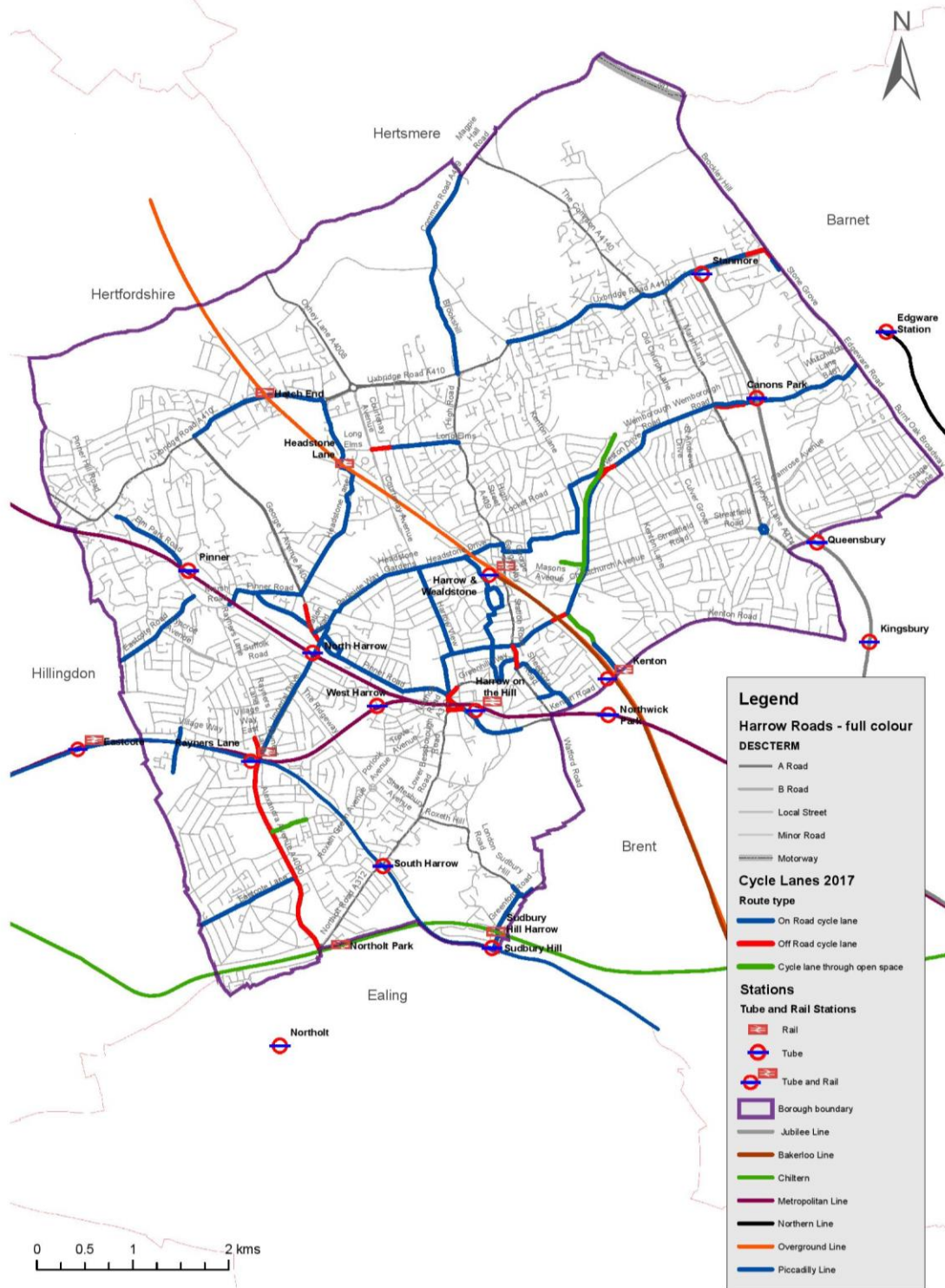
Figure 6: Road and rail lines surrounding the borough



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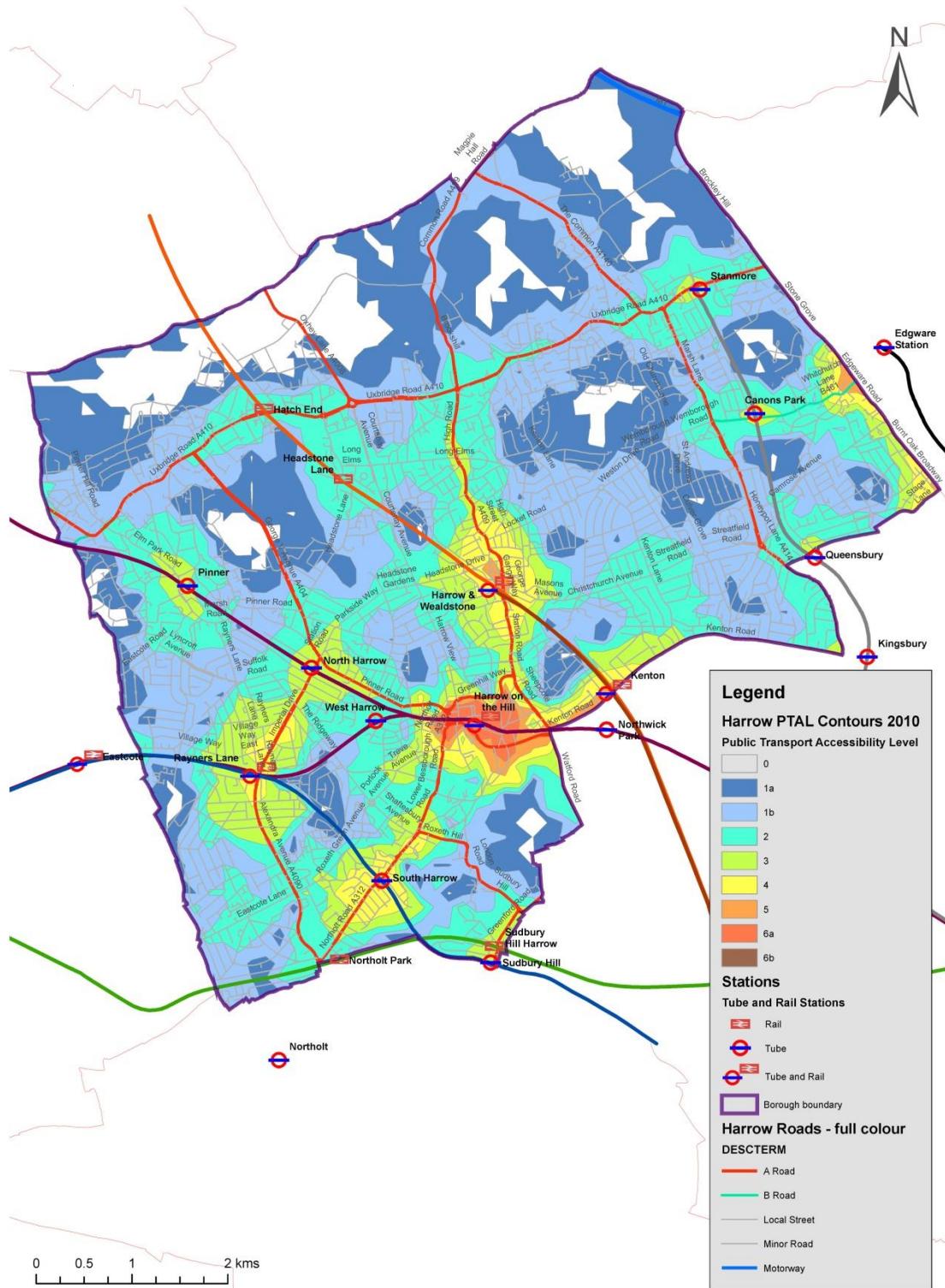
Figure 7: Cycle routes in Harrow



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Figure 8: PTAL across Harrow



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2.4 Changing the transport mix

Challenges and opportunities

- 2.4.1 Harrow is committed to changing the transport mix in the borough and increasing the amount of active travel. The current level of cycling in the borough is disappointingly low despite ongoing efforts to increase cycling opportunities. Harrow was ranked the lowest of the 33 London boroughs for residents who cycle to work in the 2011 census.
- 2.4.2 Changing the transport mix in the borough is being addressed through a combination of tools. These include the borough's development and planning processes, ensuring appropriate parking restrictions are used where needed, effective travel planning, public realm improvements, active travel promoted through Harrow's health agenda and by working with schools to increase cycle training and through improved engineering designs.
- 2.4.3 Improved engineering designs will deliver liveable neighbourhoods, increased neighbourhoods of the future, provide better infrastructure support for electric vehicles, more facilities for cycling (including e bikes) and an improved walking environment. To improve the environment for walking and cycling, the overall perceptions of safety in the borough also need to be considered. This will be addressed by extending 20mph zones, delivering healthy streets and delivering appropriate road safety engineering measures at specific locations. None of these measures alone will make a sufficient impact. All of these changes together can do so.
- 2.4.4 Active travel is also an important way that Harrow encourages more walking and cycling. Harrow is committed to increasing physical activity among residents particularly for those people who are inactive as shown in the Active Harrow Physical Activity and Sports Strategy 2016-20⁹. Harrow takes a life-course approach and advocates taking actions which will benefit everyone but with a greater emphasis and intensity on those who are more disadvantaged. The guiding principles for the Harrow Health and Wellbeing Strategy 2016-20 are: Start well, Develop well, Live well, Work well, Age well and work on social determinants to address the health divide between the rich and the poor. It is recognised that without a focus on being more active, obesity and diabetes rates may continue to rise.
- 2.4.5 In recent years, growth and development in Harrow took place on a largely ad hoc basis. However the Harrow Core Strategy (2012) and Regeneration Strategy (2015) have moved the Council from being one that is reactive to one that promotes, manages and co-ordinates development. This approach will ensure the social, economic and place-making benefits of new development and growth can be realised. Better planning can reduce the need to travel by car.

⁹ Active Harrow: Physical Activity and Sports Strategy 2016-2020

- 2.4.6 The Harrow Opportunity Area is the focus for growth in the borough. The designation is recognised in the London Plan as being a location that can accommodate change and has capacity to do so. In district and local centres, positive policy interventions will be used to reduce vacancy rates, deliver improvements to the public realm and, where appropriate, reinforce and enhance the historic and distinctive features that contribute to a centre's character and appeal. The focus on the Opportunity Area and the forecast growth provides an opportunity to deliver an area where the change in the transport mix will be both significant and visible.
- 2.4.7 Wealdstone and Station Road which are in the Opportunity Area is the focus of the borough regeneration efforts, providing for a substantial proportion of the borough's future housing growth. Urban realm enhancements and the provision of mixed use development will drive a new urban form and the intensification of employment generating uses of industrial sites.
- 2.4.8 It will not be enough simply to deliver engineering solutions to the borough and hope that they have the desired behavioural effect. Changing behaviour will also require the new infrastructure to be joined up in a way that the borough effectively works. The importance of changes being made needs to be promoted. Streets need to be inviting places for all, so that residents, visitors, employers and employees can better appreciate them.
- 2.4.9 The Community Infrastructure Levy (CIL) and Section 106 funding are particularly difficult to realise in Outer London. The removal of TfL funding to support Harrow's principal road maintenance has also added to the challenge of delivering some of the necessary improvements.
- 2.4.10 Delivering the changes in a time of austerity will be a significant challenge. However delivering the change is also an important part of the borough's commitment to tackling the urgent environmental issues the borough faces as well as addressing the significant risks of longer term climate change.
- 2.4.11 Harrow's Local Development Framework, the borough's Core Strategy, Regeneration Strategy and the policies outlined in this Transport Local Implementation Plan will together enable the borough to deliver the necessary changes and to deliver a significant change in the borough's transport mix.

Borough objectives

- 2.4.12 Harrow has developed LIP3 objectives which cover the period 2019/20 to 2021/22 and also reflect the timeframe of the mayor's Transport Strategy up to 2041. The objectives have been developed in order to do the following:
1. Assist in delivering the borough corporate priorities
 2. Address Harrow's key transport concerns
 3. Help to address local environmental issues relevant to LIP3

4. Assist in delivering the Mayor of London's nine strategic outcomes identified in the MTS
5. Assist in delivering the Mayoral aim for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041

2.4.13 Harrow's corporate priorities are:

- Build a Better Harrow
- Be more business-like and business friendly
- Protect the most vulnerable and support families

2.4.14 Harrow's key transport concerns are:

1. Reduce motorcycle casualties across the borough
2. Increase cycling
3. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area
4. The condition of the principal road network which continues to be a very high issue for Harrow residents

2.4.15 Harrow's local environmental issues of particular relevance to LIP3 include the necessity to do the following:

1. Reduce traffic as it is the main source of air pollution
2. Encourage sustainable travel
3. Reduce reliance on the car
4. Reduce the volume of car travel
5. Reduce river flooding following high rainfalls
6. Reduce carbon dioxide emissions to mitigate climate change
7. Increase flood resilience
8. Enhance biodiversity, fauna and flora
9. Deliver health improvements including reducing high levels of obesity and diabetes through active travel

2.4.16 Harrow's transport objectives are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change

4. Improve freight servicing and delivery arrangements to reduce congestion and delays on the network and consider other types of freight delivery options that could reduce traffic congestion
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
6. Encourage the uptake of ultra-low emission vehicles instead of fossil fuel powered vehicles through the use of promotional activities, increased Ultra Low emission zones, neighbourhoods of the future, and greater availability of electric charging facilities, thereby improving air quality, reducing traffic noise and reducing CO₂ emissions throughout the borough
7. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
8. Improve transport connectivity throughout the Harrow and Wealdstone Opportunity Area and particularly between Harrow-on-the-Hill station/ Harrow bus station and Harrow & Wealdstone station
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes

2.4.17 The borough intends to deliver significant progress in the delivery of the following objectives over the shorter term.

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire

schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.

10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience

2.4.18 The link between Harrow's objectives and the Mayor's desired outcomes are shown in Table 2.

Table 2: Link between Harrow objectives and Mayoral outcomes

	1. London's streets will be healthy and more Londoners will travel actively	2. London's streets will be safe and secure	3. London's streets will be used more efficiently and have less traffic on them	4. London's streets will be clean and green	5. The public transport network will meet the needs of a growing London	6. Public transport will be safe, affordable and accessible to all	7. Journeys by public transport will be pleasant, fast and reliable	8. Active, efficient and sustainable travel will be the best option in new	9. Transport investment will unlock the delivery of new homes and jobs'
1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality	✓	✓	✓	✓				✓	
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough		✓				✓			
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change	✓		✓	✓				✓	

	1. London's streets will be healthy and more Londoners will travel actively	2. London's streets will be safe and secure	3. London's streets will be used more efficiently and have less traffic on them	4. London's streets will be clean and green	5. The public transport network will meet the needs of a growing London	6. Public transport will be safe, affordable and accessible to all	7. Journeys by public transport will be pleasant, fast and reliable	8. Active, efficient and sustainable travel will be the best option in new	9. Transport investment will unlock the delivery of new homes and jobs'
4. Improve freight servicing and delivery arrangements to reduce congestion and delays on the network and consider other types of freight delivery options that could reduce traffic congestion			✓						
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.	✓		✓	✓	✓		✓		

	1. London's streets will be healthy and more Londoners will travel actively	2. London's streets will be safe and secure	3. London's streets will be used more efficiently and have less traffic on them	4. London's streets will be clean and green	5. The public transport network will meet the needs of a growing London	6. Public transport will be safe, affordable and accessible to all	7. Journeys by public transport will be pleasant, fast and reliable	8. Active, efficient and sustainable travel will be the best option in new	9. Transport investment will unlock the delivery of new homes and jobs'
6. Encourage the uptake of ultra-low emission vehicles instead of fossil fuel powered vehicles through the use of promotional activities, increased Ultra Low emission zones, neighbourhoods of the future, and greater availability of electric charging facilities, thereby improving air quality, reducing traffic noise and reducing CO ₂ emissions throughout the borough				✓					
7. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment			✓		✓			✓	
8. Improve transport connectivity throughout the Harrow and Wealdstone Opportunity Area and particularly between Harrow-on-the-Hill station/ Harrow bus station and Harrow & Wealdstone station			✓		✓				

	1. London's streets will be healthy and more Londoners will travel actively	2. London's streets will be safe and secure	3. London's streets will be used more efficiently and have less traffic on them	4. London's streets will be clean and green	5. The public transport network will meet the needs of a growing London	6. Public transport will be safe, affordable and accessible to all	7. Journeys by public transport will be pleasant, fast and reliable	8. Active, efficient and sustainable travel will be the best option in new	9. Transport investment will unlock the delivery of new homes and jobs'
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport			✓	✓	✓				
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience			✓			✓	✓		
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework				✓	✓		✓	✓	
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area			✓		✓			✓	
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes			✓				✓	✓	

2.5 Mayor's Transport Strategy outcomes

2.5.1 This chapter shows how Harrow will work to deliver each of the Mayoral outcomes. A full summary of all of the Harrow policies provided in this chapter is provided in Appendix A.

Outcome 1: London's streets will be healthy and more Londoners will travel actively

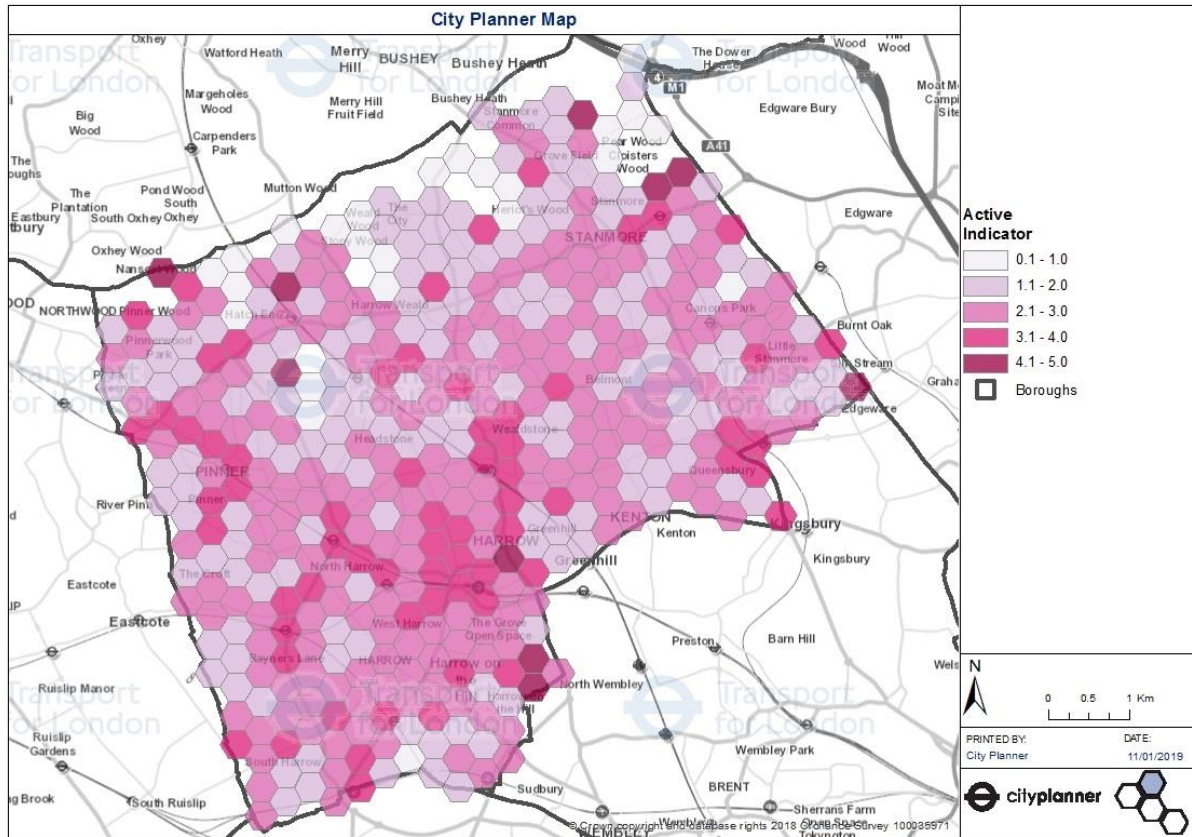
Challenges and opportunities

- 2.5.2 The borough has very high car ownership compared with much of London, with nearly a third of Harrow's households having access to two or more cars. However there remain around 25% of households with no car access at all. These households are mainly in the central part of Harrow, Greenhill, Marlborough and Wealdstone areas. These are the areas with highest PTAL and connectivity to central London which reduces the need for a car and demonstrates the benefits of improving PTAL elsewhere across the borough.
- 2.5.3 For many of those living in the borough, the ease of taking the car is simply too appealing. To encourage those with access to a car to walk, cycle or use public transport, the alternatives need to compete favourably against the car in terms of journey times and reliability, comfort and personal independence. Active travel is far cheaper and in many cases quicker than other transport modes, but people are not always aware of this.
- 2.5.4 The borough supports the Mayoral aim that, by 2041, all Londoners do at least the 20 minutes of active travel that they need to stay healthy each day. Traffic and Highways are part of the Active Harrow Strategic Group. Active travel initiatives are promoted with this group and with the other council and community and voluntary sector partners. The strategic group is also developing a multi-agency focus on two geographical areas of higher obesity and physical inactivity in the borough; an action plan will be developed to promote community led opportunities to be more active in South Harrow and a Superzone pilot based in Wealdstone which will look at a whole system approach to improving the health of the urban environment.
- 2.5.5 Figure 9 provides the TfL City Planner summary of active travel in the borough. A higher score represents a higher relative priority location to be addressed. Indicators are calculated by averaging the scores of the contributing datasets for each hex cell. Scores are assigned (from 0 to 5) from GLA wide percentile ranks. When multiple hex cells are combined the scores of the contributing datasets are averaged for the selection.
- 2.5.6 The Active outcome indicator is the combination of scored modelled cycle flow (AM 2014), cycling potential (LTDS switchable trips 2010-15), pedestrian density (2005-16), walking potential (LTDS switchable trips 2010-15), residents completing 2 x 10

min active travel trips (average day 2005/06 to 2015/16). The potentially active travel locations in the borough are heavily influenced by the cycling and walking potentially switchable trips.

2.5.7 The information provided in the City Planner map will be used to focus appropriate measures to encourage increased active travel.

Figure 9: City Planner active travel summary



2.5.8 To encourage active travel and deliver a modal shift towards more sustainable forms of transport, the borough needs to improve the environment for pedestrians and cyclists in the whole borough and particularly within new growth areas such as the Harrow Intensification Area. To do this across the borough, Harrow will deliver more healthy streets and ‘Liveable Neighbourhoods’ to improve people’s experience of walking, cycling and using public transport and to encourage fewer trips by car. As ‘Liveable Neighbourhoods’ and healthy streets are introduced, increased planting and street greening will be introduced, issues of severance caused by high traffic flow will be addressed, potential reallocation of road space to benefit sustainable transport, as well as road traffic restrictions and the possible introduction of play streets.

2.5.9 The Healthy Streets approach is the underlying framework for the Mayor’s Transport Strategy. Figure 10 shows the ten indicators that are used to measure Healthy

Streets. Using these evidence based indicators will help to ensure that streets are made to be more attractive places. This will enable Harrow to work towards creating a healthier street environment increasing the number of people walking, cycling and using public transport and improve streets so that all people are included and can live well, and where inequalities are reduced.

Figure 10: Healthy Streets indicators



2.5.10 Harrow Council offices are moving. The new site is likely to be ready by 2023 and a new travel plan for the site has been agreed. There will be a significant reduction in parking spaces on the new site and significant modal shift will be required and delivered to adjust to the new premises.

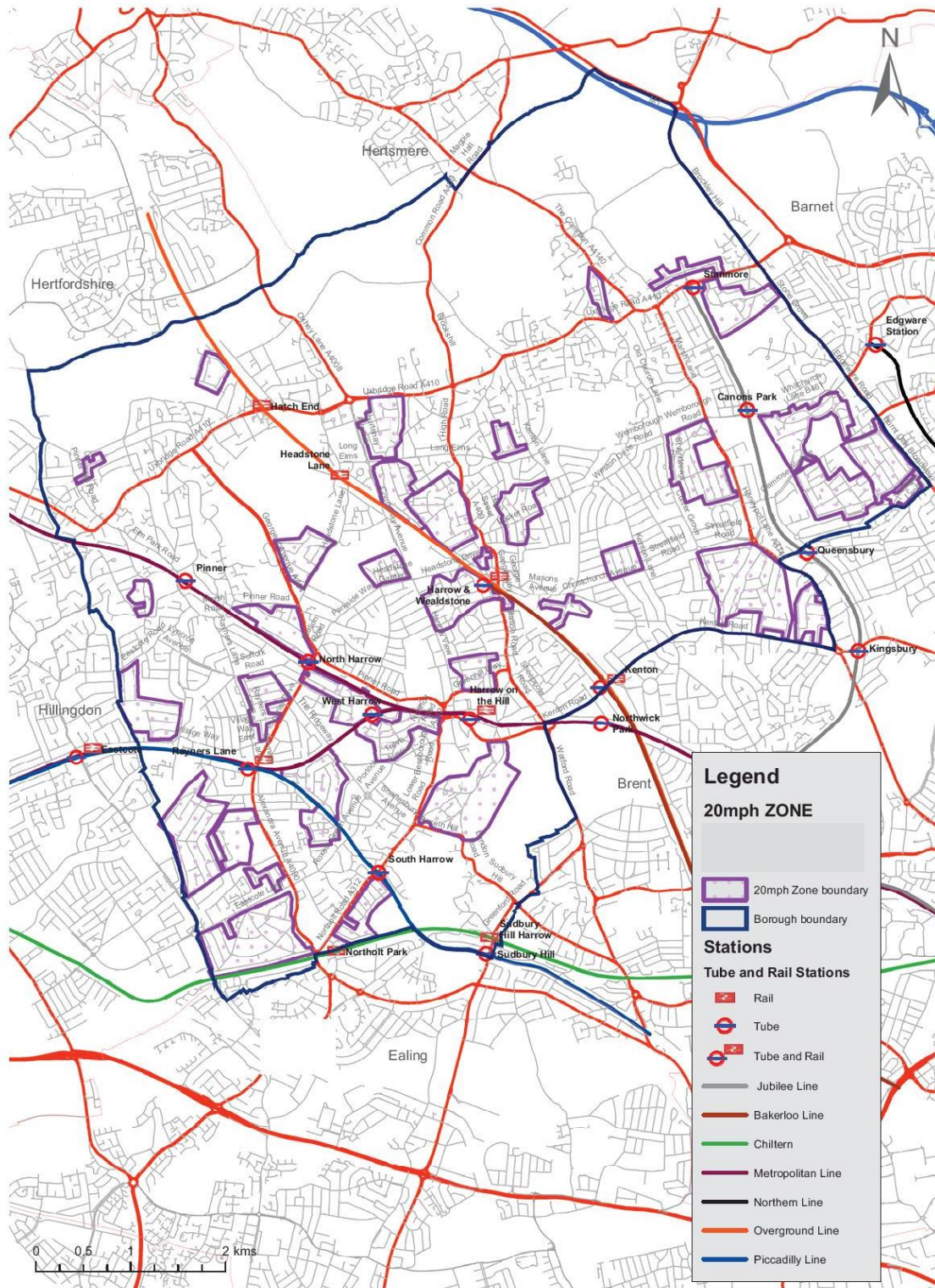
2.5.11 Encouraging active travel for children and those without access to a car is far easier. Awareness of both the physical and psychological health benefits of cycling and walking and the importance of protecting the environment are all issues that encourage increased use of sustainable modes. The borough has high levels of diabetes and health improvements are being addressed through encouraging increased walking and cycling and promoting the enjoyment of Harrow's greener spaces.

2.5.12 Fast traffic is a deterrent to walking and cycling particularly for children and vulnerable road users. The majority of pedestrian casualties occur in built up areas. The main aims of the introduction of a 20mph speed limit in an area are to:

1. improve road safety
2. discourage passing through traffic
3. encourage walking and cycling
4. improve the local environment

2.5.13 Figure 11 shows all the 20mph zones in the borough. Zones are designed to be "self-enforcing" due to traffic calming measures which are introduced along with the change in the speed limit. Speed humps, chicanes, road narrowing, and other measures are typically used to both physically and visually reinforce the slower speed limits.

Figure 11: 20mph zones within Harrow



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2.5.14 Harrow has been identified as one where there is scope to increase cycling and it has been estimated that there are a potential of 228,100 cyclable trips in the borough. This is being actively pursued through more travel planning, increased cycle training and better facilities for cyclists. TfL's Analysis of Cycling Potential published in March 2017 identified a potential to increase cycling throughout London. Harrow has also considered the Strategic Cycling Analysis (SCA) identifying future cycling demand in London published by TfL in June 2017. This shows that much of the top potential cycle demand is on London's strategic road network. The SCA also shows that Pinner, Rayners Lane, Harrow Town Centre and Edgware carry the highest number of potentially cyclable trips in the borough, and that there is a greater propensity to cycle from these locations. Cycling Transport Accessibility Levels (CTALs) calculated in the SCA show the current potential for cycling accessibility.

2.5.15 Figure 12 shows the roads and paths in Harrow with the highest current cycle flow. Figure 13 shows roads and paths in Harrow with the highest potential cycling demand. Similarly, Figure 14 shows potential switchable trips to cycling based on 2010-15 data. Cycling potential is derived from the London Travel Demand Survey (LTDS) and stages are assigned to the network using the Cynemon model. The data represents trips made by London residents which could reasonably be cycled all the way but are not cycled at present.

Figure 12: Roads and paths in Harrow with the highest current cycle flow

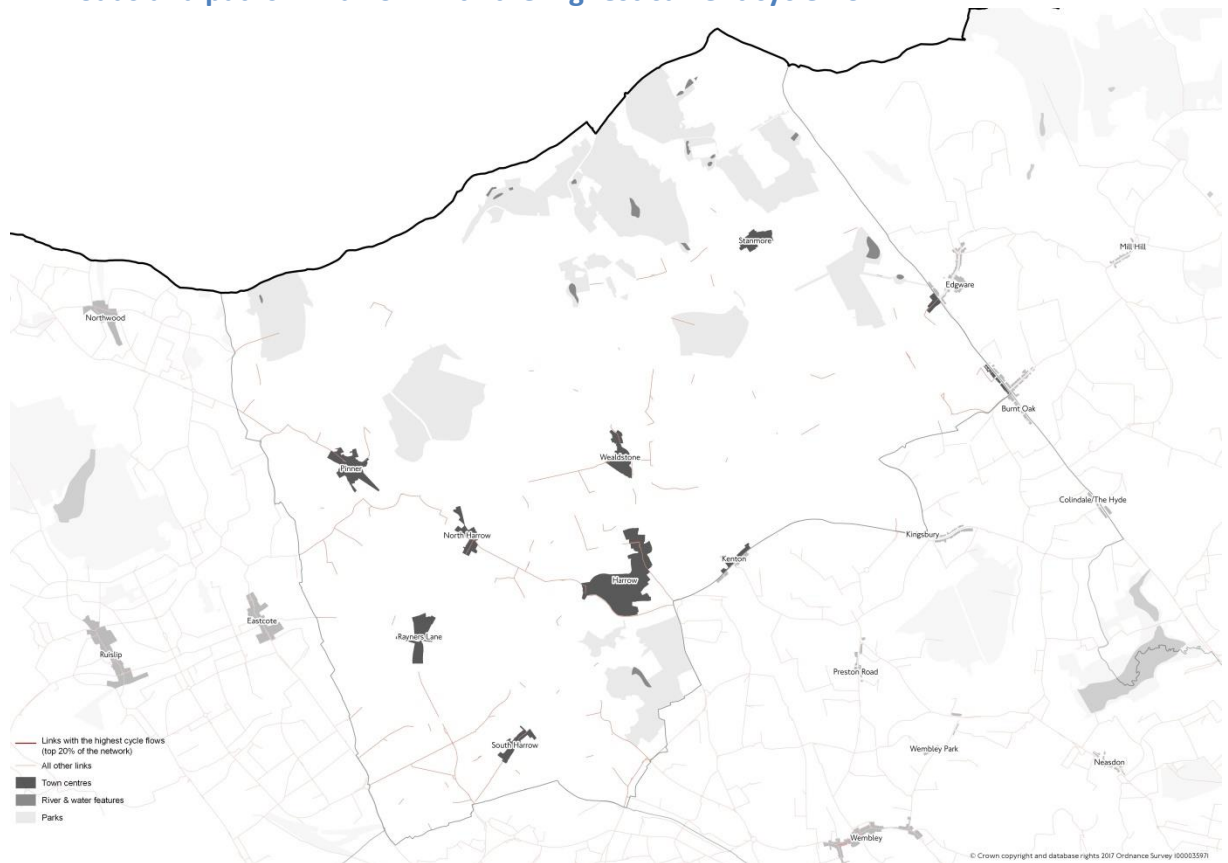
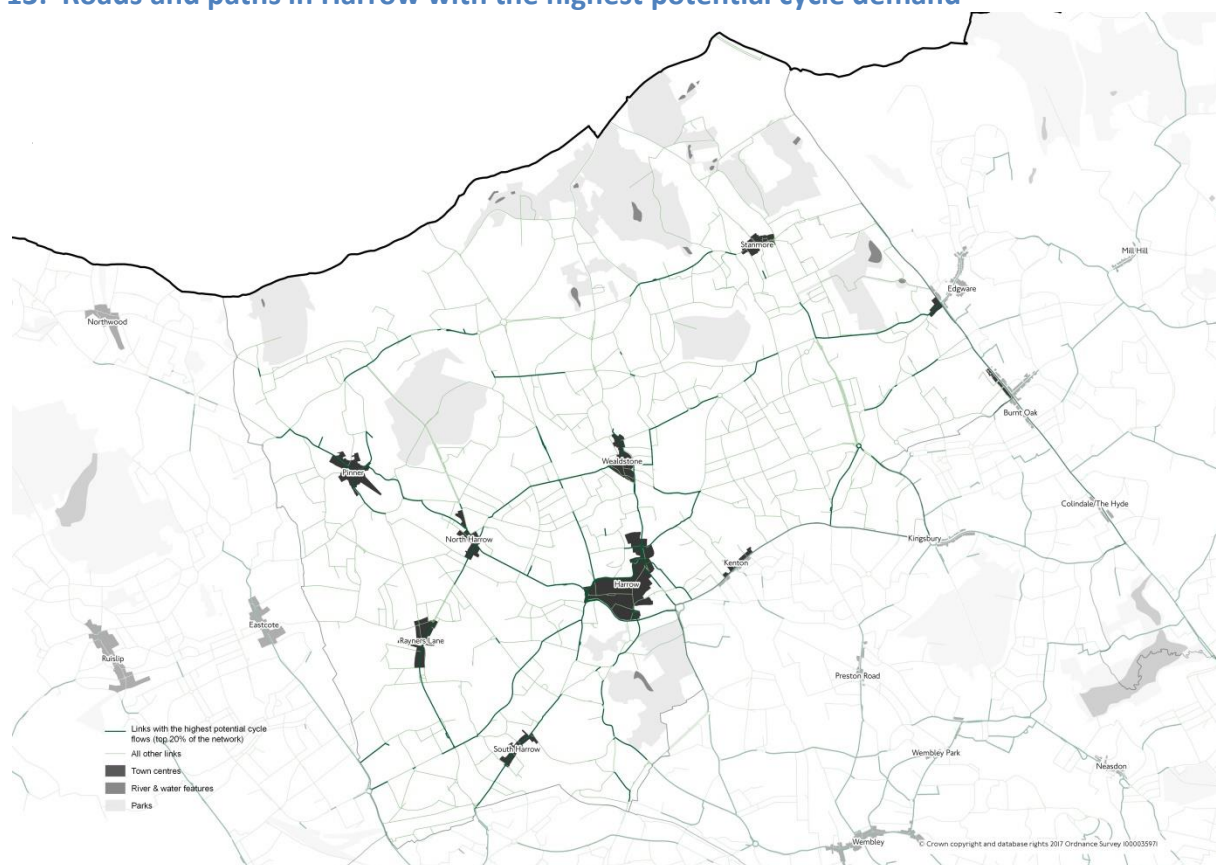


Figure 13: Roads and paths in Harrow with the highest potential cycle demand



2.5.16 The LTDS collects travel pattern data from ~17,000 persons a year including details of all trips undertaken the day before the interview. Cycle stages from survey years 2010 to 2015 have been included in this dataset. The trips have been weighted to represent all of London.

2.5.17 Harrow will consider the local CTAL scores and the areas for potential switchable trips in identifying new cycling infrastructure and additional cycle parking facilities. The routes shown in both these figures ties up with the Harrow programme for cycle route delivery.

Figure 14: City planner cycling potential switchable trips 2010-15

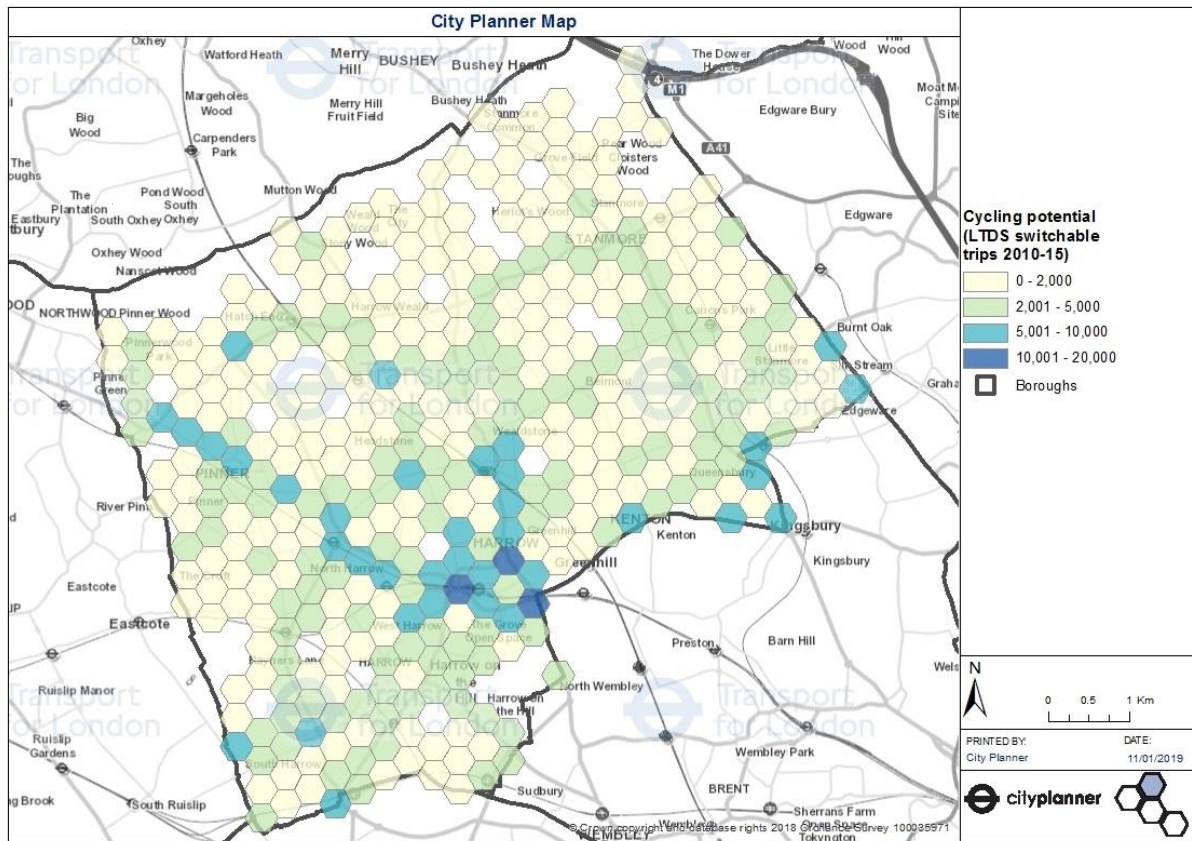
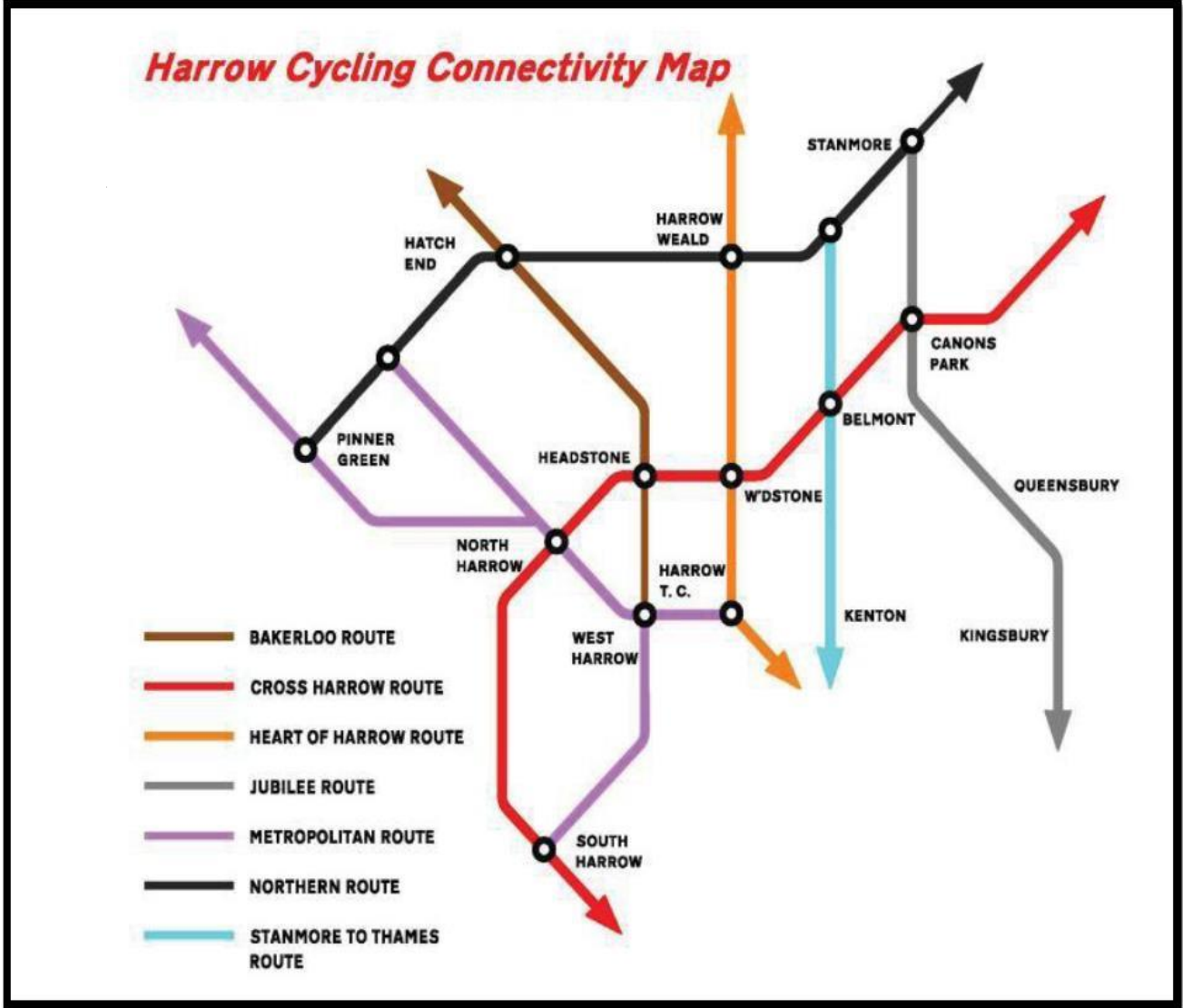


Figure 15: Harrow connectivity map



2.5.18 Figure 16 shows Harrow’s cycling connectivity map and Figure 16 shows the connectivity map and aspirational routes across the whole borough. The programme for delivering these routes is shown in Table 3.

Table 3: Cycling connectivity timetable

2017/18	2018/19	2019/20	2020/21	2021/22
Metropolitan route	Jubilee route	Heart of Harrow route	Bakerloo route	Cross Harrow route

Figure 15: Harrow connectivity map

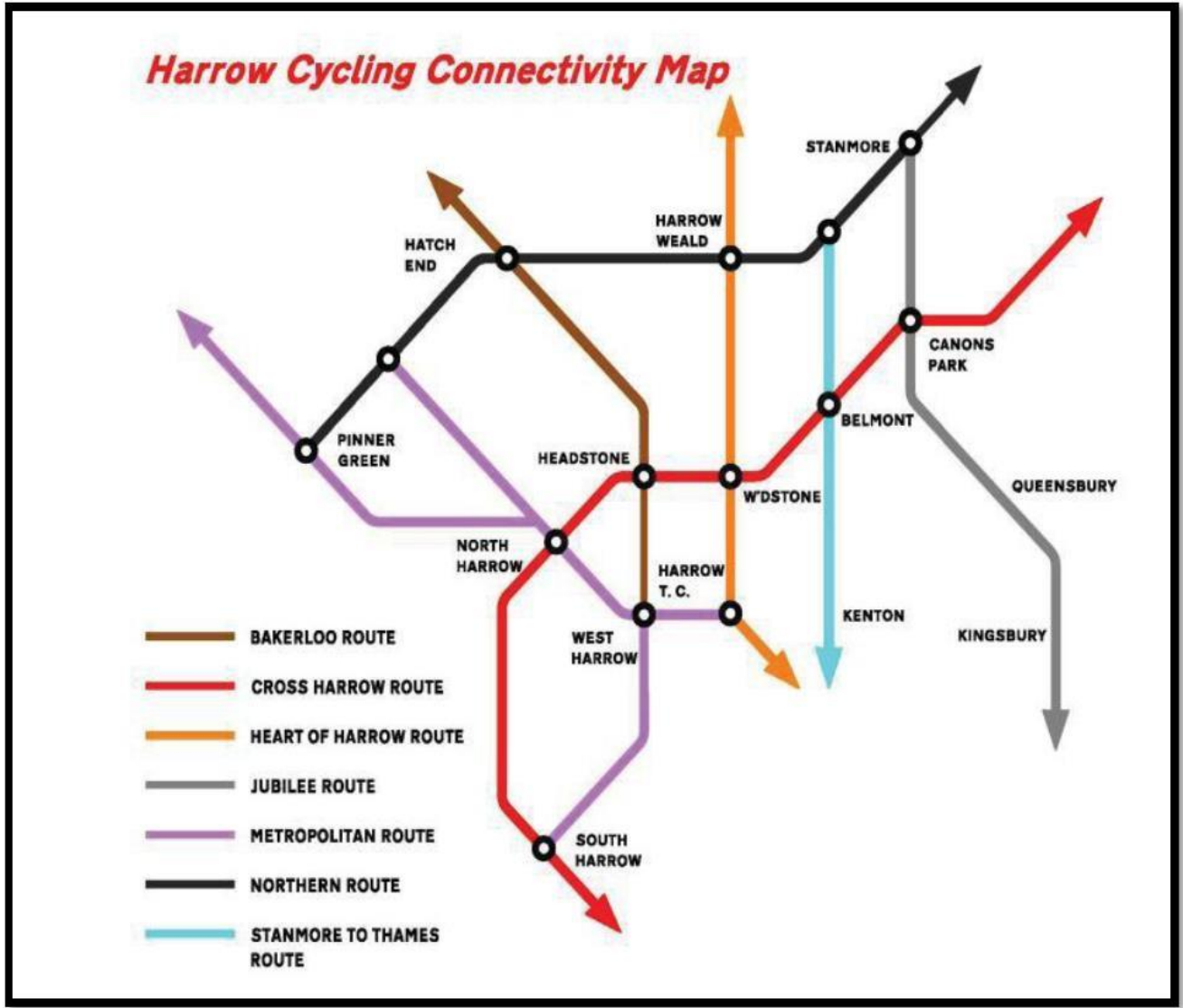
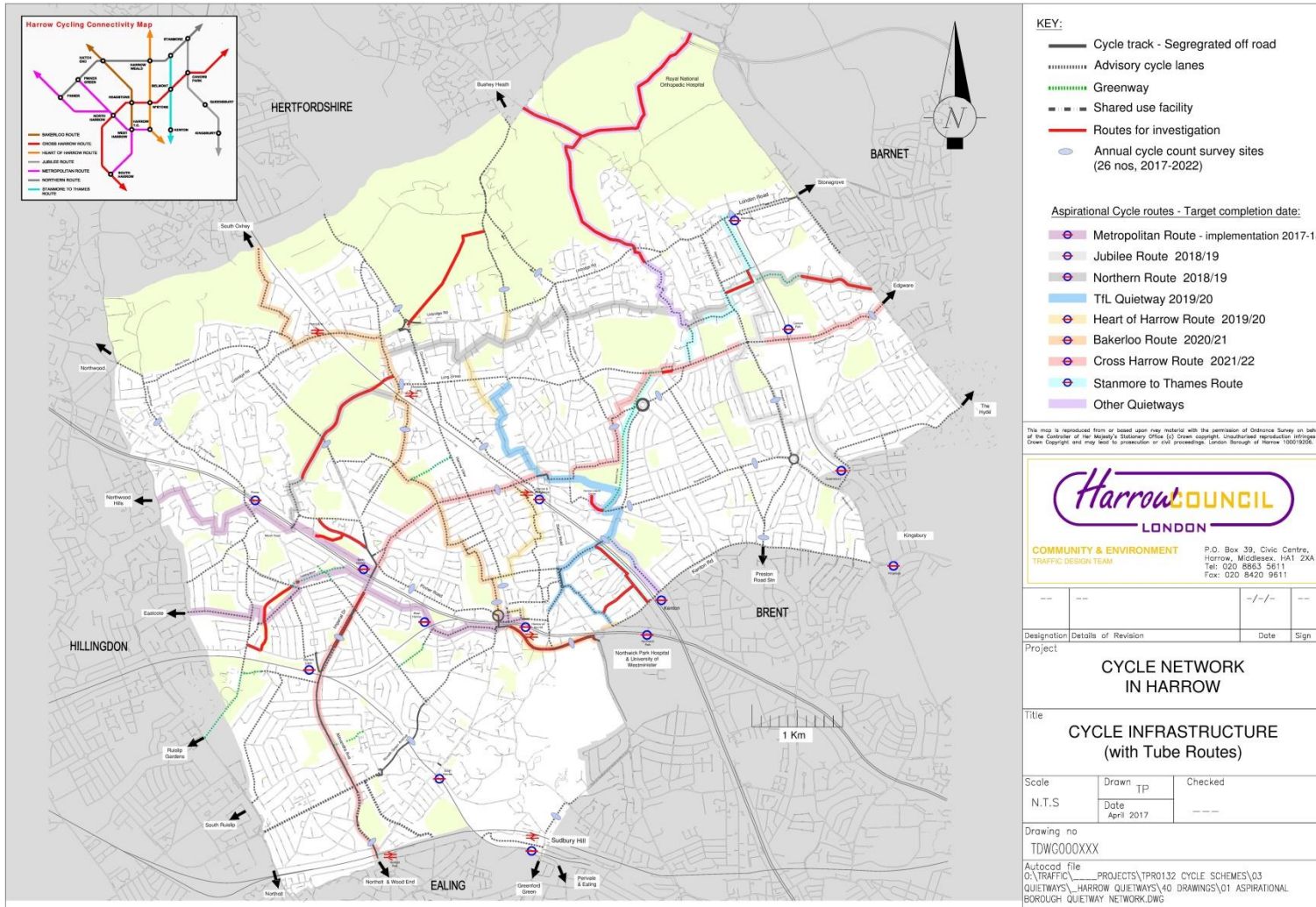


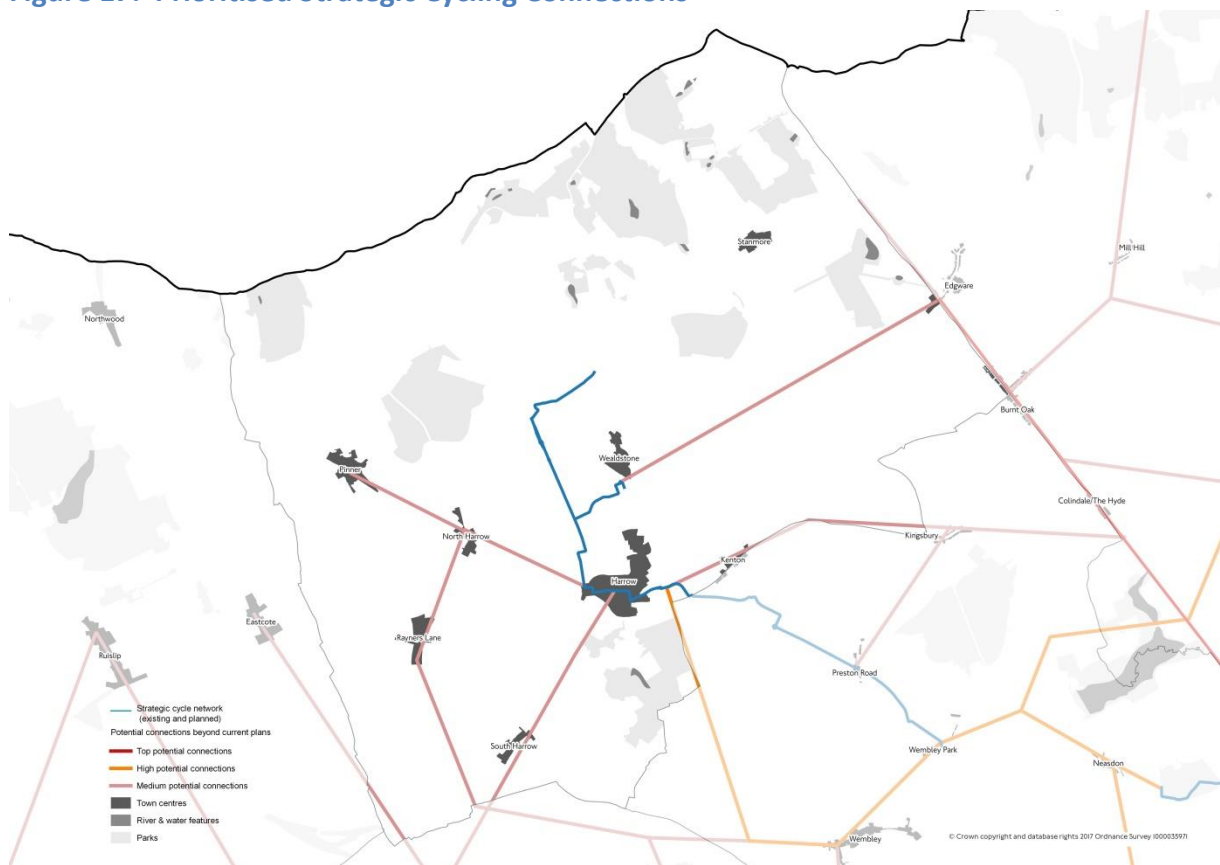
Figure 16: Harrow cycling connectivity map and aspirational routes



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2.5.19 Figure 17 shows Harrow prioritised strategic cycling connections. This shows the priority levels assigned to each cycling connection, based on their potential contribution to addressing London’s greatest cycling needs. Each connection is shown as a direct ‘crow flies’ line between origins and destinations and is subject to further refinement. The corridors are only prioritised from a cycling perspective and under the Healthy Streets Approach, they would need to be considered in terms of their wider impacts and deliverability.

Figure 17: Prioritised Strategic Cycling Connections



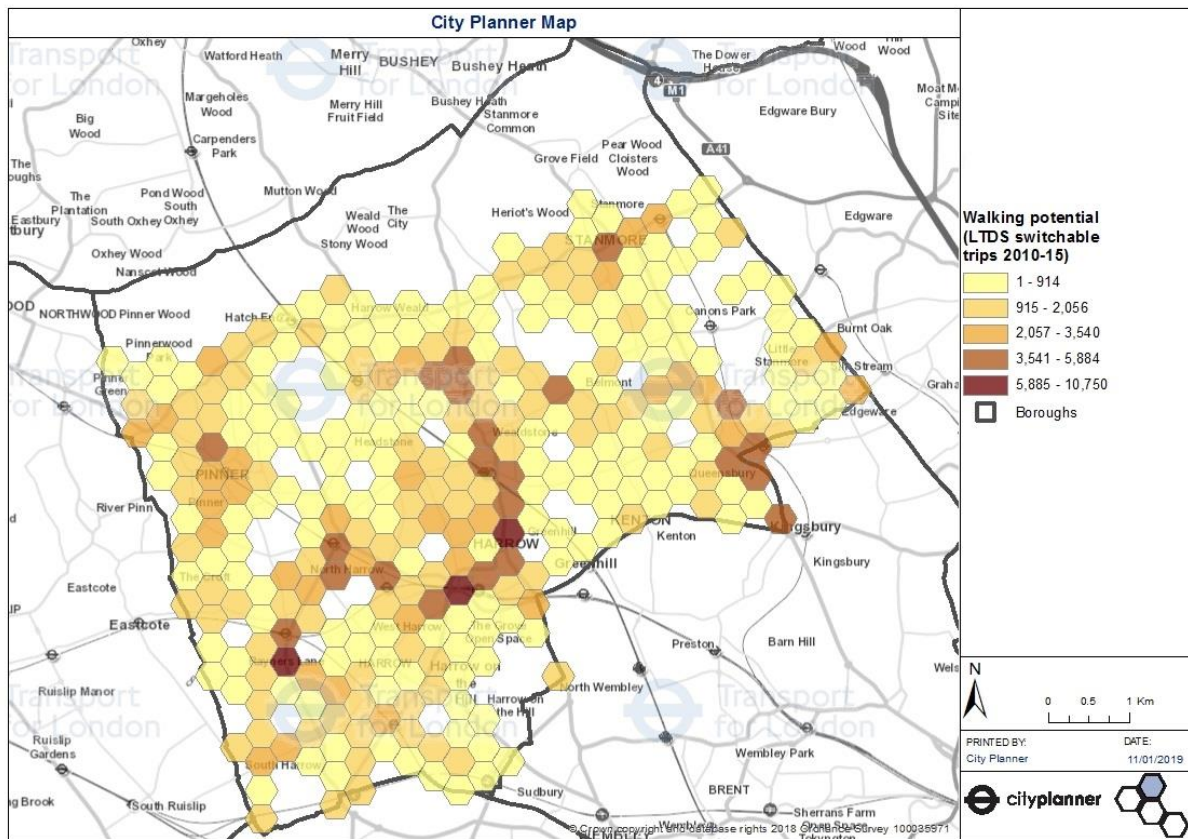
2.5.20 To encourage increased cycling, cycle training is offered to all schools in the borough as well as offered outside the school environment. Cycle training is also facilitated for Special Educational Needs and Disability (SEND) schools providing an extended duration of training and adapted bikes for pupils to participate in training. The borough also offers women only cycle training courses. To ensure that those who need to benefit from the health of increased cycling, promotional leaflets are provided across Harrow in doctor’s surgeries and libraries, leisure centres, community notice boards, social media accounts/council website, Harrow People

Magazine and Annual Council Tax guide promoting the health benefits of cycling and also providing information on how to access cycle training.

- 2.5.21 Harrow is proposing to construct a brand new BMX cycling facility to transform the lives of young people from disadvantaged communities and encourage the social and health benefits of cycling. The facility will serve the whole community and aims to increase cycling participation with young people from lower social grades and from BAME (Black, Asian and Minority Ethnic) backgrounds to promote cycling in an exciting and engaging way. The facility will be based within one of the more deprived wards in the borough.
- 2.5.22 In schools across Harrow, the borough also offers Learn to Balance and ride cycle training for those aged 3-11. During these sessions, free bicycles are provided to children to help them to learn the core fundamentals of cycling.
- 2.5.23 Tour de Salah is the largest Muslim cycling event in the UK and introduces cycling to novices within traditionally harder to reach groups. Participating cyclists cover up to 100km across the capitals iconic landmarks and mosques over one day. This year the Harrow Mosque is part of the route and the event is being promoted across the borough.
- 2.5.24 Harrow promotes travel training to eligible children and young adults at all schools in the borough. This provides support for those with learning difficulties to develop the skills and confidence to travel independently. By promoting independence from an early age and reducing people's dependence on specialist transport, participants can develop independence through accessing learning and employment opportunities and maintain an improved quality of living.
- 2.5.25 To encourage staff cycling, together with WestTrans, Harrow, took part in an e-bike trial. This involved six e-bikes being loaned to staff for a month at a time, to allow them to develop the habit of cycling to work and encourage them to purchase an e-bike for themselves. 36 staff and teams participated in trialling the bikes during the trial.
- 2.5.26 Figure 18 shows potential switchable trips to walking based on 2010-15 data. This has been derived from the London Travel Demand Survey (LTDS). The data represents trips made by London residents which could reasonably be walked all the way but are not walked at present. The LTDS collects travel pattern data from ~17,000 persons a year including details of all trips undertaken the day before the interview. Pedestrian stages from survey years 2010 to 2015 have been included in this dataset. The data is aggregated by plotting walking trips along the road network (ITN) and summing the length of these trips per cell. The trips have been weighted to represent all of London.

2.5.27 The information regarding walking potential will be used for all future borough liveable neighbourhood work and in particular does show the importance of improving walking in Wealdstone which is a high priority to the borough.

Figure 18: City Planner walking potential summary 2010-2015



2.5.28 To support increased active travel, Harrow provides free Health Walks for local residents with an opportunity to walk regularly in a relaxed and friendly environment and enjoy some of Harrow’s beautiful green spaces. The walks are varied in length and level and are all led by qualified and insured volunteer walk leaders, who encourage participants to walk at their own pace.

2.5.29 Harrow promotes the London AirTEXT service on the Council website. This gives advance warning of elevated pollution levels. Harrow has also committed to monitoring air quality sites near schools with a main road within a 5 minute walk of the school. Diffusion tubes put in place at the schools will measure nitrogen oxide emissions at each location. The air quality work has resulted in increased direct engagement with schools, an increase in awareness and understanding of air quality issues, increased face to face engagement with local businesses and increased advice to drivers through anti-idling campaigns at schools.

2.5.30 Parking controls can have a beneficial effect on air quality and public health. Measures to restrain unnecessary car journeys as a result of parking controls will help

to reduce emissions from road traffic as well as reduce public health issues related to poor air quality.

2.5.31 Harrow Council welcomes and supports community events, such as street parties to celebrate both local and national events. Applications for street closures are available on Harrow's website.

2.5.32 The annual Pinner Fair with fairground stalls and rides has been taking place in the borough for nearly 700 years. Many roads are closed to support the fair and visitors are advised to use the extensive public service transport available including buses and Metropolitan underground trains.

2.5.33 Encouraging active travel and adopting healthier lifestyles needs to begin early. Health and length of life are both known to be influenced by early lifestyles. To support the promotion of active travel to school age children, Harrow will work with schools to do the following:

- Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment
- Encourage cycling generally and in particular for journeys to school
- Provide and promote cycle training for children and adults who work, study or live in the borough
- Encourage and support schools, higher and further education establishments to review their own travel plans and to achieve and improve TfL accredited status where appropriate
- Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality
- Work with schools to set up additional school walking buses

2.5.34 To encourage increased walking and cycling throughout the borough, Harrow will do the following:

- Work with TfL to contribute to delivery of strategic cycle routes including Quietways
- Encourage recreational walking as well as active walking as a mode of transport and support national walking campaigns
- Work in partnership with Public Health to promote walking and the Walking for Health scheme
- Work with the Active Harrow Strategic Group to promote active and sustainable travel
- In partnership with Harrow Public Health, work with selected communities to promote the benefits of walking - using the TfL data on switchable journeys to walking

- Provide and promote cycle training for children and adults who work, study or live in the borough
- Introduce measures and programmes to encourage persons from BAME and other statistically cycling adverse groups to take up cycling and to cycle more often
- Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment
- Promote recreational cycling – but give priority to increasing cycling as an alternative to car use.
- Encourage cycling generally and in particular for journeys to school.
- Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings
- Promote the Walk London network and new leisure routes through Harrow’s extensive green areas
- Provide additional cycle parking in schools, review and increase the level of safe and secure cycle parking available across the borough

2.5.35 To ensure that the public realm is designed to encourage walking and cycling, the borough will encourage healthy streets by doing the following:

- Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport
- Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school
- Ensure the progressive delivery and maintenance of a high quality of cycle route provision, consistent with London Cycling Design Standards, as well as clear continuity and consistency in design; and ensure that, wherever practicable, provision is designed and implemented to cater for tricycles and bikes with trailers
- Encourage the delivery of secure and weather-protected cycle-parking at sites generating/attracting significant numbers of cycling trips – most particularly, at strategic interchanges and stations and at local shopping areas; and encourage other authorities with specific responsibilities within the Borough to do the same
- In partnership with WestTrans, trial and introduce dockless cycle hire in the town centre with a view to expanding the service throughout the borough
- Review the existing cycle delivery plan with a view to expanding the network
- Encourage employers to make provision for employees wishing to cycle to a similar standard to that required from new development including the provision of “cycle pools”
- Ensure convenient access for walking, cycling and public transport be required in the design and layout of all new development
- Work with TfL to expand Legible London throughout the Harrow Opportunity Area and into more areas in Harrow such as Stanmore and Headstone Lane

- Improve pedestrian linkage between Harrow town centre and Harrow on the Hill station
- Ensure that all aspects of the walking environment including links to parks and open spaces are effectively considered when delivering works for liveable neighbourhoods and corridor schemes
- Improve access to Harrow's green spaces and historic areas and improves pedestrian walkways that use and link existing parks and open spaces with the town centre and transport interchanges.
- Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport
- Review the Harrow Rights of Way Improvement Plan with a view to increasing active travel through Harrow's parks and open spaces
- In all liveable neighbourhoods schemes the borough will consider planting and street greening to provide shade and shelter and to create a more attractive environment, the potential reallocation of road space to benefit sustainable transport, as well as road traffic restrictions and the possible introduction of play streets

2.5.36 To enable those with mobility difficulties to access work, shops and leisure facilities, the borough will do the following:

- Prioritise in all new schemes the needs of those with mobility difficulties who need to walk, cycle or drive to work, shops or other facilities and local amenities
- Consider accessibility improvements in all new schemes, such as dropped kerbs, tactile paving and audible signals
- Consider the provision of additional seating in all new schemes to benefit the needs of those with mobility difficulties, giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes
- Continue to support the expansion of the Harrow Shopmobility services and their opening hours
- Work with schools to promote travel training for children and young people with learning difficulties
- Ensure convenient car parking for people with disabilities is considered in the development of all parking schemes
- Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised

Borough Objectives

2.5.37 The key borough objectives to deliver Outcome 1 are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians

and cyclists thereby reducing congestion and improving public health and local air quality

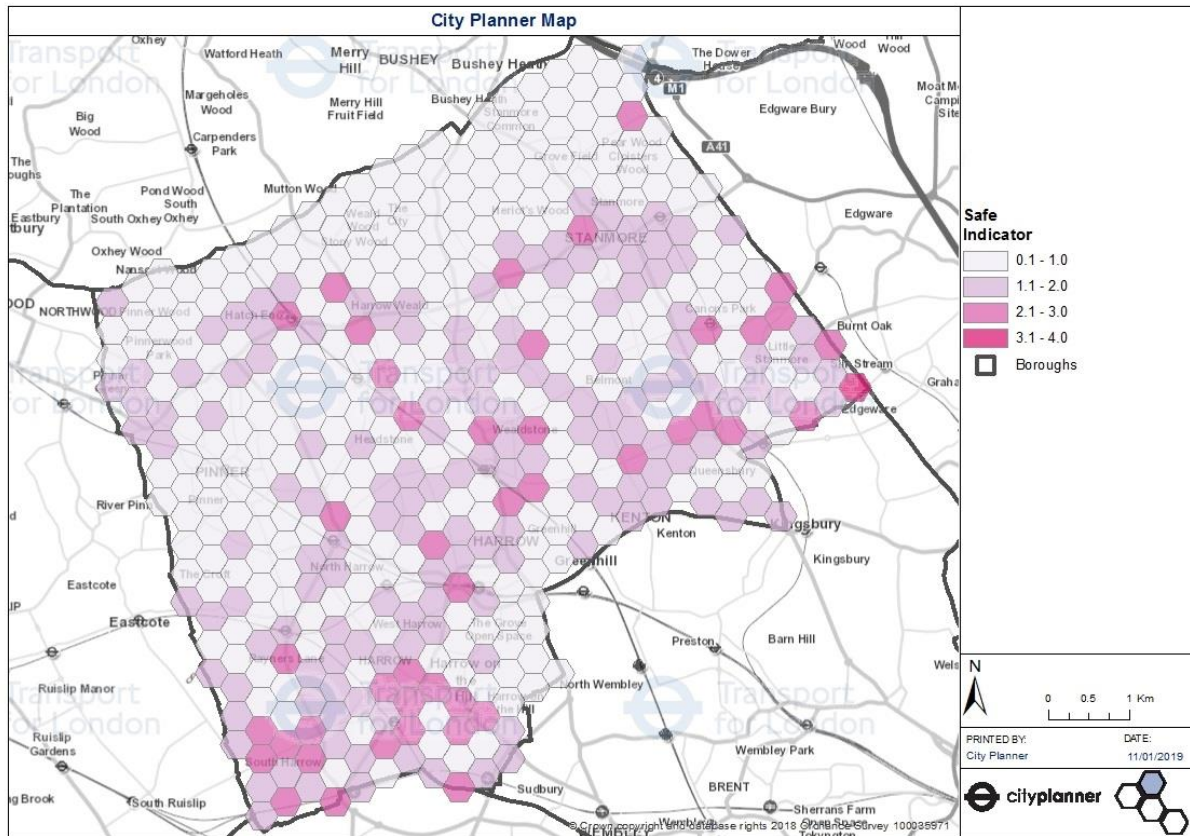
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking

Outcome 2: London's streets will be safe and secure

Challenges and opportunities

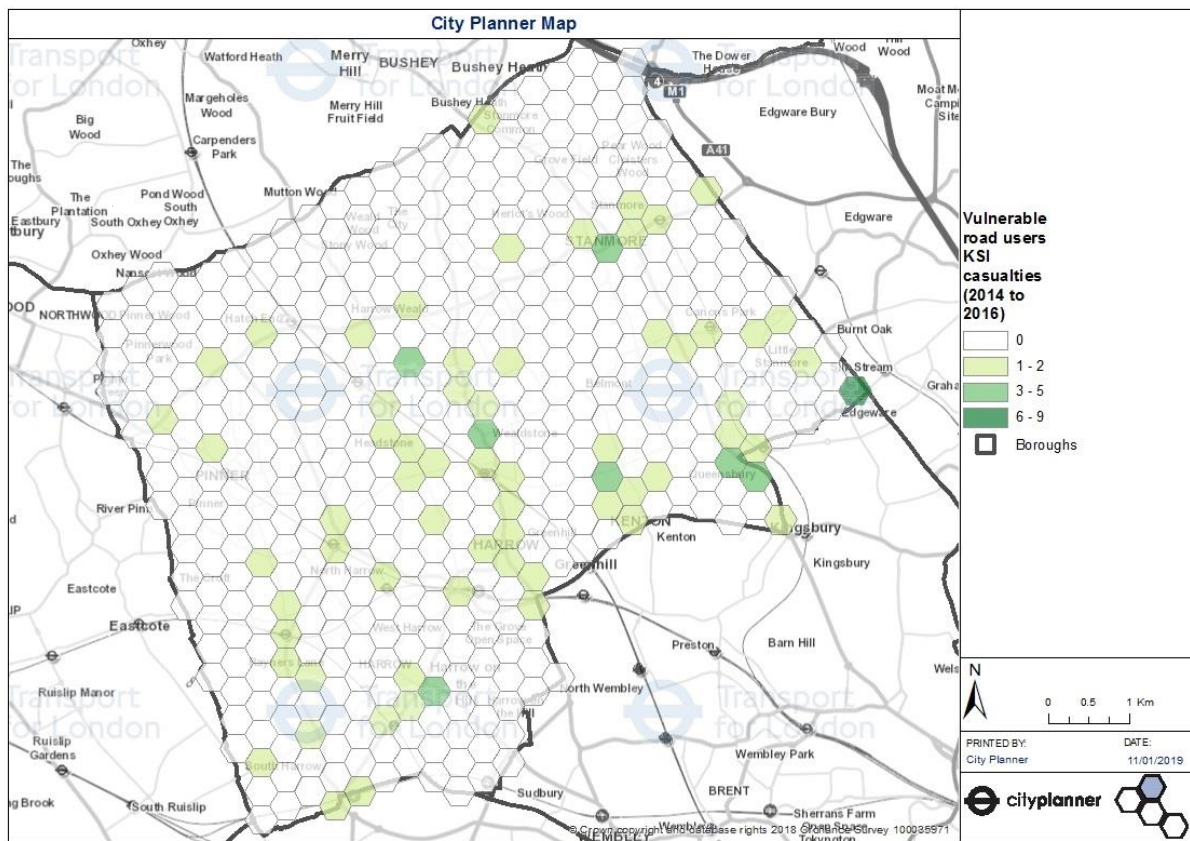
2.5.38 Figure 19 provides a summary of TfL City Planner safety information in the borough. A higher score represents a higher relative priority location. This was developed using a combination of scored All modes total casualties (2014 to 2016) and Street Crime Rate (2014-15).

Figure 19: City Planner safety summary



2.5.39 The casualty rate in the borough is very low and the borough has continually reported some of the lowest casualty rates in London. Because of this there are no specific locations with high accident rates. Recent problems in getting full STATS19 data from the police have exacerbated the borough's ability to identify accident locations. Figure 20 shows the locations of vulnerable road users casualties 2014-2016. This information is also provided in separate City Planner maps for motorcyclists, pedestrians and cyclist.

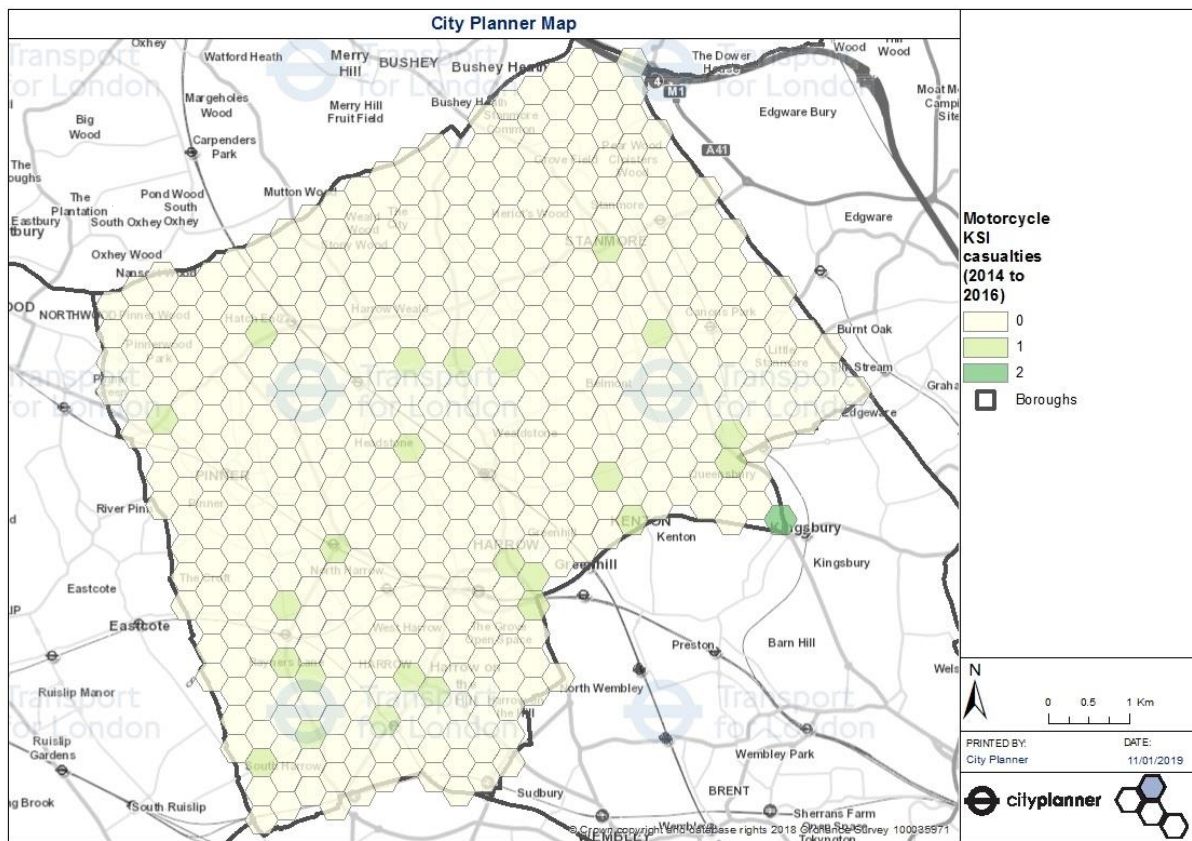
Figure 20: City Planner vulnerable road users KSI casualties 2014-2016



2.5.40 Harrow has adopted a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041. In 2018, gang violence resulted in a motorcycle fatality. Other accidents were caused by a variety of reasons. The borough will continue to run road safety educational campaigns on all issues including dedicated road safety education for motorcyclists to specifically to address their safety concerns.

2.5.41 Motorcycle casualties are a significant problem across the borough and the number of motorcycle accidents in the borough increased in both 2016 and 2017. Addressing this issue is a key objective for the borough. Unfortunately, the reduction in resources for both road safety and road maintenance in the borough limits how road safety issues can be addressed. Figure 21 shows City Planner motorcycle casualties for 2014-2016 across the borough.

Figure 21: City Planner motorcycle KSI casualties 2014-2016



2.5.42 Figure 22 and Figure 23 show City Planner pedestrian and cycle KSIs 2014-2016 respectively. Cycling casualties are fortunately low, but it is recognised that this is in part as a result of the low number of cyclists across the borough.

2.5.43 The location with the highest pedestrian KSI casualties is predominantly along the A409 which is Station Road and High Street Wealdstone. This ties in well with the Harrow Wealdstone Liveable neighbourhood bid.

Figure 22: City Planner pedestrian KSI casualties 2014-2016

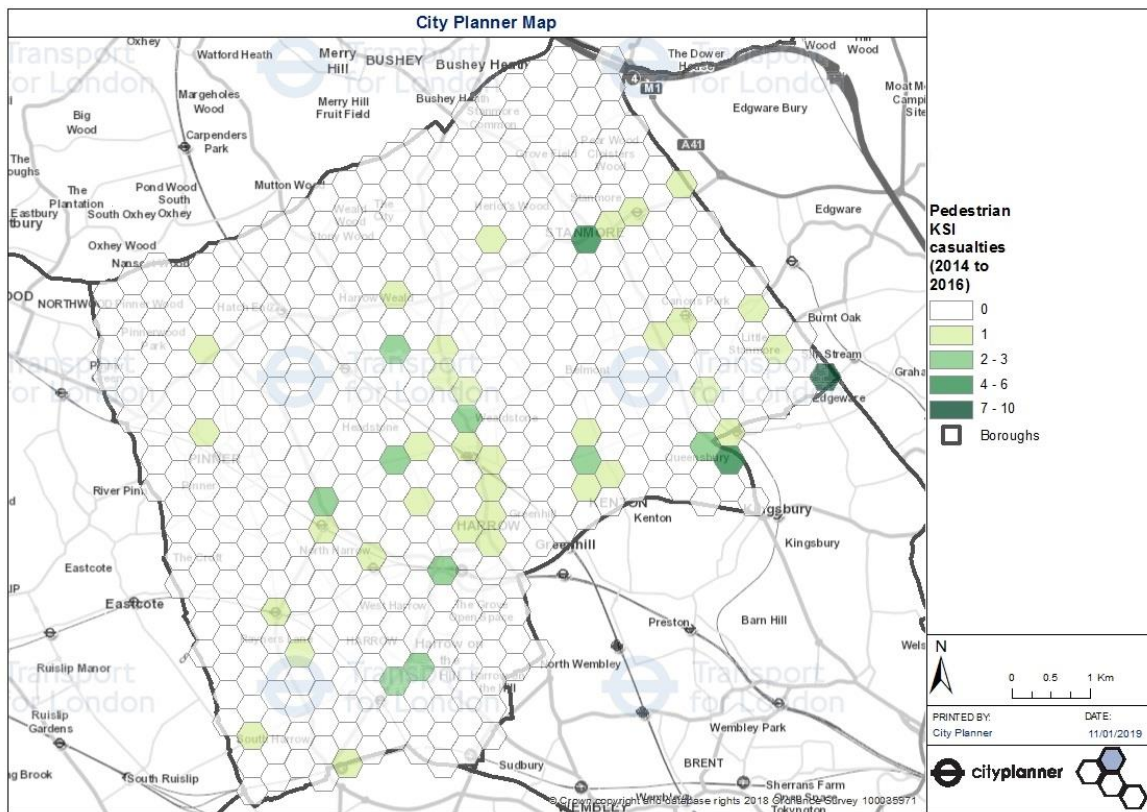
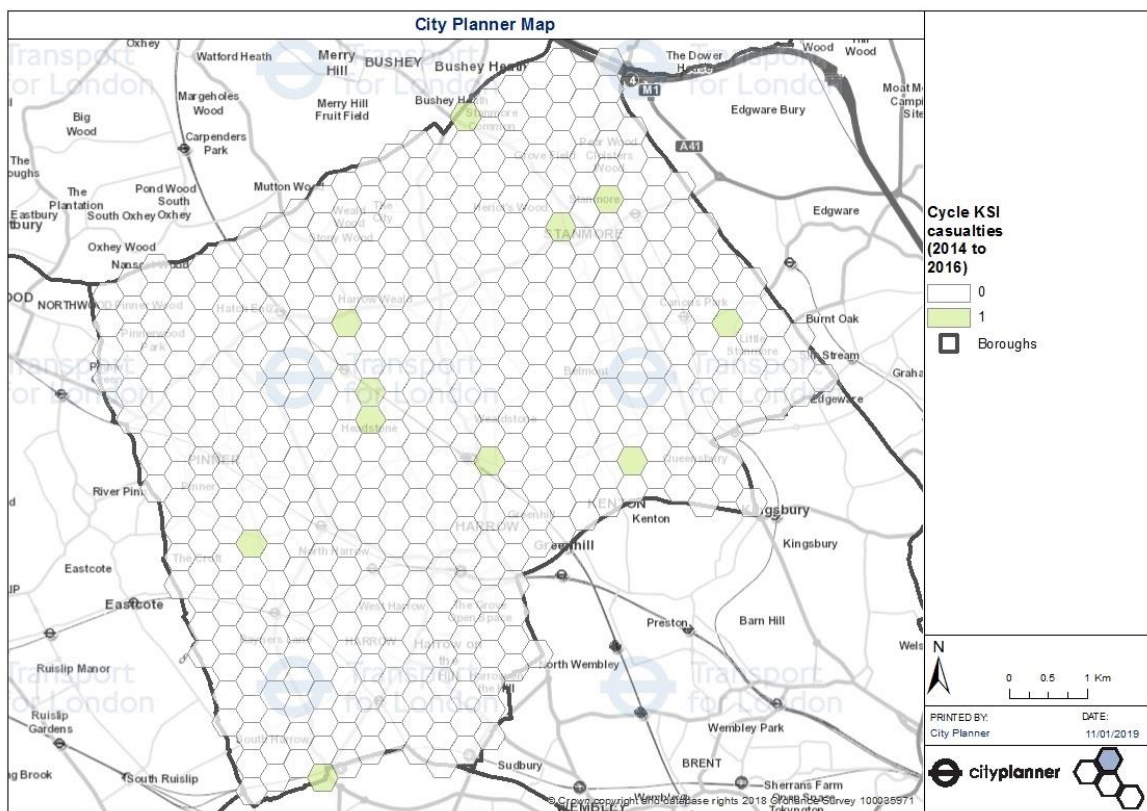


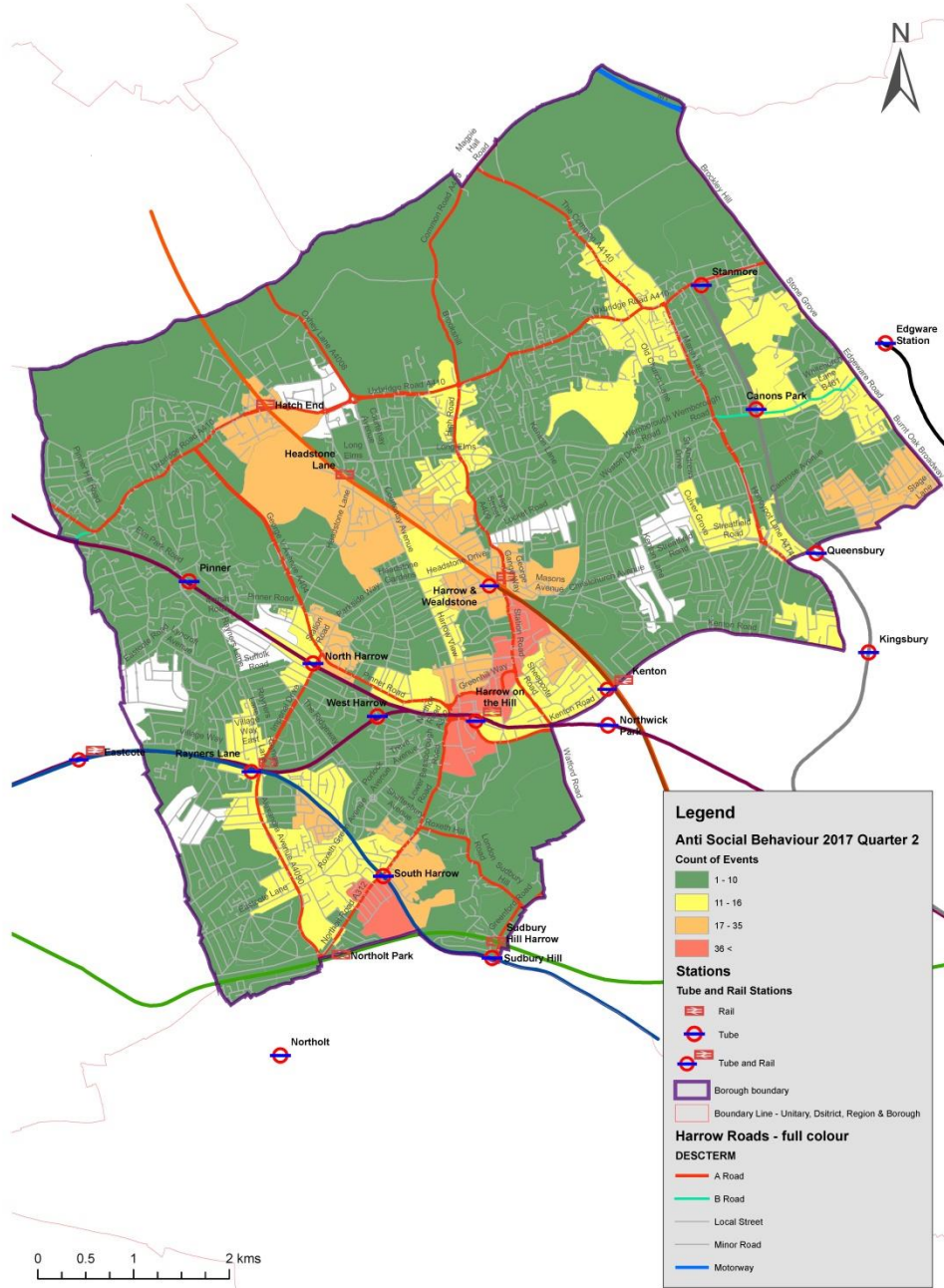
Figure 23: Cycle KSI casualties 2014-2016



- 2.5.44 The Metropolitan Police Service (MPS) introduced a new collision reporting system in November 2016 - the Case Overview and Preparation Application (COPA). The City of London Police also moved to the Collision Reporting And SHaring (CRASH) system in October 2015. This has had a number of impacts on the data that is available to Transport for London (TfL), and the London Boroughs in the ACCSTATS database for collision investigation.
- 2.5.45 Under the new systems officers use an 'injury-based assessment' in line with DfT STATS 20 guidance and online self-reporting is available. Both of these changes are expected to provide a better assessment of injury occurrence and severity but have made data collected from November 2016 onwards difficult to compare with earlier data.
- 2.5.46 TfL commissioned the Transport Research Laboratory (TRL) to undertake a back-casting exercise to enable pre November 2016 data to be compared with post November 2016 data. These initial back cast estimates include the number of people killed or seriously injured (KSI) for each borough between 2005 and 2017 and this data has been used to update borough targets to align with those contained in the Mayor's Transport Strategy, namely a 65 percent reduction in KSIs by 2022 against the 2005-09 baseline, a 70 percent reduction in KSIs by 2030 against the 2010-14 baseline and zero KSIs by 2041. The targets contained in this final version of the LIP have been set against Outcome 2 for Vision Zero to reflect the reporting changes. The level of ambition remains unchanged, despite these revised figures.
- 2.5.47 The reported crime rate in Harrow was the lowest across all London boroughs averaging 56 crimes per thousand residents in 2017 compared with a London average of 93 crimes per thousand residents across London in the year ending December 2017. Similarly bicycle theft was reported at a lower rate in Harrow, 0.58 crimes per thousand residents compared with 2.39 for all of London. Wealdstone has been in the top five wards in the borough for crime over the last five years. Hot-spots for gangs and youth violence in the borough include Rayners Lane, Wealdstone and South Harrow. Criminal damage, drink and drugs as well as arson are prevalent in Wealdstone. This is one of the top crime areas for anti-social behaviour and has 38 incidents per 1000 persons compared with the London average 31 and England & Wales 35. Figure 24 shows locations of reported anti-social behaviour across the borough for quarter 2 in 2017.
- 2.5.48 There are also some problem crime locations within the town centre which are:
- pedestrian links between the High Street and Gladstone Way/Peel Road (Wealdstone Centre),
 - footpaths between Gladstone Way and George Gange Way (drug dealing and gang activity)

- 2.5.49 Wealdstone “hosts” gangs in the borough with many members being on the London Wide Gang Matrix, consequently, there has been regular activity in the area by the Police Proactive Team, Trident Officers and Council community safety teams. Rates of gang flagged offences in the borough are low but resident concern is rising.
- 2.5.50 Antisocial behaviour around Harrow on the Hill bus station is often raised as a concern to Harrow residents. However the police have addressed this issue with ongoing police presence and the use of CCTV.
- 2.5.51 Lighting can significantly increase people’s perception of safety. Lighting across the borough is being improved by a change to LED lighting. This will ensure that the levels of lighting wherever needed across the borough are brought up to the necessary standards.

Figure 24: Reported locations of anti-social behaviour in 2017 Q2



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2.5.52 To improve road safety for children in Harrow schools, Harrow will do the following:

- Provide road safety education events at schools and colleges throughout the borough
- Provide and promote cycle training for children and adults who work, study or live in the borough
- Work with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers
- Work with TfL to ensure take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils
- Work with TfL to ensure take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools
- Work with the parking service and police to enforce and promote safe driving and parking in school zones

2.5.53 To ensure that the roads in Harrow are best designed to improve safety, and that the appropriate road safety training is provided, Harrow will do the following:

- Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041
- Employ a road danger reduction approach to design, using the streets toolkit for designers, Road Safety Audit, and Healthy Streets Check for Designers
- Prepare a programme of 20 mph zones in the borough and incorporate these into schemes for future TfL funding
- Ensure that all aspects of a safe environment, including improved lighting, better sight lines particularly for vulnerable road users and well-lit waiting areas, are effectively considered when delivering works for all new schemes
- Where possible use engineering solutions to minimise the need for additional road safety enforcement
- Maintain an effective method of accident monitoring for the borough
- Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions
- Reduce the number of motorcycle casualties in the borough through road safety educational campaigns
- Support the police in targeting illegal and non-compliant behaviour that puts motorcyclists at risk, using data to focus on the roads with a higher risk of motorcyclist collisions
- Educate road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist/cyclist skills training and communications

- Promote Motorcycle Industry Association (MCIA) accredited training providers to motorcyclists looking to undertake Compulsory Basic Training
- Provide BikeSafe vouchers for subsidised courses delivered by local Motorcycle Industry Association (MCIA) accredited training providers
- Improve the safety of street design by following the design guidance set out in TfL's Urban Motorcycle Design Handbook
- Prioritise schemes that maximise casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance
- Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location
- Support the police in targeting illegal and non-compliant behaviour that places other road users at risk
- Ensure that the safety concerns of all road users, including pedestrians, cyclists, horse riders and those in motorised vehicles are considered when developing any traffic scheme
- Carry out road safety audits of all new significant traffic and highway proposals.
- Provide and promote cycle training for children and adults who work, study or live in the borough
- Deliver appropriate road safety interventions and resources for road users aged 60+ by targeting community groups, day centres and social clubs, facilitating bespoke workshops and presentations and providing road safety literature
- Provide additional cycle parking in schools, review and increase the level of safe and secure cycle parking available across the borough

2.5.54 To ensure that people in Harrow feel safe, the borough will do the following:

- Work with TfL to improve the frequency and reliability of weekend and late night public transport services to/from Central London
- Support the police to maintain focus on disrupting the criminal gangs involved in motorcycle theft and enabled crime
- Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths
- Work with schools and police to address perceptions of personal safety on buses
- Work with GPS providers to ensure that freight routes are appropriately guided within the borough and avoid residential areas
- Work with the Metropolitan Police to consider introducing traffic calming to lower speed and reduce impact of hostile vehicles in selected locations
- Support the police to address anti-social behaviour around Harrow bus station
- Improve lighting across the borough by a change to LED lighting

Borough Objectives

2.5.55 The key borough objectives to deliver Outcome 2 are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough

Outcome 3: London's streets will be used more efficiently and have less traffic on them

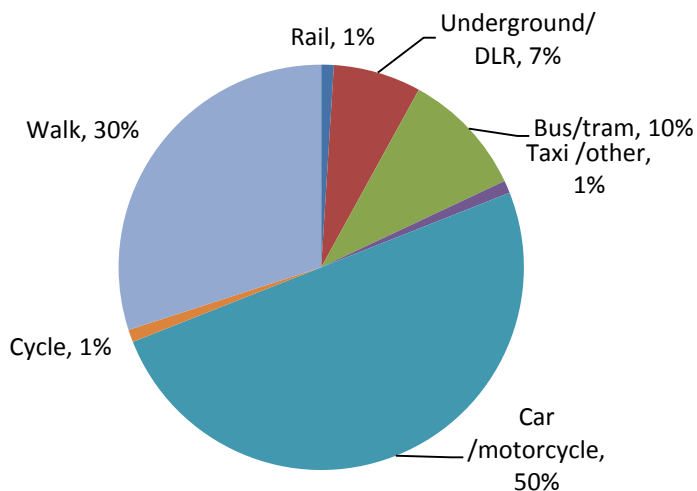
Challenges and opportunities

2.5.56 To reduce road traffic and use London's streets more efficiently, a change in attitude to single car occupancy and driving short journeys are both needed as well as some increase in the available capacity on public transport. Harrow will work to encourage shorter journeys to be made by active travel - cycled or walked and this will enable bus capacity to be more appropriately used for longer journeys.

2.5.57 Census 2011 shows that around only 1% of working population (in employment and not working at home) cycle to work and 7% walk to work – yet 12% of the same population live less than 2km away from work and 16% between 2 and 5 km.

2.5.58 The latest modal split data for trips originating in Harrow by main mode is shown in Figure 25. This shows main mode for average day (7-day week) 2014/15 to 2016/17. The use of motorised transport needs to be reduced to enable Harrow to grow sustainably, to improve air quality and to reduce road traffic.

Figure 25: Harrow modal split 2014/15 to 2016/17



Source: Travel in London 10 supplementary information
Total trips per day 460,000

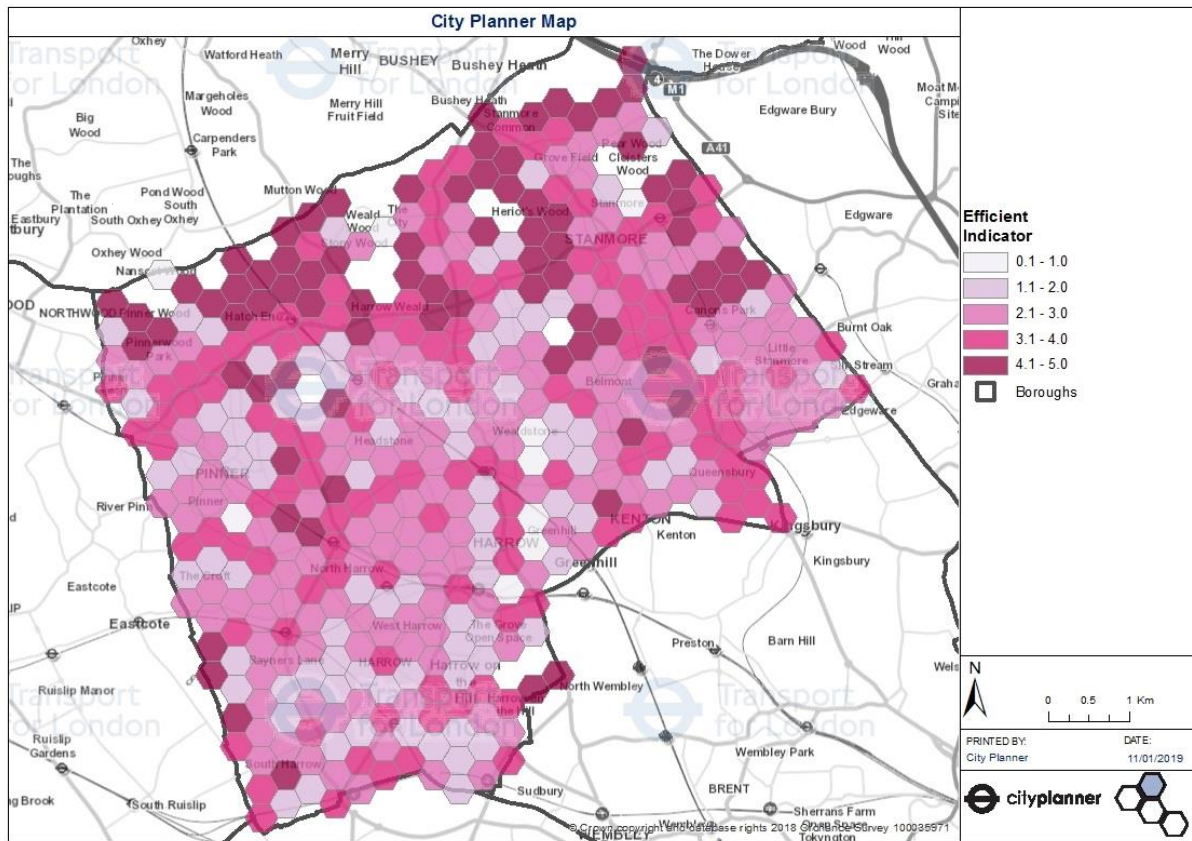
2.5.59 The most congested roads in Harrow are the A409, Marsh Lane/London Road/Stanmore Broadway in Stanmore, Marsh Road, Imperial Drive and Northolt Road. In all these locations, congestion issues will be addressed through managing the network performance and encouraging sustainable travel choices. In Northolt Road the congestion will also be addressed through introducing bus priority measures and removing some of the existing on-street parking. Figure 27 shows the average delays on Harrow roads between 7am and 10am between Jan 2016 and Nov 2016.

- 2.5.60 Reducing traffic levels will also improve the local air quality. Air pollution has a significant impact upon public health, with both short and long term health effects increasing the risk of conditions such as asthma, cardiovascular, and respiratory disease, as well as risk of death¹⁰. Reducing the rate of NO₂ across the borough to under 20.5µg/m³ over the next ten years could reduce the number of cases of asthma by 112 cases and diabetes by 437 cases per 100,000 population per year. Reducing PM2.5 rates to >12.3µg/m³ across the borough would reduce the number of cases of coronary heart disease by 462, cases of chronic obstructive pulmonary disease by 260, cases of stroke by 120, cases of diabetes by 466 and prevent 260 deaths per 100,000 population per year.
- 2.5.61 In order to discourage private car ownership, both on and off street car clubs are being encouraged by new developments in the town centre. These are being introduced through the planning process in exchange for a reduction in the availability of private parking and are funded by Section 106 development funding.
- 2.5.62 Another way that car ownership is being addressed in selected areas in the borough is through parking permit restrictions that are applied to some properties that are intended to be 'car free' or have a low parking provision and are in areas with good access to public transport. Blue badge holders may still apply for permits at these locations. These conditions or agreements are applied at the time planning permission was approved for the development or conversion of a property.
- 2.5.63 The borough will also introduce parking control schemes to enable increased parking restraint measures and to encourage greater use of sustainable transport modes. This will increase the number of people walking and cycling and lead to more active and healthy lifestyles.
- 2.5.64 Congestion and efficiency are being addressed in the borough through improved parking layouts and providing appropriate parking and loading facilities across the borough thereby reducing obstructive and illegal parking as well as reducing wasted travel by vehicles searching for spaces to park or load vehicles. In residential areas, controlled parking zones (CPZs) are introduced to ensure that there is sufficient parking available for those with disabilities, to support local businesses and to enable appropriate servicing and delivery where needed. CPZs incorporating residents parking schemes improve safety, access and residential amenity and assist management of parking in town centres to ensure more short stay shopper / visitor spaces are available. Harrow will be standardising the operational hours of CPZs across the borough to change away from one hour only for all areas and making the operational hours appropriate for the busiest times of the zone.

¹⁰ Public Health England, 2018. A tool to test the long term health and cost impacts of air pollution at a local authority level

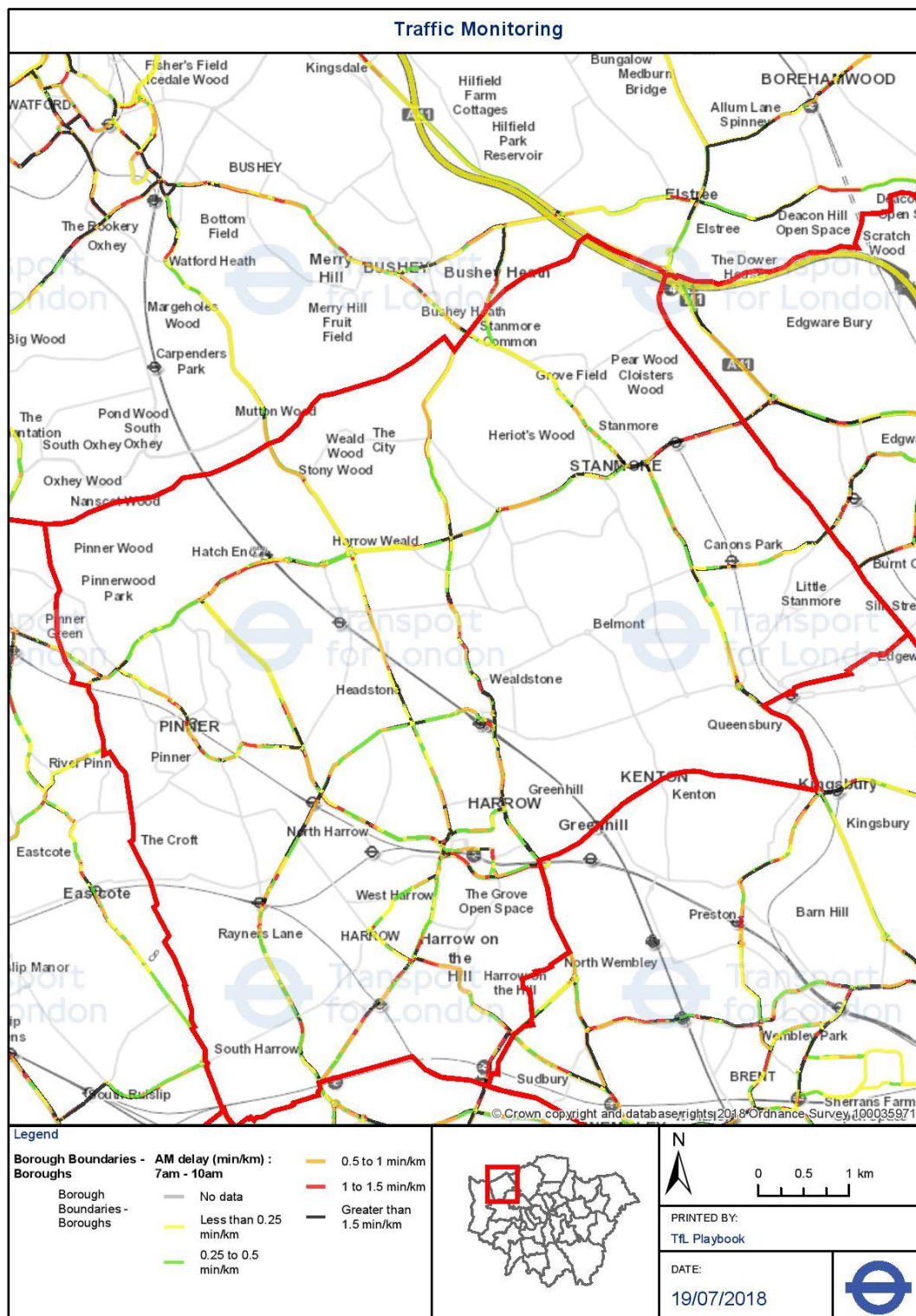
- 2.5.65 Badly managed parking regulations can result in inefficient road use and as mentioned can also result in increased congestion and drivers wasting journeys looking for parking spaces or places to park or load. There is also an economic impact of poorly managed parking with time wasted by delivery services unable to park near their destinations or taking too long stuck in congestion. This is not only inefficient, but also costly and frustrating. Well managed parking regulations can both reduce wasted journeys and encourage the use of “greener” vehicles.
- 2.5.66 Following the Harrow Council move, which is likely to be by 2023, the travel plan for the new premises will include car pools which will be available for necessary car journeys and will be used as an economic alternative to private car use. This will reduce car use by Council officers.
- 2.5.67 Harrow is collaborating with WestTrans in developing a freight heat map which will enable the borough to be better informed about the parking and loading needs of freight in the borough. Improving the parking and loading needs for freight vehicles will also help reduce congestion caused by illegal parking.
- 2.5.68 Figure 26 shows the City Planner efficiency summary for the borough. The City Planner efficient outcome indicator is the combination of scored Modelled freight flow (AM 2012), Car/van accessibility per household (ONS Census 2011) and Modelled car/taxi flow (AM 2012). The higher score locations represent a higher relative priority location. The high scores in the north of the borough are influenced by high car ownership in the area. Highest scores are shown along the Uxbridge Road and between Bushey Heath and Kingsbury and reflect the high levels of traffic trying to use these routes.

Figure 26: City Planner efficiency summary



2.5.69 Another way congestion is addressed in the borough is through promoting sustainable travel choices and reducing the need to travel by car. Requiring development and regeneration to be situated in places best served by public transport and with appropriate facilities for sustainable travel choices will help to address some congestion issues.

Figure 27: Average delays on Harrow roads (7-10am) (Jan 2016 to Nov 2016)



2.5.70 In 2012 Harrow introduced a borough freight strategy. This enabled the borough to prevent some heavy goods vehicles from cross cutting through local roads in the

borough as a shortcut to reach destinations beyond Harrow. This significantly reduced heavy goods vehicles misusing local roads in the borough. The borough will continue to consider introducing and enforcing weight restrictions and road width restrictions to prevent the misuse of roads by inappropriate vehicles.

2.5.71 Harrow supports the London Lorry Control Scheme (LLCS) which controls the movement of heavy goods vehicles over 18 tonnes. The LLCS operates at night and at weekends on specific roads in London helping to minimise noise pollution. Harrow will support the continuation and effective enforcement of the London Lorry Ban.

2.5.72 Well-designed freight delivery servicing facilities can help reduce traffic. To ensure this happens, Harrow will do the following:

- Ensure that freight movement, delivery and servicing within the borough is provided for in an environmentally sensitive, economic and efficient manner and ensuring appropriate routing avoiding residential areas while reducing impacts and conflicts with other modes, for example bus lanes, cycle lanes
- Periodically review the provision in town centres and the Harrow Opportunity Area for all aspects of servicing, delivery, loading/unloading and freight movement, with particular regard to its impact on all other modes of transport, the local economy and the local environment
- Seek to provide adequate delivery and servicing access to shops, businesses and residential premises and in particular to provide convenient on-street short-stay spaces for servicing / delivery vehicles
- Produce and publish a map setting out key information in respect of restrictions on lorry movement within the borough, in terms of:
 - Width, weight and length restrictions
 - Low bridges
 - Loading bans
 - Access restrictions, including pedestrian areas
 - Preferred routes for lorries
- Work with WestTrans to develop a freight heat map enabling the borough to be better informed about the parking and loading needs of freight in the borough
- Require, as a condition of securing planning permission, that development proposals make proper off-street provision for servicing and loading/unloading within the development site, in such a way that all vehicles entering or leaving a site are enabled to do so in a forward gear
- Support and seek, via the responsible regional/subregional authorities, appropriate sub-regional provision of break-bulk, consolidation, distribution and modal-transfer facilities for freight management, and appropriate and effective access to those facilities from the borough
- While recognising that road transport will remain the basis for freight movement, delivery and servicing provision within Harrow, Harrow will promote and maintain

local area lorry bans together with supporting initiatives to move freight by non-road transport modes

- Use the planning process on major planning applications to require a Construction Logistics Plan that reduces the environmental impact through the use of lower vehicle emissions and reduced noise levels; improves the safety of road users; reduces vehicle trips particularly in peak periods and encourages efficient working practices

2.5.73 To address congestion in the borough, Harrow will do the following:

- Maximise the efficiency and reliability of the operation of the road network through methods outlined further in Harrow's Highway Network Management Plan
- Reduce traffic volumes on local roads through traffic management techniques and where possible by diverting traffic to main arterial/distributor roads
- Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities
- Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion
- Monitor and review the provision and operation of CPZs in all areas of the borough that are experiencing on-street parking stress and install new CPZs subject to, demand and consultation with the local community
- For new CPZs, and as CPZs are reviewed, change the operational hours of enforcement to target the busiest times of the location
- Review the parking regulations in the Opportunity Area to ensure that the needs of planned growth are appropriately addressed

2.5.74 To reduce traffic on roads in Harrow, the borough will do the following:

- Encourage modal shift towards more sustainable forms of transport and in developing travel plans work with businesses to give consideration to support switching deliveries from vans to sustainable travel modes including cargo bikes
- Provide effective alternatives to the car to encourage modal shift
- Increase provision for non-motorised modes of travel including cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport
- Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality
- Promote and support the development of travel plans in accordance with TfL guidelines either for individual organisations or on an area wide basis as appropriate
- Promote sustainable and healthy travel choices through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking environment
- Secure deliverable Travel Plans for major trip generating development

2.5.75 To ensure that parking is managed efficiently in the borough, Harrow will do the following:

- Ensure that charges for parking support the economic vitality of all town centres
- Promote and secure the adoption of consistent and complementary strategies at national, regional, London, sub-regional and neighbouring local authority levels and through the restraint-based car-parking standards
- In the development and operation of parking schemes and to ensure transparency, the council will follow the guidelines as outlined in the parking management strategy which will be regularly reviewed and updated
- Support local businesses by giving priority to short stay on-street parking and by discouraging on-street long-stay parking
- Charges are set to discourage the use of private cars, however where off-street parking is available, ensure that charges for off-street parking:
 - Support the economic vitality of all town centres
 - Finance progressive improvements to the standards of the council owned car parks
 - Consider price competitiveness with comparable privately operated car parks
 - Encourage short stay parking with rapid turnover of spaces and deter long-stay parking where appropriate
 - Reduce the demand on surrounding on-street long stay pay and display parking
 - Are set with the aim of car parks being 85% full in peak periods
 - Are self-financing
- Where practicable, seek to secure consistent cross-boundary parking charges in conjunction with neighbouring authorities
- Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking providing charging points for electric vehicles
- Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion
- Monitor and review the provision and operation of CPZs in all areas of the Borough that are experiencing on-street parking stress and install new CPZs subject to, demand and consultation with the local community
- Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised

- Consider introducing virtual permitting system for most permit types where practicable across the borough and following this remove free parking for motorcycles¹¹ borough wide

Borough Objectives

2.5.76 The key borough objectives to deliver Outcome 3 are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
4. Improve freight servicing and delivery arrangements to reduce congestion and delays on the network and consider other types of freight delivery options that could reduce traffic congestion

¹¹ Free parking has been available for motorcycles borough wide as displaying parking permits on motorcycles is not practical.

Outcome 4: London's streets will be clean and green

Challenges and opportunities

2.5.77 Harrow is in a privileged position in London, in that it contains a substantial amount of accessible open space, extensive areas of Green Belt and also some attractive and unique historic neighbourhoods. Change, as well as growth, needs to be managed in a way that respects local character and heritage, and also enhances it whenever possible. New development, public realm improvements, as well as issues such as air quality need to be dealt with carefully to ensure Harrow remains an attractive place to live and work.

2.5.78 Figure 28 shows NO₂ emissions in the borough for 2013. The map also shows the borough focus areas for NO₂. These are locations that not only exceed the EU annual mean limit value for NO₂ but are also locations with high human exposure. The map clearly shows the impact of road traffic pollution on the environment.

2.5.79 Figure 29 shows the City Planner green indicator summary. This is the combination of scored NO₂ levels ($\mu\text{g}/\text{m}^3$, 2020) and PM₁₀ levels ($\mu\text{g}/\text{m}^3$, 2020).

Figure 28: NO₂ emissions, 2013

Focus Areas LAEI 2013 in Harrow

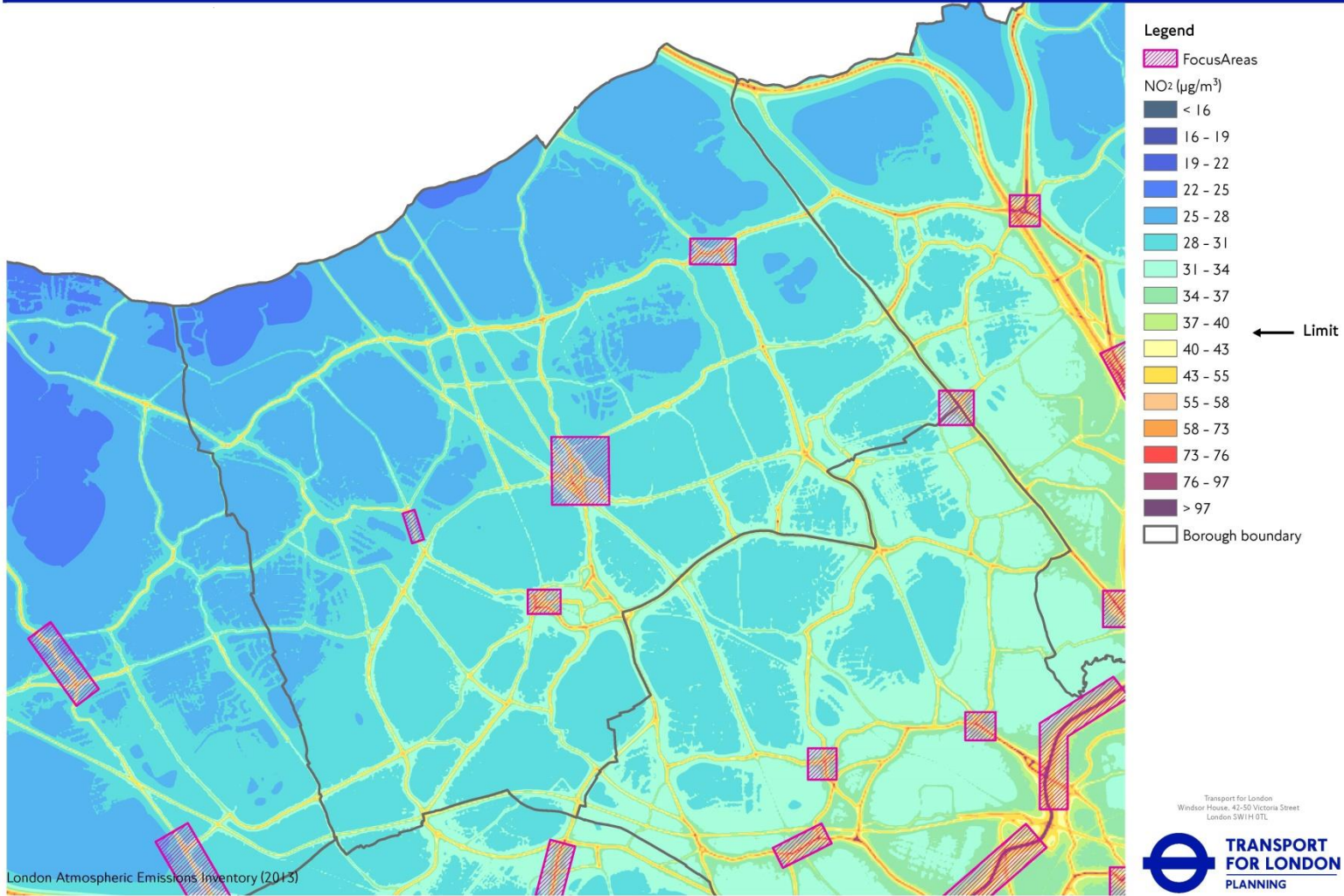
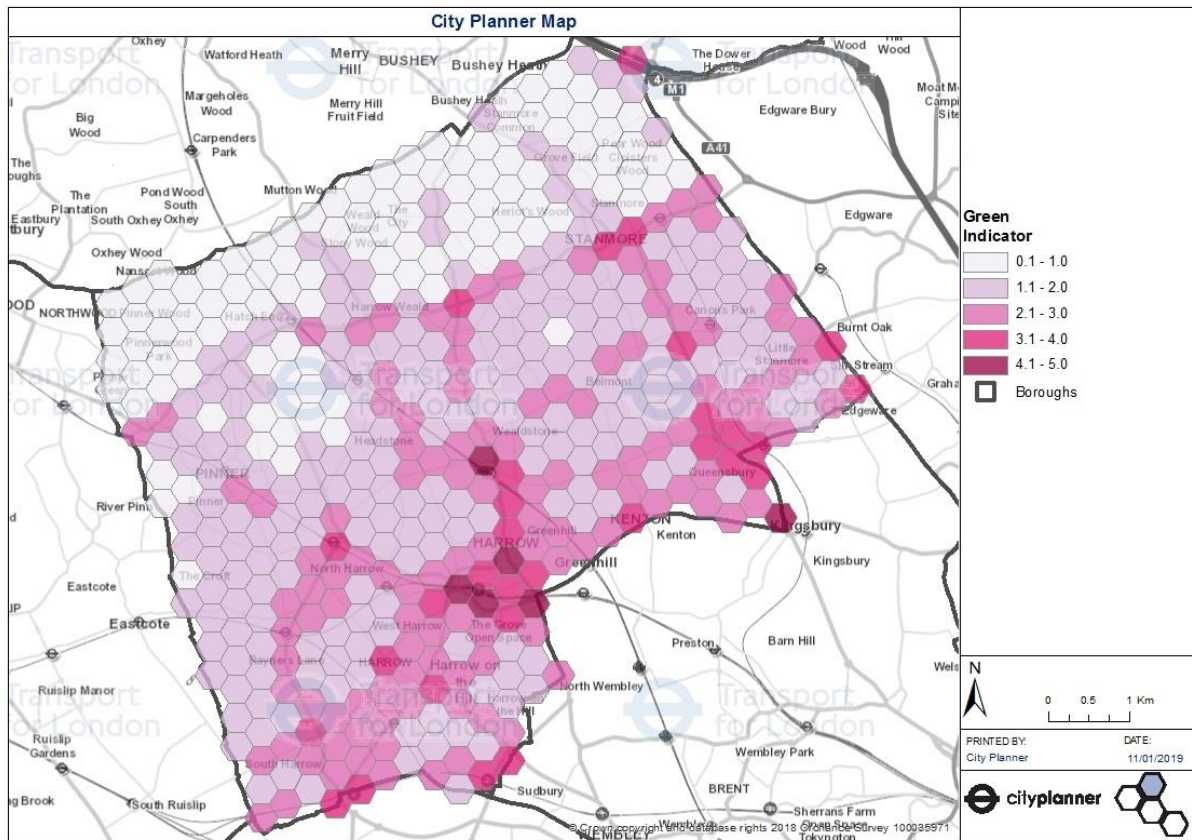


Figure 29: City Planner green indicator summary



2.5.80 Climate change is predicted to increase global temperatures, and could also lead to increased flooding. Harrow therefore needs to reduce its carbon dioxide emissions and its impact on the environment in general, to contribute to climate change mitigation, whilst at the same time adapting the built environment to become more resilient to the effects of climate change. This includes flood resilience measures being designed into developments, and other sustainable construction techniques being encouraged, whilst protecting the heritage around us. Secondly, lifestyles have to become more sustainable and so issues such as reducing car travel, tackling waste and increasing the provisions for recycling need to be addressed.

2.5.81 The development of enhanced public realm throughout the borough also needs to consider the impact of noise, dust, vibrations, pollution and vehicle emissions in the locality as these can detract from the enjoyment of any environment. Damage can occur through vehicle emissions which can accelerate the erosion and decline of an area's historic fabric. The siting of signage, road markings, pavement works and crossings can all impact on the visual aesthetic of an area and their locations must be sensitively considered.

2.5.82 In 2017/18 Harrow introduced its first ultra-low emission zone, neighbourhood of the future (NOF) in Harrow town centre. Measures included in the zone are:

- amending parking policies to incentivise Ultra Low Emission Vehicles (ULEV) ownership and providing parking discounts
- providing increased charging infrastructure in destination car parks near to the two main shopping areas of St Ann's and St George's shopping centre
- providing free credited training to mechanics in the area to ensure ULEVs can be safely and easily serviced
- up skilling local mechanics to support local businesses, making Harrow a centre of excellence for ULEV servicing and maintenance and boosting the local economy
- enabling businesses based in the borough to trial Low Emission Vehicles (LEVs) for their fleets, implementing a long term behaviour change strategy to raise awareness of the benefits of LEVs and overcome any misconceptions.

2.5.83 Harrow is considering restricting private cars from accessing Station Road/College Road and allowing only ULEVs access into the zone. The borough is researching current road signage issues that limit the borough's ability to do this.

2.5.84 Based on the success of the Harrow NOF, Harrow is now considering the delivery of more NOFs across the borough.

2.5.85 Harrow intends to develop a broader borough wide policy to address the need to increase the uptake of electric vehicles in the borough. A lack of off-street parking in some residential areas prohibits uptake of electric vehicles due to the inability to safely charge vehicles while off-street. An electric vehicle borough policy will help identify locations where electric vehicle charging facilities will be most beneficial for both private residential areas and in commercial centres such as shopping centre car parks. It will also help identify appropriate locations for rapid charging infrastructure.

2.5.86 The Harrow Council vehicle depot is currently being redeveloped. Vehicles using the depot are refuse and recycling vehicles, school buses and pool cars. The new depot facilities will include up to 40% electric vehicle charging points for service vehicles. Harrow Council buses are currently Euro V and Euro VI diesel but the borough will have a full fleet of Euro VI diesel vehicles by early 2019. Refuse vehicles are Euro V but the borough will have a full fleet of Euro VI vehicles by early 2019. Tipper and pool cars are planned to switch to a combination of diesel and electric vehicles by 2020. The new depot is scheduled to be complete by 2020.

2.5.87 Potential flooding in the borough is being addressed through a variety of measures. These include using the planning process to ensure surface water from developments is restricted; creating flood storage areas; silt and vegetation management on watercourses; maintaining kerbside gullies and improving and maintaining flood defence structures along Harrow's water courses.

- 2.5.88 For new developments, the discharge rate is restricted to the Greenfield run off rate. This is achieved through a combination of various Sustainable Drainage System (SuDS) features which include green roofs, balancing ponds, rain gardens, swales and attenuation tanks.
- 2.5.89 The borough actively creates surface flood storage areas and river restoration in parks and open spaces. In addition to flood protection these also improve water quality; and by creating new and varied habitat also increase biodiversity. This also improves resilience to climate change by reducing flooding. These projects improve public amenity, provide educational opportunities and encourage public engagement and volunteering.
- 2.5.90 The borough has a kerbside gully cleansing programme which is targeted to ensure cleansing frequencies are appropriate for each road. Watercourse trash screens are categorised into weekly, monthly or quarterly cleansing regimes.
- 2.5.91 Lighting across the borough is being improved by a change to LED lighting. This will ensure that the levels of lighting wherever needed are brought up to the necessary standards. The levels of lighting will be further enhanced by the use of higher output units in locations such as major junctions and crossing points. This will also drive a reduction in the volume of energy consumed to ensure that the borough works to meet the Government's and the Mayor's green agenda. The change to LED lighting is being based upon changing the oldest stock first. For the oldest stock, this includes changing the entire lighting installation.
- 2.5.92 Trees in the borough provide a range of environmental, economic and social benefits to Harrow residents. On a practical level trees help to mitigate and adapt to climate change and improve air quality. Trees are good for the environment as they absorb carbon dioxide as they grow and the carbon that they store in their wood helps slow the rate of global warming. Trees also help prevent flooding and soil erosion, absorbing thousands of litres of stormwater.
- 2.5.93 The residents of Harrow are fortunate to have a significant amount of mature tree cover across many parts of the Borough. Trees are also particularly good for the physical and psychological wellbeing of all those who visit areas where they grow. The borough aims to undertake to annually plant more trees than are removed. To ensure that Harrow benefits from additional trees, the borough will do the following:
- Increase the amount and variety of trees and plants across the borough's open spaces and within streetscapes
 - Seek opportunities for new tree planting in the Opportunity Area
- 2.5.94 Harrow is concerned about the impact of new heavier buses on the Harrow road network. Newer heavier buses have a detrimental impact on the road network and the frequency that roads need to be repaired. Despite the new buses being

'greener', they have a local environmental impact in terms of road material replacement frequency and requirements. In addition, Harrow is not always informed in advance about bus frequency changes or bus model changes.

2.5.95 Delivering a high quality public realm increases the attractiveness of the streets, supports local shops and businesses and can enhance personal safety. Cleaner and greener environments are also crucial to enabling healthier communities.

2.5.96 To improve local air quality, reduce traffic noise and encourage the use of more environmentally friendly vehicles, the borough will do the following:

- Continue to support the Harrow town centre neighbourhood of the future and deliver new NOFs across the borough
- Provide reduced cost residential and other relevant parking permits for appropriate greener vehicles
- Provide additional public electric charging points at key locations and consider the provision of rapid charging points to assist taxis, freight vehicles and car clubs
- Review the viability of introducing a revised parking permit structure based on vehicle emissions
- Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of "greener" vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles
- Request all providers or users of Council transport fleets to consider how they can move towards the use of less polluting vehicles
- Work with schools to identify local air quality issues surrounding schools and where appropriate access the Mayor's Air Quality Fund to provide appropriate solutions and raise awareness of the issue
- Use new polymer modified materials with EME material (Enrobé a Module Élevé) a derivative for use on bus stops where there is heavy static loading and low speed heavy movements for road surfacing to reduce noise, increase durability and increase the roads lifespan. New materials and better road conditions can reduce noise by up to 20%
- Maximise procurement opportunities for Small and medium-sized enterprises (SMEs) and local suppliers to minimise supply chain journeys
- Work with schools and police with regard to issues of traffic noise pollution, particularly from motorcycles

2.5.97 To enable Harrow to deliver a cleaner and greener environment, Harrow will do the following:

- Improve the environment for pedestrians and cyclists in the whole borough and particularly within the Harrow Opportunity Area

- In all new neighbourhood schemes the borough will consider the Healthy Streets checklist
- Ensure that all schemes implemented follow the Harrow public realm design guides ensuring best practice for materials, reducing street clutter and conserving the local environment
- Improve on the condition of Harrow roads by continuing to prioritise road maintenance in Harrow's capital and revenue budgets in line with best practice asset management principles
- Ensure all projects consider their air quality and noise impact and that where possible mitigation is introduced to minimise adverse impacts
- In all liveable neighbourhoods schemes the borough will consider planting and street greening to provide shade and shelter and to create a more attractive environment, the potential reallocation of road space to benefit sustainable transport, as well as road traffic restrictions and the possible introduction of play streets
- Ensure that all new public realm improvements and neighbourhood schemes consider their impact on heritage assets and their setting alongside the local archaeological potential as well as designated and non-designated assets
- Improve pedestrian and cycle wayfinding across the borough and work with TfL to expand Legible London in Harrow
- Raise awareness among residents about the planning requirements around paving over front gardens and opportunities to use permeable surfacing
- Support the introduction of rapid electric charging facilities for freight, taxis and car club vehicles to enable the introduction of Zero Emission Capable (ZEC) taxis
- Use the planning process to ensure that the discharge rate for new development is restricted to the Greenfield run off rate using various SUDS measures
- In addition to flood protection, create surface flood storage areas in parks and open spaces to improve water quality and increase biodiversity
- For all new schemes, review opportunities to introduce rain gardens, additional trees and protect existing grass verges to increase local biodiversity. Wherever practicable grass verge areas will be introduced and extended to ensure that the maximum amount of water will be contained within the highway area to percolate through to the sub-soil, rather than in to the local sewer system

Borough Objectives

2.5.98 The key borough objectives to deliver Outcome 4 are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality

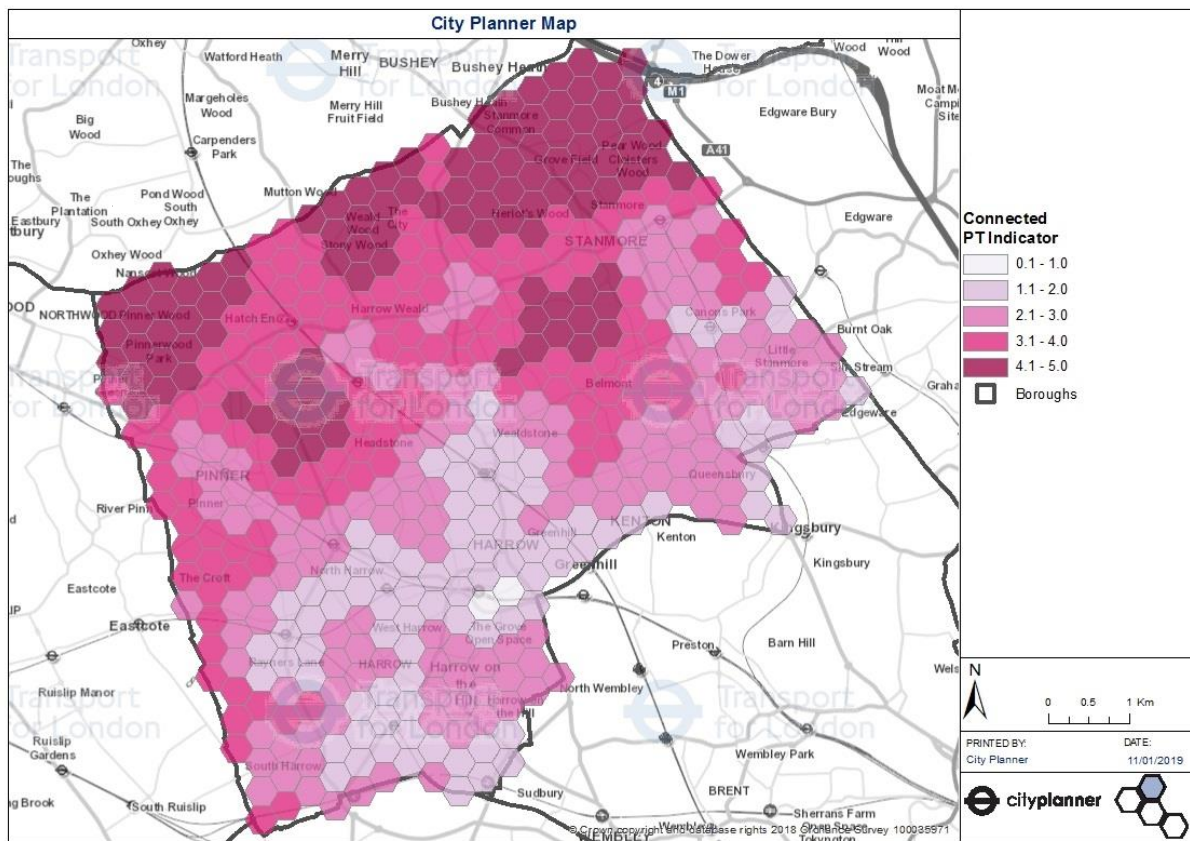
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
6. Encourage the uptake of ultra-low emission vehicles instead of fossil fuel powered vehicles through the use of promotional activities, increased Ultra Low emission zones, neighbourhoods of the future, and greater availability of electric charging facilities, thereby improving air quality, reducing traffic noise and reducing CO₂ emissions throughout the borough
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework

Outcome 5: The public transport network will meet the needs of a growing London

Challenges and opportunities

- 2.5.99 Harrow's population is growing and the demographic of residents is changing. Households are getting smaller, life expectancy is anticipated to increase, and technological advances are changing the way people live, travel and work. Harrow residents enjoy good life expectancy (82.7 years for men and 86.1 years for women) resulting in a disproportionately high increase in the proportion of older residents and adults living alone. It is expected that the number of residents aged 65 plus will increase by 42% and those aged 85 plus could increase by 62% by 2029.
- 2.5.100 A lack of good transport options can be a significant barrier to social inclusion and independence. Because older people are more dependent on public transport, they suffer more than most from poor public transport and a badly maintained transport infrastructure. The Borough will also see a growth in the under 15 age group (9.8%) which will also need to be considered regarding their future transport needs.
- 2.5.101 Figure 31 shows the City Planner summary for connected public transport in the borough. This is the combination of scored Average PTAL 2015, Jobs accessible in a 45 min journey 2011 (Jobs 2011 PT 2011), Population accessible in a 45 min journey 2011 (Popn. 2011 PT 2011) and Households accessible in a 45 min journey 2011 (HH2011, PT 2011). The areas showing the highest scores in this map are primarily the green areas in the borough with very low population levels. Therefore many of the areas just below the Harrow green areas and showing a connectivity PT indicator of 3.1 are also a priority to be addressed.

Figure 30: City Planner connected public transport summary



2.5.102 Night time public transport is important to support London’s growing night time economy and also to support those working at night. Harrow currently benefits from a 24 hour 7 days a week service on the 140, N98 and N18 bus services but a 24 hour service at weekends only on the 183 and 114 service. This means that places like Kenton, North Harrow and Pinner in the northern and western part of the borough only have a night time bus service on the weekends (to match the night tube service). However, rest of the week they neither have night tube nor night bus service. Harrow will work with TfL to improve the frequency and reliability of weekend and late night public transport services to and from Central London.

2.5.103 Although many older residents in the borough remain independent, there is undoubtedly a need to ensure that the public realm is both welcoming and accessible to meet their needs and the needs of all those who face similar obstacles. To address these issues, Harrow will do the following:

- Work with TfL to improve the penetration and expansion of local bus services into every local neighbourhood area – either by extending existing routes or, where necessary, by promoting new routes – this will be subject to the evaluation of the local impact of any additional bus services
- Persuade TfL to concentrate on continuing to improve public transport service reliability ensuring improved radial and orbital services

- Work with TfL to improve bus service reliability and to improve orbital bus links between the town centres and major employment locations and to other key destinations within Harrow and neighbouring boroughs
- Review cycle parking at stations, particularly at Wealdstone, Harrow on the Hill, Stanmore and Rayners Lane stations and work towards cycling provision meeting likely demand at these stations and further afield
- Work towards introducing a fully integrated, accessible bus and underground station at Harrow on the Hill
- Consider the provision of additional seating in all new schemes to benefit the needs of those with mobility difficulties, giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes
- In partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the borough are progressively improved with the intention of developing at access points, a fully wheelchair-accessible boarding / alighting points, as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- Improve transport connectivity within the Opportunity Area between Harrow Town Centre and Wealdstone including the provision of in station cycle parking
- Work with the key regulators and providers of rail, Underground and bus services within the borough to progressively improve the network in terms of capacity and reliability
- Build on existing liaison arrangements with those parties responsible for regulating and operating public transport services in the borough – issues discussed will include concerns of public transport users with both TfL bus and all rail operators and will include bus driving standards, bus emissions, driver behaviour, bikes on buses and trains, as well as general service provision
- Seek to secure a fully integrated approach to the provision and operation of public transport services within Harrow, including:
 - Improving the ease and convenience of approach routes to service access points, and the quality and clarity of the access signing
 - Taking account of the specific needs of people with impaired sight or impaired mobility
 - Improved taxi facilities at rail and underground stations
- Support the extension of additional taxi rank operational hours where this supports late travel such as the night time running of the Jubilee Line
- Work with TfL to improve the frequency and reliability of weekend and late night public transport services to/from Central London
- Ensure that road markings to better enable bus priority enforcement are prioritised in all schemes

Borough Objectives

2.5.104 The key borough objectives to deliver Outcome 5 are as follows:

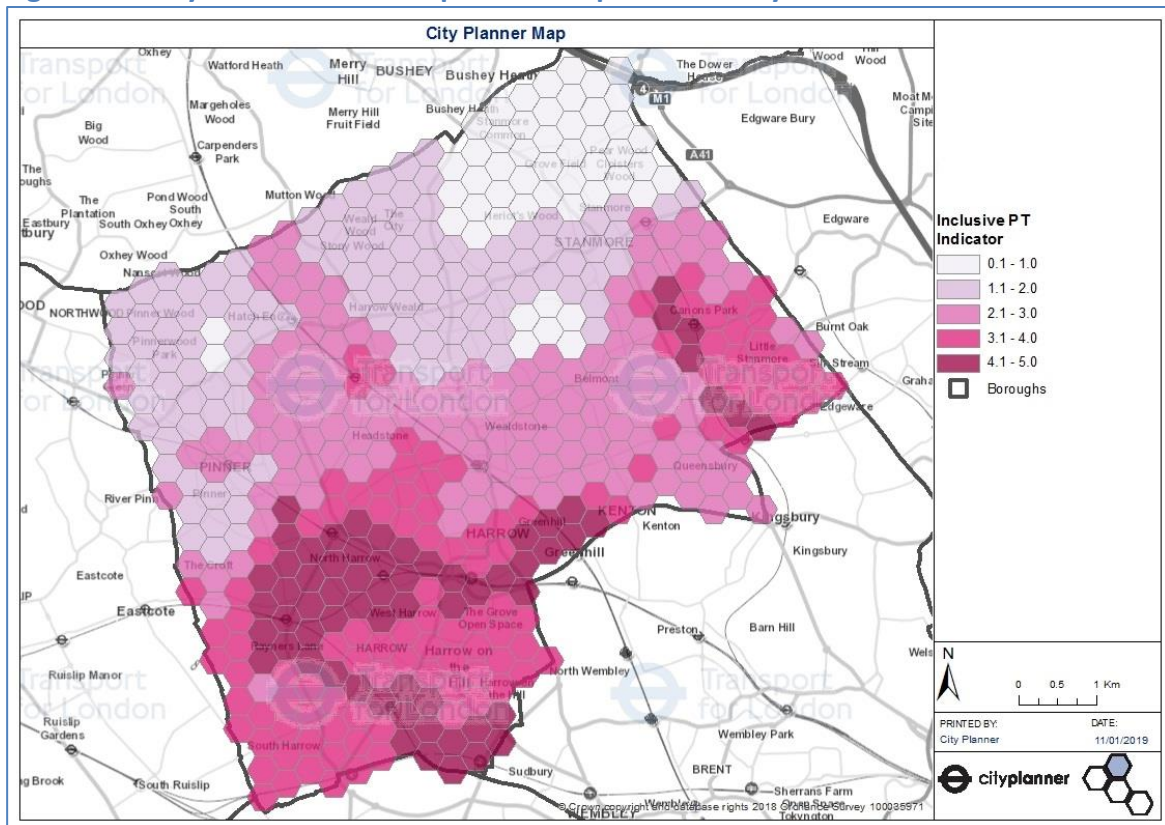
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
6. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
8. Improve transport connectivity throughout the Harrow and Wealdstone Opportunity Area and particularly between Harrow-on-the-Hill station/ Harrow bus station and Harrow & Wealdstone station
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area

Outcome 6: Public transport will be safe, affordable and accessible to all

Challenges and opportunities

- 2.5.105 For many years, Harrow has been lobbying for improved accessibility at Harrow on the Hill station. Step free access is now being introduced at the station and is scheduled to be completed by 2020. This is a major victory for accessibility in Harrow town centre. Further underground accessibility improvements are required at Stanmore, Rayners Lane and Canons Park stations. Stanmore station has some accessibility through the car park but it is far from adequate.
- 2.5.106 Harrow was one of the first boroughs in London to introduce an audit of bus stop accessibility and has continued to progress with improving accessibility levels. 99% of bus stops in the borough are now accessible.
- 2.5.107 Figure 31 shows the City Planner summary of inclusive public transport in the borough. This shows the combination of scored Average travel time 2015 step free vs. not step free % diff, Jobs accessible 2015 step free vs. not step free % diff and Population accessible 2015 step free vs. not step free % diff. The poor accessibility of Harrow on the Hill station heavily influences this map. Many of the areas shown with a low score have very poor public transport. There is little difference in journey times between no public transport and no accessible public transport.

Figure 31: City Planner inclusive public transport summary



2.5.108 To support those with mobility difficulties, Harrow Council provides the Freedom Passes, Blue Badges and Taxicards enabling concessionary transport services for eligible residents. Freedom Passes allow free travel in the Greater London area on buses, tube, national rail (London network), DLR and Tramlink, for older and disabled people who reside in the borough. They also allow free bus travel on local bus services anywhere in England. The Blue Badge scheme gives free and dedicated parking close to amenities for drivers and passengers with mobility related disabilities, or who are blind. Taxicards are made available to those with serious difficulties with walking (including breathing problems and sight loss) to travel in taxis at reduced rates.

2.5.109 Harrow Community Transport provides community transport services for those in Harrow with mobility needs. Their service is provided to local community and voluntary groups in the borough. They are charity funded through donations and deliver essential services in both the London boroughs of Harrow and Brent. They also provide Group Transport, Individual Transport, Community Car Service (CCS), Driver Training - MiDAS (Minibus Driver Awareness Scheme), Technical Advice / Vehicle Management and Contract Services.

2.5.110 To support those with mobility difficulties in Harrow and to improve the safety and accessibility of travelling in Harrow, the borough will do the following:

- Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041
- In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered
- Ensure adequate provision of blue badge parking is available in all town centres
- In partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the borough are progressively improved with the intention of developing at access points, a fully wheelchair-accessible boarding / alighting points, as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- Work towards introducing a fully integrated, accessible bus and underground station at Harrow on the Hill
- Petition TfL to improve the accessibility of all stations in the borough where there is no disabled access
- Seek to ensure that all stations and bus stop locations in the borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- Liaise with the Public Carriage Office regarding improving the accessibility of taxi ranks in the borough

- Continue to support the expansion of the Harrow Shopmobility services and their opening hours
- Work with schools to promote travel training for children and young people with learning difficulties
- Work with Harrow Association of Disabled People and other disability organisations to address a range of accessibility issues

Borough Objectives

2.5.111 The key borough objectives to deliver Outcome 6 are as follows:

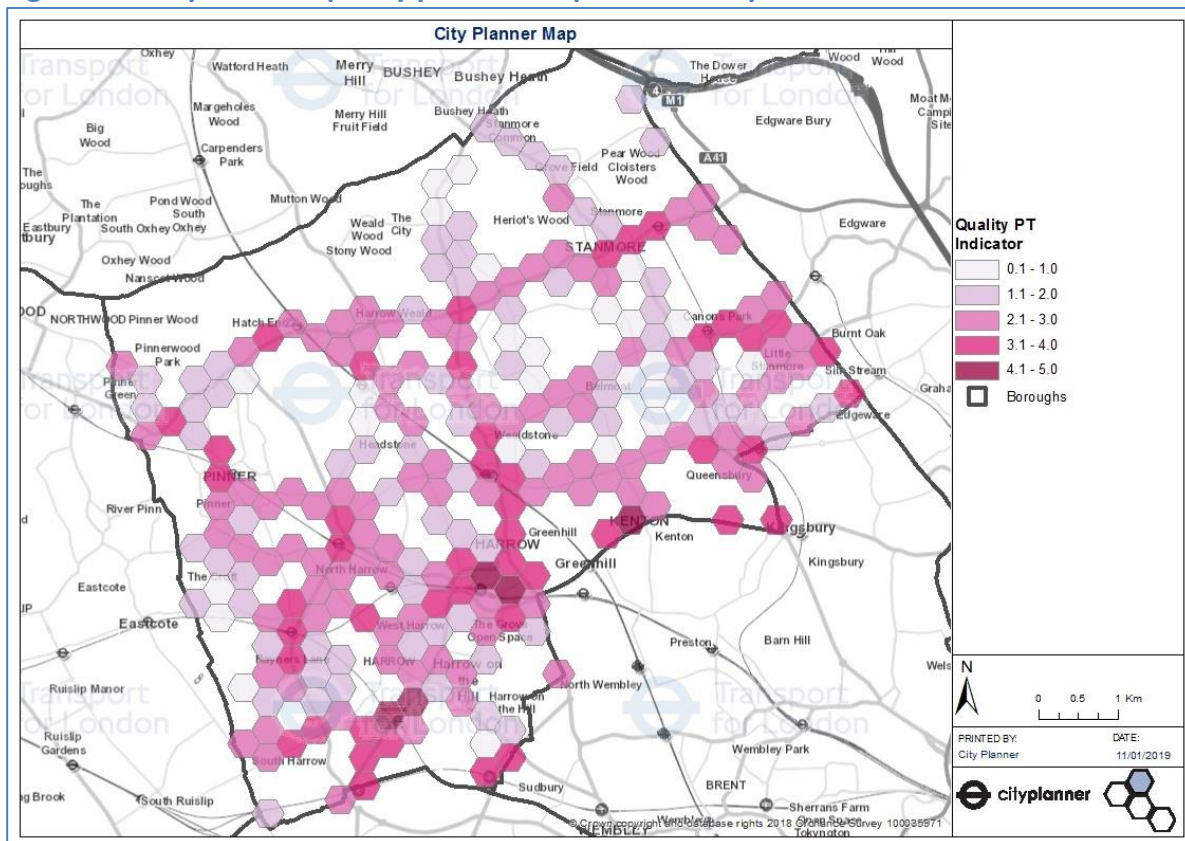
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience

Outcome 7: Journeys by public transport will be pleasant, fast and reliable

Challenges and opportunities

- 2.5.112 Harrow will continue to liaise with TfL and public transport operators and user groups through its regular public transport liaison group meetings. Harrow works through the public transport liaison group to review and improve standards to improve the attractiveness of bus travel in the borough.
- 2.5.113 Harrow liaises with TfL about the transport needs of the borough but has limited influence over the services that actually run. As TfL faces significant funding restrictions, the borough is concerned that this might result in cuts to local bus services in terms of bus routes and bus frequency. If this were to happen, then overcrowding would become a greater issue and the necessary public transport support for new growth areas would not be provided. In addition, the new orbital bus services needed in Outer London would not be delivered.
- 2.5.114 Figure 32 shows the City Planner quality public transport summary. This shows the combination of scored Bus oyster boardings (15/16), Bus scheduled km (AM 11/11/2016) and Bus speed change % (AM 14/15-16/17). The areas with the highest boardings are most severely impacted by speed changes.

Figure 32: City Planner quality public transport summary



2.5.115 The reliability of bus routes can be improved by good design, better managed roadworks and well managed kerbside space through appropriate parking regulations. Introducing appropriate bus priority including additional bus lanes, bus gates, introducing signal reviews, changes to bus lane operational hours and accessible bus stops can all improve the reliability of the bus service. In addition, the importance and reliability of the bus service is always considered in managing the road network in the borough. Enforcement of road traffic, parking and waiting regulations need to be considered in the interests of improving bus priority and where possible engineering solutions need to be used to minimise the need for any additional enforcement.

2.5.116 To support buses and taxis to provide a pleasant, fast and reliable service, Harrow will do the following:

- Deploy full range of available bus priority measures ensuring that measures are designed to reduce problems for all modes
- Work with TfL to prioritise available resources to provide the road space and traffic regulatory / management infrastructure to support development of the bus services as well as additional bus services
- Seek to work with public transport providers and regulators to ensure that engineering works and service closures are coordinated to minimise passenger inconvenience
- Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority. Where possible engineering solutions will be used to minimise the need for additional enforcement.
- Work in partnership with public transport service providers and regulators to seek to ensure that all stations and bus stop locations in the borough are progressively improved to offer a safe, secure and passenger-friendly environment and appropriate 'state-of-the-art' passenger interchanges, including adequate and secure cycle parking facilities
- Seek to ensure that all stations and bus stop locations in the borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- Liaise with the Public Carriage Office regarding improving the accessibility of taxi ranks in the borough
- Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
- Work with TfL and bus operators to ensure adequate off-highway facilities are available for the storage and maintenance of buses at appropriate locations and to ensure that bus stands are appropriately located

Borough Objectives

2.5.117 The key borough objectives to deliver Outcome 7 are as follows:

10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable faster and more accessible public transport experience
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes

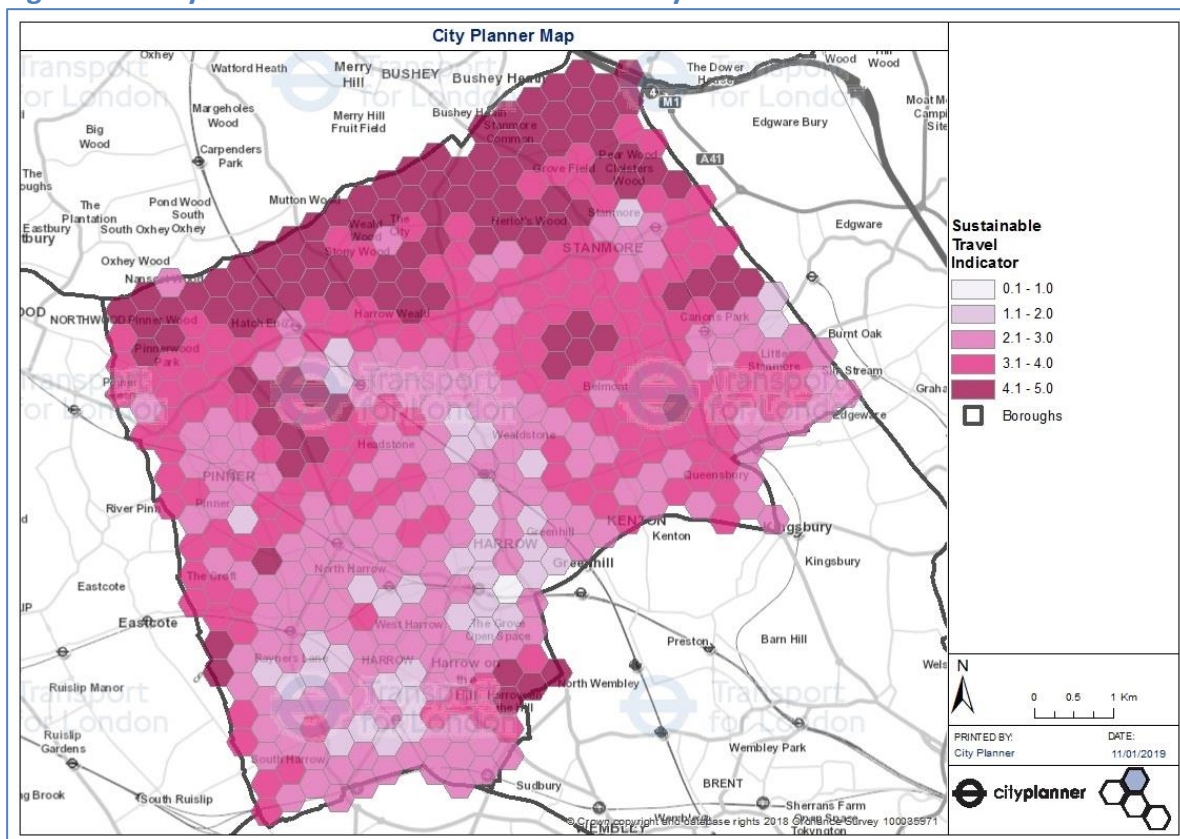
Outcome 8: Active, efficient and sustainable travel will be the best option in new developments

Challenges and opportunities

2.5.118 The London Plan parking standards are used to drive down car ownership in the borough and to increase cycle parking facilities. The standards ensure that new developments of various types contain high levels of access to cycle parking. Harrow will be developing a new transport Supplementary Planning Document (SPD) to support the Local Plan and to better explain and enable the borough to enforce the need for reduced car ownership through the planning process. The SPD is likely to include threshold information on parking requirements for residential and non-residential developments, details on travel plan requirements and travel plan bonds, cycle storage and parking as well as specific information on assessing restaurants and takeaways and the development of residential garages.

2.5.119 Figure 33 shows the City Planner sustainable travel summary. This is the combination of scored Car/van accessibility per household (ONS Census 2011), Modelled car/taxi flow (AM 2012) and Average PTAI 2015. The areas showing the highest scores in this map are primarily the green areas in the borough with very low population levels.

Figure 33: City Planner sustainable travel summary



2.5.120 The Harrow and Wealdstone Opportunity Area in the centre of the borough will be the focus for borough regeneration, providing for a significant portion of new development and include much of the borough growth in population, housing and employment within the borough. An Area Action Plan for the Opportunity Area has been developed and to support this growth, the area will need to be the focus of many new transport initiatives in the borough. Other areas of growth across the borough will be directed to town centres where additional transport needs will also be considered.

2.5.121 Harrow has developed high quality town centre design standards and also a materials pallet that are being used for the Harrow and Wealdstone Opportunity Area. These higher standards will be rolled out to other areas where regeneration occurs.

2.5.122 To ensure that growth in Harrow is sustainable, Harrow will do the following:

- Promote growth in areas of greatest public transport to encourage residual travel by public transport, walking and cycling
- Consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas
- Promote mixed use development in growth locations to reduce the need to use a vehicle for trips between residential, retail, leisure and employment areas
- Consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas
- Seek to ensure that new facilities to reduce car dependency e.g. real time public transport information and shopping lockers are placed in shopping centres
- Work with the Mayor, the GLA and the Government to pursue the progressive removal / control of “free” parking – through planning agreements (new development), through voluntary initiatives (retail partnerships) or by extending the principle of charging for car parking spaces
- Where accessibility by non-car modes is particularly good or can be made so, the council will actively seek to secure lower levels of car parking provision or even zero provision in developments, and require the completion of a binding agreement to introduce residential permit restrictions on the developments to limit the increase in car use and ensure that any measures necessary to improve accessibility by non-car modes are secured
- For new larger developments, use travel plan bonds, for failure to meet performance of agreed travel plans and secure Developer funding to pay to monitor the travel plans; monitoring will continue for at least five years following development completion
- In preparing Transport Assessments and Transport Statements to demonstrate sufficient/appropriate levels of car parking provision for locations outside of high

PTAL areas, trip generation data should be assessed alongside Census travel to work and car ownership data for the relevant ward or Middle Super Output Layer (Office for National Statistics)

- When considering housing developments the council will encourage developers to explore the potential for schemes to provide access to cars without individual ownership, possibly linked to inducements to use other modes
- Ensure convenient access for walking, cycling and public transport be required in the design and layout of new development
- Ensure that walking permeability (a multiplicity of routes to give easy accessibility to, from and within a site) is assessed and prioritised for all new residential or business developments
- Secure deliverable Travel Plans for major trip generating development
- Promote the use of travel plans for all educational establishments, hospitals and other places of work and where appropriate work with organisations to improve site specific travel plans
- Use its powers as local planning authority to make planning permission for future development conditional upon the availability of an appropriate level of pedal cycle parking and facilities such as showers and lockers and encourage provision of “cycle pools”
- Use the planning process on major planning applications for larger developments to require a Construction Logistics Plan that reduces the environmental impact through the use of lower vehicle emissions and reduced noise levels; improves the safety of road users; reduces vehicle trips particularly in peak periods and encourages efficient working practices
- Use Section 106 Planning Agreements to secure developer contributions towards the costs of meeting and ameliorating the travel demand generated by development through improvement to public transport, walking and cycling, installing parking controls and, where necessary, creating regulated and controlled public car-parks
- In considering planning applications for non-residential development the council will have regard to the specific characteristics of the development including provision made for:
 - Operational parking and servicing needs
 - Convenient car-parking for people with disabilities
 - Car parking related to shift and unsociable hours working
 - Convenient and secure parking for bicycles
 - Needs of parking for motorcyclists
- For new residential developments, parking permits will be restricted for all developments in areas of PTAL 5/6. Permits may also be restricted in new residential developments in areas of lower PTAL rates at the discretion of Harrow Highway’s Service. This will not apply to residents with blue badges.

Borough Objectives

2.5.123 The key borough objectives to deliver Outcome 8 are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework

Outcome 9: Transport investment will unlock the delivery of new homes and jobs'

Challenges and opportunities

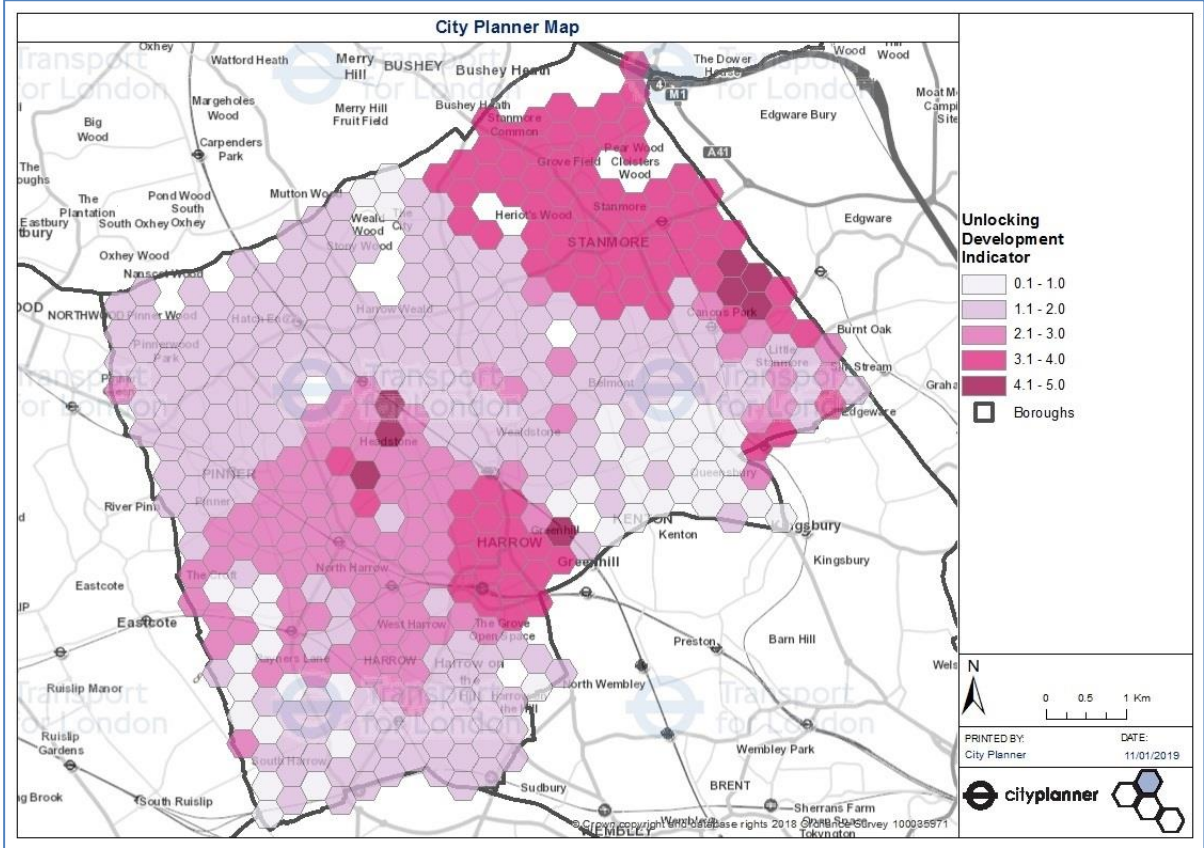
2.5.124 London faces significant projected population growth (70,000 every year), reaching 10.5 million in 2041. This means that just to meet demand, at least 66,000¹² new homes need to be built in London every single year. In Harrow, the borough needs to build 13,920 new homes by 2028/29.

2.5.125 The borough needs to deliver new homes and jobs to meet the forecast growth in population. To deliver new housing and regeneration in Harrow, the borough will continue to work with TfL to pursue opportunities for mixed-use development and redevelopment in and around rail and bus stations. Harrow is already working in partnership with TfL reviewing TfL landholdings to improve efficiency use and identifying development opportunities around Harrow on the Hill station. In addition, the borough will seek contributions from developers through Section 106 agreements and using the Community Infrastructure Levy (CIL) for bus and cycle infrastructure improvements that will help support this growth.

2.5.126 Figure 34 shows the City Planner unlocking development summary. This is the combination of scored Population change 2011 to 2041 (LTS v7.1) and Employment change 2011 to 2041 (LTS v7.1). This data is in line with the information provided in Figure 35 which shows the planned growth in the borough.

¹² Draft London Plan, 2017

Figure 34: City Planner unlocking development summary

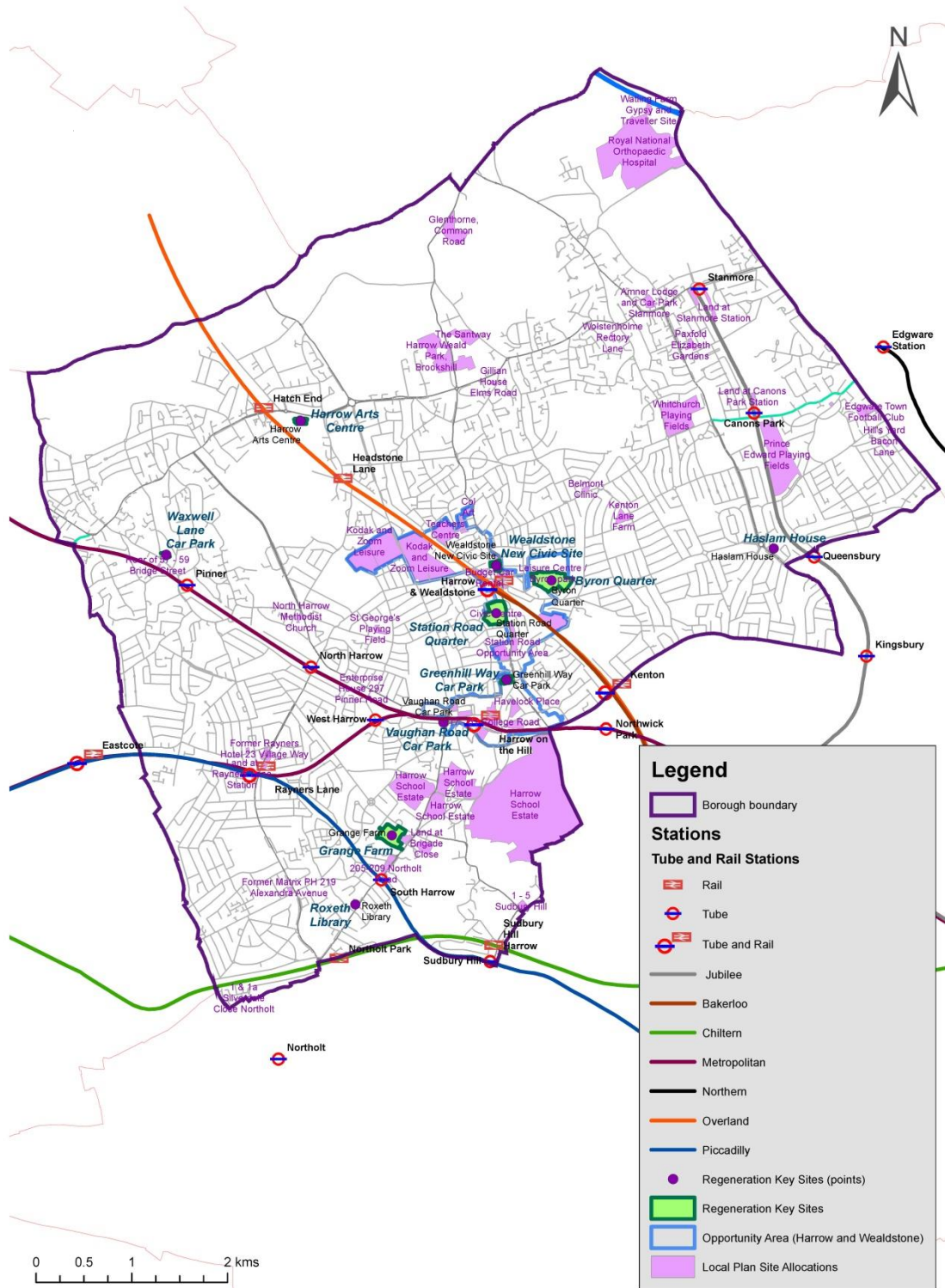


2.5.127 Bus routes throughout the borough may need to be extended to ensure that the growth in population doesn't result in a disproportionate and unsustainable growth in car use. Good bus services as well as walking and cycling facilities are all vital to unlocking the delivery of new homes and jobs in the borough. Where cars are needed, there needs to be a move to more sustainable vehicle choices supported through increased provision of electric charging facilities. This will all be assisted through the delivery of more liveable neighbourhoods and neighbourhoods of the future. Additional cycle routes and cycle parking at public transport interchanges and other key locations will also be needed to support planned growth.

2.5.128 Harrow supports the development of the West London orbital line. However the proposed route is unlikely to have a considerable impact on travel in the borough. The borough needs improved orbital links to increase access to employment opportunities. Harrow does have an excellent bus link to Heathrow airport. Bus route 140 offers a direct and high frequency service taking 75-100 minutes to reach the airport. The borough will work with TfL to assess suggested service improvements.

2.5.129 Figure 35 shows the planned growth areas in the borough.

Figure 35: Growth areas in Harrow



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2.5.130 To support the delivery of new homes and jobs, Harrow will do the following:

- Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
- Work with TfL to assess suggested service improvements for the Heathrow bus link route 140 as well as any additional routes needed to support the proposed Heathrow expansion
- Review cycle parking at stations, particularly at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and work towards cycling provision meeting likely demand at these stations and further afield
- Provide additional cycle parking in schools, review and increase the level of safe and secure cycle parking available across the borough
- Ensure the progressive delivery and maintenance of a high quality of cycle route provision, consistent with London Cycling Design Standards, as well as clear continuity and consistency in design; and ensure that, wherever practicable, provision is designed and implemented to cater for tricycles and bikes with trailers
- Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings
- Maximise training, apprenticeship and employment opportunities on all schemes to ensure residents benefit from the economic opportunities generated by transport infrastructure programmes and journey to work times are reduced

Borough Objectives

2.5.131 The key borough objectives to deliver Outcome 9 are as follows:

7. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes

2.6 Other Mayoral Strategies

2.6.1 The following Mayoral strategies were all considered in developing Harrow's Transport Local Implementation Plan:

- The Mayor's Transport Strategy, 2018
- Mayor's Transport Strategy – Local Implementation Plan guidance, 2018
- Draft London Plan, Spatial Development Strategy for Greater London, 2017
- London Environment Strategy, 2018
- Economic Development Strategy, 2017-18
- Vision Zero for London, 2017
- Healthy Streets for London, 2017
- Better Environment, Better Health, 2013
- Mayor's Climate Change Adaption Strategy, Managing risks and increasing resilience, 2011

2.6.2 The first three of these documents have been the key influences on developing the Harrow LIP3.

2.6.3

2.6.4 Table 4 shows the key influences from these documents.

Table 4: Key document influences on LIP3

Strategy	Key input into LIP3	Sections of LIP3 most influenced
The Mayor's Transport Strategy And Local Implementation Plan guidance	Driving force for all content – also an excellent source of background data and reasoning for policies	Development of all borough objectives Development of policy to deliver Mayoral outcomes
Draft London Plan, Spatial Development Strategy for Greater London	Integration of land use and transport Link between development and healthy streets indicators Car and cycle parking standards for development	Development of borough objectives Development of borough growth and parking policies
London Environment Strategy	Air quality, noise, biodiversity and climate change data and policies	Development of borough objectives Details for environment content

2.6.5 The Mayoral policies listed all contain a range of ambitions and targets. Table 5 shows targets included in the documents that are most relevant to LIP3.

Table 5: Key ambitions and targets from Mayoral policy documents

Strategy	Relevant Key Targets / Ambition
<p>The Mayor’s Transport Strategy And Local Implementation Plan guidance</p>	<p><u>Traffic</u> Reduce total London traffic by 10-15 per cent by 2041 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041 By 2041, all Londoners to do at least the 20 minutes of active travel they need to stay healthy each day</p> <p><u>Casualties</u> 2022 – reduce the number of people who are killed or seriously injured by 65 per cent against 2005-09 levels 2030 – reduce the number of people who are killed or seriously injured by 70 per cent against 2010-14 levels 2041 – eliminate all deaths and serious injuries from road collisions from London’s streets 2022 – reduce the number of people who are killed or seriously injured in, or by, London buses by 70 per cent against 2005-09 levels 2030 – reduce the number of people killed in, or by, London buses to zero</p> <p><u>Emissions</u> Make London’s transport network zero emission by 2050 including achieving a health-based target of 10µg/m³ for PM_{2.5} by 2030. All new taxis to be zero emission capable from 2018 and all new Private Hire Vehicles (PHVs) from 2023, all new buses to be zero emission from 2025, all new cars and vans from 2030 and all other vehicles from 2040</p>
<p>Draft London Plan, Spatial Development Strategy for Greater London</p>	<p>10 year targets for net housing completions (2019/20-2028/29) 10 year targets (2019/20 -2028/29) for net housing completions on small sites (below 0.25 hectares in size) Make more than 50 per cent of London green by 2050</p>
<p>London Environment Strategy</p>	<p>Reducing construction traffic by five per cent by 2020, and reducing the number of freight trips during the morning peak by ten per cent by 2026 London to be zero emission city by 2050 Habitat creation targets including targets for species-rich woodland, flower-rich grassland, rivers and streams and for reedbeds Increase the area of London under tree cover by ten per cent by 2050</p>

3. The Delivery Plan

3.1 Introduction

3.1.1 This chapter sets out Harrow's Delivery Plan for achieving the objectives of LIP3. It includes:

- Linkages to Mayor's Transport Strategy priorities
- A list of potential funding sources for the period 2019/20 to 2021/22
- Proposed long-term interventions
- A three year indicative Programme of Investment for period 2019/20 to 2021/22
- A detailed annual programme for 2019/20

3.2 Linkages to the Mayor's Transport Strategy priorities

3.2.1 The Delivery Plan has been developed to align the borough's projects and programmes with the policy framework of the Mayor's Transport Strategy, the overarching mode share aim, each of the nine outcomes, and the relevant policies and proposals. Table 6 shows the linkages between the LIP projects and programmes and the MTS outcomes.

Table 6: Linkages between LIP projects and programmes and the Mayor's Transport Strategy outcomes (ST01)

Project / Programme		MTS mode share	MTS outcomes							
			Improving active, efficient and sustainable mode share	No 1:-Active	No 2:- Safe	No 3:-Efficient	No 4:- Clean & Green	No 5:- Connected	No 6:- Accessible	No 7:- Quality
	Corridors and supporting measures	✓	✓	✓	✓	✓	✓	✓	✓	✓
1	Road Safety Schemes (Vision Zero)	✓	✓	✓	✓	✓				
2	Walking and Cycling Schemes	✓	✓	✓	✓	✓	✓			✓
3	Bus Priority Schemes				✓		✓	✓	✓	✓
4	Freight Management Schemes		✓	✓	✓	✓	✓			
5	Network Performance Schemes				✓	✓	✓		✓	✓
6	Accessibility Schemes		✓	✓		✓		✓	✓	✓
7	Shopmobility		✓	✓						
8	Travel Training		✓	✓	✓			✓	✓	
9	ULEV and Air Quality	✓				✓	✓			✓
10	Active and Sustainable Travel	✓	✓		✓	✓	✓			✓
11	Road Safety Education			✓	✓			✓		
18	Cycle Training	✓	✓	✓	✓	✓	✓	✓		✓
17	Travel Plans	✓	✓	✓	✓	✓				
19	Controlled Parking Zones	✓		✓		✓		✓		✓
	Major schemes	✓	✓	✓	✓	✓	✓	✓		✓
1	Liveable Neighbourhoods	✓	✓	✓	✓	✓	✓			✓

3.3 TfL Business Plan

- 3.3.1 Harrow is unique in London in that none of the Transport for London road network passes through the borough. Consequently, the borough is significantly less impacted than other boroughs by TfL plans.
- 3.3.2 None of the schemes identified by TfL as part of their transformational schemes, major schemes or cycle superhighways are within Harrow or will impact the borough.
- 3.3.3 Land by Harrow on the Hill station in the Harrow and Wealdstone Opportunity Area is being developed working in partnership with TfL to bring forward additional housing.

3.4 Sources of funding

- 3.4.1 Harrow parking revenue is used to support the Freedom Passes and Taxicard schemes. Harrow capital funds are used to support parking infrastructure management measures including CPZs. This is usually £300k per annum. In 2019/20 and 2020/21, around £500k of Harrow capital has also been used to support principal road maintenance and to address the removal of funding by TfL. It is not yet clear if this will continue into later years.
- 3.4.2 Table 7 identifies potential funding sources for implementation of LIP3, including LIP3 funding allocation from TfL, contributions from the borough's own funds, and funding from other sources.
- 3.4.3 The key source of funding is the borough's LIP allocation which is formula funding based on the following factors: local public transport (buses), safety, congestion, environment and accessibility. Figures provided by TfL indicate that the borough will receive £1,290.7k per annum, however this may change.
- 3.4.4 In addition to the above, the borough hopes to achieve TfL Strategic and Discretionary funding for liveable neighbourhoods, bus priority, road safety, cycle Quietway and MAQF. This funding is dependent on negotiations with TfL and successful bids.
- 3.4.5 The sums available from developers in Harrow via section 106 agreements are likely to be around £100k per annum.
- 3.4.6 Receiving the financial awards from TfL and the discretionary funding awards will make a significant impact on the borough's ability to deliver modal shift.

Table 7: Potential funding for LIP3 delivery (ST02)

Funding source	2019/20 £k	2020/21 £k	2021/22 £k	Total £k
LIP Formula funding				
Corridors & Supporting Measures	1,290.7	1,290.7	1,290.7	3,872.1
GLA funding				
Public Realm Good Growth (Lyon Square)	150	615	0	765
Discretionary funding				
Liveable Neighbourhoods (Wealdstone town centre)	200	2,000	2,000	4,200
Strategic funding				
Bus Priority	100	100	100	300
Road Safety	100	100	100	300
Cycle Quietway	1,500	1,500	0	3,000
MAQF	100	100	100	300
Strategic funding Sub-total	1,800	1,800	300	3,900
Borough funding				
Capital funding (CPZs and Principal Road Maintenance)	800	800	800	2,400
Borough funding Sub-total	800	800	800	2,400
Other sources of funding				
S106	100	100	100	300
Other funding Sub-total	100	100	100	300
Total	£4,341	£6,606	£4,491	£15,437

3.5 Long-Term interventions to 2041

- 3.5.1 Over the longer term, changes to improve Harrow that are needed to achieve significant benefits that will ensure the economic and social vitality of the borough are the delivery of more liveable neighbourhoods. Delivering more liveable neighbourhoods will enable a visible step change in the public realm and also has the potential to deliver significant environmental improvements. The areas chosen to deliver these have predominantly been based on the TfL Strategic Cycling Analysis of potentially switchable trips. These are shown in Table 8 with indicative funding and indicative but uncommitted timescales.
- 3.5.2 All new liveable neighbourhoods would address road safety and personal safety, improve accessibility, traffic calming, address environmental issues including air quality improvements, provide more trees, greenery and electric charging facilities,

deliver shaded shelter, increased places to sit and socialise in the street environment, deliver improvements to the public realm that would encourage walking and cycling and improve the overall accessibility of the area. These will also be key in enabling the borough to deliver the required change to support the Mayor’s aims and priorities.

3.5.3 Introducing liveable neighbourhoods would also enable the borough to include increased localised active travel initiatives to better address health issues such as diabetes and obesity levels.

Table 8: Long-term interventions up to 2041 (ST03)

Project	Approx. date	Indicative cost	Likely funding source	Comments
Harrow and Wealdstone Town Centre Liveable neighbourhood	2020-2025	£5.0M	LB Harrow TfL and developer contribution	To include active travel initiatives as well as liveable neighbourhood improvements (location identified as one where more cycle trips are possible)
Rayners Lane Liveable neighbourhood	2022-2027	£5.0M	LB Harrow TfL and developer contribution	To include active travel initiatives as well as liveable neighbourhood improvements (location identified as one where more cycle trips are possible)
Stanmore Liveable neighbourhood	2024-2029	£5.0M	LB Harrow TfL and developer contribution	To include improvements in accessibility to Stanmore station, active travel initiatives as well as liveable neighbourhood improvements
Edgware Liveable neighbourhood	2026-2031	£5.0M	LB Harrow TfL and developer contribution	To include active travel initiatives as well as liveable neighbourhood improvements (location identified as one where more cycle trips are possible)
South Harrow Liveable neighbourhood	2028-2033	£5.0M	LB Harrow TfL and developer contribution	To include active travel initiatives as well as liveable neighbourhood improvements

3.6 Three-year indicative Programme of Investment

3.6.1 The Three Year indicative Programme of Investment is shown in Table 9.

Table 9: Three-year indicative programme of investment for the period 2019/20-2021/22 (ST04)

London Borough of Harrow TfL BOROUGH FUNDING 2019/20 TO 2021/22	Programme budget		
	Indicative 2019/20	Indicative 2020/21	Indicative 2021/22
Local transport initiatives			
CORRIDOR, NEIGHBOURHOODS & SUPPORTING MEASURES	£k	£k	£k
Road Safety Schemes (Vision Zero)	240	240	240
Walking and Cycling Schemes	300	300	300
Bus Priority Schemes	250	250	250
Freight management schemes	40	40	40
Network performance schemes	40	40	40
Accessibility schemes	35	35	35
Shopmobility	5	5	5
Travel training	20	20	20
ULEV and air quality schemes	60	60	60
Active and sustainable travel	40	40	40
Road Safety Education	40	40	40
Cycle training	65	65	65
Travel plans	105	105	105
Forward programme development	50.7	50.7	50.7
Sub-total	1,290.7	1,290.7	1,290.7
DISCRETIONARY FUNDING	£k	£k	£k
Wealdstone Liveable Neighbourhood	200	2,000	2,000
STRATEGIC FUNDING	£k	£k	£k
Bus Priority	100	100	100
Road Safety	100	100	100
Cycle Quietways	1,500	1,500	0
Mayor's Air Quality Fund	100	100	100
Sub-total	1,800.0	1,800.0	300.0
All TfL borough funding	3,290.7	5,090.7	3,590.7

3.7 Supporting commentary for the three-year programme

- 3.7.1 The three-year programme has been developed by considering the Mayoral and borough priorities, available borough resources and funding and also maximising the potential use of all available funding to maximum benefit. No significant differences are expected between different years in the delivery of the corridors and supporting measures over this time period.
- 3.7.2 Road Safety Schemes (Vision Zero) include accident remedial studies, local road safety schemes, 20mph zone extensions and school travel plan highway schemes. This will address KSI clusters along corridors and at junctions on all street types. In 2019/20, the borough will introduce 20mph zones at the following locations: Clitheroe Avenue area, Rayners Lane - Kingshill Avenue area - Kenton and focus on KSI accidents.
- 3.7.3 Walking and cycling schemes include all walking schemes, all cycling schemes as well as Legible London schemes. Walking schemes will facilitate walking, reduce segregation and improve pedestrian safety. Cycle schemes will implement cycle routes, Quietways and greenways identified in Harrow's cycle strategy to deliver a complete cycle route network. In 19/20 the borough will focus on the development of Heart of Harrow cycle route running north south from Harrow Town Centre - Introduce entry treatment along A409 corridor and investigate Legible London locations.
- 3.7.4 Bus Priority schemes will introduce schemes to improve bus journey times and the overall public transport experience based on route tests and iBus data. In 19/20, schemes to improve bus journey times and the public transport experience will be carried out in North Harrow - Complete Pinner Road / Station Road - road widening scheme and High Road Harrow Weald.
- 3.7.5 Freight management schemes will implement the operational freight strategy and will include works to review weight restriction areas and implement designated freight routes. In 19/20, the borough will work to implement the revised freight strategy, and this will include works to review weight restriction areas and review advisory freight routes. Also the borough will review the existing lorry bans along Kenton Road corridor.
- 3.7.6 Network performance schemes will review areas of the network where journey time reliability issues have been identified and introduce improvement schemes. In 19/20 the borough will develop Queensbury Circle plans and investigate Belmont Circle and London Road corridors.

- 3.7.7 Accessibility improvements will introduce a programme of accessibility improvements including additional disabled persons parking places, pedestrian dropped kerbs and other minor localised improvements.
- 3.7.8 Shopmobility funding will enable increased opening hours for the service for times when volunteers are not available e.g. Saturdays and pre-Christmas.
- 3.7.9 Travel Training funding will be used to support those with learning difficulties to remove barriers to travelling independently on sustainable transport and in particular to support public transport use. The borough will attempt to target two schools per annum for assistance.
- 3.7.10 ULEV and air quality scheme funding will deliver air quality improvements through measures to support use of ULEV vehicles e.g. charging points, introduction of car clubs and smarter driving to reduce environmental impact of private cars. The funding will also be used to support NOFs, anti-idling campaigns, air quality monitoring and education programmes and electric vehicle promotion. In 19/20, this will also support the NOF scheme in Greenhill ward.
- 3.7.11 Active and sustainable travel funding will be used to promote active travel and sustainable transport modes to the general public. This includes developing and promoting travel campaigns and events (e.g. bike week, Dr bike workshops, walking works, smarter travel, dockless bike hire, e-bikes, etc.), providing support for the public and organisations in order to promote walking and cycling initiatives and public transport use, providing information about healthy streets and healthy lifestyles and links to air quality, cycling routes, walking routes, green grid network.
- 3.7.12 Road Safety Education funding will be used for educational initiatives in schools to teach road safety skills and remove barriers to walking, cycling and public transport use. General road safety promotions target all road users particularly driver behaviour and vulnerable road users e.g., powered 2 wheelers, cyclists and pedestrians. This is coordinated with other projects and initiatives where relevant. About 20 schools per annum are visited and all schools would be visited over a three year cycle.
- 3.7.13 Cycle training funds will be used to continue the programme of cycle training offered to all age groups and particularly to school children in the borough. All courses are promoted via the council website and with schools and businesses in the borough. Approximately 1100 - 1200 children are trained to bikeability levels 1 or 2 per annum.
- 3.7.14 Travel plan funds will support the development and implementation of School Travel Plans and STARS schemes and supporting the development of travel plans for businesses and organisations in the borough to increase active travel by sustainable transport modes.

3.7.15 The forward programme development will enable the borough to undertake surveys, feasibility studies and assessments to develop schemes for future years. This will include all street types.

3.7.16 The Wealdstone Liveable Neighbourhood is an opportunity area with extensive growth opportunities set out in its Area Action Plan. The scheme will support growth by providing an enhanced public realm to improve pedestrian and cycling movement and encourage active travel modes. The scheme will also improve capacity for the growth of bus services in the town. The GLA are funding a public square which is complementary to the wider scheme.

3.8 Risks to the delivery of the three-year programme

3.8.1 Table 10 shows the principal risks associated with delivery of the LIP together with possible mitigation actions for the three-year programme. The risk register summarises the strategic risks identified that could impact on the three-year programme of schemes/initiatives.

Table 10: LIP3 Risk Assessment for three-year programme 2019/20-2021/22 (ST05)

Risk	Likelihood			Potential mitigation measures	Impact if not mitigated
	H	M	L		
Financial					
TfL support for long term scheme funding	✓			Some schemes would not be able to proceed if funding not provided. No mitigation available, but Harrow would rebid for funds in later years	Would impact on delivering cycle, walking and air quality targets
Further reduction in TfL funding allocation		✓		Most programmes would still proceed but their delivery would be delayed as less schemes each year would be delivered	May not achieve air quality reductions or road safety targets
Slow development/ growth and therefore reduction in S106 and CIL funding		✓		No mitigation required if no development	N/A
Statutory / Legal					
TfL may not approve LIP3			✓	Would need to renegotiate changes to document	Inability to deliver targets and worsening air quality and accident rates
SEA approval			✓	Would need to reconsult on document and delay programme	Would impact on delivering programme and all targets
Third Party					
Consultation			✓	Individual schemes would need to be redesigned to suit needs of local residents	Could impact on delivering some targets
Public / Political					
Internal funding pressures			✓	Would need TfL to support borough in prioritising LIP3 schemes	Would impact on delivering all targets
Change in political support			✓	Would need to brief new PH and possibly discuss options to suit their agenda	May not achieve air quality reductions or road safety targets
Programme & Delivery					
Results from local consultations could change plans			✓	Would need to redesign selected schemes to address issues raised	Some schemes may not proceed
Approval timetable			✓	Would need to negotiate with TfL a delayed LIP3 submission	Would impact on delivering programme and all targets

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3.9 Annual programme of schemes and initiatives

3.9.1 The annual programme of schemes has been completed and submitted to TfL via the Borough Portal and using TfL's Proforma A. The programme of schemes will be updated annually.

3.10 Supporting commentary for the annual programme

3.10.1 The annual programme has been developed by considering the Mayoral and borough priorities, available borough resources and funding and also maximising the potential use of all available funding to maximum benefit.

3.10.2 Air quality, traffic congestion, casualty data and predicted growth have all been used to help develop the annual programme. Information from various user groups has also helped to identify borough issues. Local expertise has been used to prioritise the programme.

3.10.3 Harrow uses a programme entry assessment system to provide a formal framework for assessing all suggestions for projects, schemes or works. This enables the borough to develop a ranking list for each work category type. The work categories used in the programme entry system are based around the MTS and latest LIP. Those cases that satisfy the criteria and meet a set threshold are then used to inform the development of future programmes of investment. This enables the borough to provide better information as to why some schemes are unsuitable and also to provide better timetables for scheme delivery.

3.10.4 The ranking list for each of the specified work categories is regularly updated as and when new assessments are added so that the highest priorities can always be determined. The lists also provide historical data about previous or similar requests to ensure that consistent assessments can be made and to provide evidence to justify the priorities selected. It is very common for similar or repeat requests to be received on a specific issue and making reference to the list helps avoid any duplication and inconsistencies.

3.10.5 The assessment factors for each work category are different and specific to the category. Each programme entry case is assessed against all of the factors for the relevant work category and a judgement made by technical staff about the relative priority and position on the work category ranking list. Planned work categories also have a strategic weighting criteria applied as well as the operational criteria. This allows the strategic fit for planned works to be tested against the LIP policies, objectives and corporate priorities.

3.11 Risk assessment for the annual programme

3.11.1 Table 11 shows the principal risks associated with delivery of LIP3 together with possible mitigation actions for the annual programme and summarises the strategic risks identified that could impact on the annual programme of schemes / initiatives.

Table 11: LIP3 Risk Assessment for annual programme - 2019/20 (ST06)

Risk	Likelihood			Potential mitigation measures	Impact if not mitigated
	H	M	L		
Financial					
Slow development/ growth and therefore reduction in S106 and CIL		✓		No mitigation required if no development	N/A
Statutory / Legal					
Agreeing programme within agreed timetable			✓	Will negotiate a revised data	Some schemes would be delayed
Third Party					
BREXIT	✓			May need to change sourcing of some materials	Non delivery of selected schemes
General election	✓			Would need to delay some schemes due to purdah	No mitigation needed
Consultation			✓	Individual schemes may need to be redesigned to suit needs of local	Could impact on delivering some targets
Public / Political					
Internal funding pressures			✓	Would need TfL to support borough in prioritising LIP3 schemes	Would impact on delivering all targets
Change in political support			✓	Will need to brief new PH and possibly discuss options to suit their agenda	May not achieve air quality reductions or road safety targets
Programme & Delivery					
Results from local consultations could change plans			✓	Will need to redesign selected schemes to address issues raised	Some schemes may not proceed

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3.12 Monitoring the delivery of the outcomes of the Mayor's Transport Strategy

3.12.1 Overarching mode-share aim and outcome Indicators

Table 12 shows the borough outcome indicator targets. Delivering these targets will be challenging for the borough and will be dependent on the funding available to implement appropriate schemes and the ability to deliver behavioural changes.

3.12.2 Delivery indicators

The borough will monitor and record the delivery indicators and report progress in delivery to TfL once a year in June using Proforma C.

Table 12: Borough outcome indicator targets (ST07)

Objective	Metric	Borough target	Target year	Borough target	Target year	Additional commentary
Overarching mode share aim – changing the transport mix						
Londoners' trips to be on foot, by cycle or by public transport	Active, efficient and sustainable (walking, cycling and public transport) mode share (by borough resident) based on average daily trips. Base period 2013/14 - 2015/16.	50%	2021	64%	2041	Between 2014/15 and 2016/17, 48% of daily trips were made by foot, cycle or public transport in Harrow.
Healthy Streets and healthy people						
Outcome 1: London's streets will be healthy and more Londoners will travel actively						
Londoners to do at least the 20 minutes of active travel they need to stay healthy each day	Proportion of London residents doing at least 2x10 minutes of active travel a day (or a single block of 20 minutes or more).	34%	2021	70%	2041	Between 2014/15 and 2016/17, 25% of residents were recorded as doing at least 20 mins active travel a day. This will be an extremely difficult target for Harrow to achieve. Key programmes to help achieve this target will be additional cycle training and Harrow Health walks.
Londoners have access to a safe and pleasant cycle network	Proportion of Londoners living within 400m of the London-wide strategic cycle network.	10%	2021	51%	2041	In 2016, none of Harrow residents lived within 400m of the London-wide strategic cycle network. This will be delivered through completion of the Harrow Quietway scheme.
Outcome 2: London's streets will be safe and secure						
Deaths and serious injuries from all road collisions to be eliminated from our streets	Deaths and serious injuries (KSIs) from road collisions, base year 2005/09 (for 2022 target)	38KSIs	2022	0 KSIs	2041	The 2005/09 baseline in Harrow is 109 KSIs. Focus will be on addressing motorcycle KSIs. New local safety schemes and road safety education, cycle training and motorcycle safety courses will help to achieve this target.

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Objective	Metric	Borough target	Target year	Borough target	Target year	Additional commentary
	Deaths and serious injuries (KSIs) from road collisions base year 2010/14 (for 2030 target).	24KSIs	2030	0 KSIs	2041	The 2010/14 baseline in Harrow is 79 KSIs. New local safety schemes and road safety education, cycle training and motorcycle safety courses will help to achieve this target.
Outcome 3: London's streets will be used more efficiently and have less traffic on them						
Reduce the volume of traffic in London.	Vehicle kilometres in given year. Base year 2015. Reduce overall traffic levels by 10-15 per cent.	568 million annual vehicle km miles	2021	540 million annual vehicle km miles	2041	In 2015, traffic levels recorded by the DfT were 568 million annual vehicle kms. Target is a 0% increase by 2021. This will be achieved by increased walking, cycling and bus priority initiatives.
Reduce the number of freight trips in the central London morning peak.	10 per cent reduction in number of freight vehicles crossing into central London in the morning peak period (07:00am - 10:00am) by 2026.	N/A	N/A	N/A	N/A	N/A
Reduce car ownership in London.	Total cars owned and car ownership per household, borough residents. Quarter of a million fewer cars owned in London. Base period 2013/14 - 2015/16.	100,600	2021	100,800	2041	In 2016, the number of licensed cars owned in Harrow was 104,675. Reduction in cars owned will be achieved by changes to CPZs and attractiveness of walking, cycling and public transport.
Outcome 4: London's streets will be clean and green						
Reduced CO ₂ emissions.	CO ₂ emissions (in tonnes) from road transport within the borough. Base year 2013.	124,800 tonnes	2021	32,100 tonnes	2041	In 2013, 141,600 tonnes of CO ₂ were emitted from road transport in Harrow. Target will be achieved through reduced car usage particularly for shorter journeys and also increased use of greener vehicles.

Objective	Metric	Borough target	Target year	Borough target	Target year	Additional commentary
Reduced NO _x emissions.	NO _x emissions (in tonnes) from road transport within the borough. Base year 2013.	210 tonnes	2021	20 tonnes	2041	In 2013, 460 tonnes of NO _x were emitted from road transport in Harrow. Target will be achieved through reduced car usage particularly for shorter journeys and also increased use of greener vehicles.
Reduced particulate emissions.	PM ₁₀ and PM _{2.5} emissions (in tonnes) from road transport within borough. Base year 2013.	43 tonnes PM ₁₀ 21 tonnes PM _{2.5}	2021	23 tonnes PM ₁₀ 12 tonnes PM _{2.5}	2041	In 2013, 51 tonnes of PM ₁₀ and 28 tonnes of PM _{2.5} were emitted from road transport in Harrow. Target will be achieved through reduced car usage particularly for shorter journeys and also increased use of greener vehicles.
A good public transport experience						
Outcome 5: The public transport network will meet the needs of a growing London						
More trips by public transport - 14-15 million trips made by public transport every day by 2041.	Trips per day by trip origin. Reported as 3yr moving average. Base year 2013/14 - 2015/16.	125,000 trips	2021	173,000 trips	2041	117,000 trips per day were made by public transport between 2013/14 and 2015/16. This will be achieved by a combination of programmes and particular development regulations but also as a result of younger people in general being less car dependent.
Outcome 6: Public transport will be safe, affordable and accessible to all						
Everyone will be able to travel spontaneously and independently.	Reduce the difference between total public transport network journey time and total step-free public transport network.			5 mins	2041	Difference between total public transport network journey time and total step free public transport journey time in 2015 was 12 minutes. Achieving this will be dependent on TfL improving the accessibility of stations in the borough.

Objective	Metric	Borough target	Target year	Borough target	Target year	Additional commentary
Outcome 7: Journeys by public transport will be pleasant, fast and reliable						
Bus journeys will be quick and reliable, an attractive alternative to the car	Annualised average bus speeds, base year 2015/16.	11.5mph	2021	12.7mph	2041	In 2015, bus speeds were 11.1mph. This will be achieved by bus priority and congestion reduction schemes, traffic signal changes and reduced car use.
New homes and jobs						
Outcome 8: Active, efficient and sustainable travel will be the best options in new developments Outcome 9: Transport investment will unlock the delivery of new homes and jobs						
Delivery of Section 106 agreements	Percentage of transport related Section 106 obligations met	100%	2021	100%	2041	S106 agreements secure funding / measures to make individual schemes acceptable in planning / highways scheme. Metric measures where subject obligations are being met by both the developer and the Council.
CIL funding allocations used for strategic transport initiatives	Percentage of CIL receipts allocated to transport initiatives that are used for strategic transport initiatives	100%	2021	100%	2041	CIL provides funding for broader infrastructure initiatives (i.e. not just infrastructure needs arising from individual developments), thereby unlocking the delivery of new homes and jobs. In reflection of this, the Harrow CIL Charging Schedule indicates that where CIL is allocated to transport / highways related infrastructure, this should be spent on strategic infrastructure.

Appendix A: Borough Transport policies

Walking

- W1 Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment
- W2 Encourage recreational walking as well as active walking as a mode of transport and support national walking campaigns
- W3 Work with schools to set up additional school walking buses
- W4 Work in partnership with Public Health to promote walking and the Walking for Health scheme
- W5 Work with the Active Harrow Strategic Group to promote active and sustainable travel
- W6 Promote the Walk London network and new leisure routes through Harrow's extensive green areas
- W7 In partnership with Harrow Public Health, work with selected communities to promote the benefits of walking
- W8 Review the Harrow Rights of Way Improvement Plan with a view to increasing active travel through Harrow's parks and open spaces
- W9 Ensure that all aspects of the walking environment including links to parks and open spaces are effectively considered when delivering works for liveable neighbourhoods and corridor schemes
- W10 Improve access to Harrow's green spaces and historic areas and improve pedestrian walkways that use and link existing parks and open spaces with the town centre and transport interchanges.
- W11 Improve pedestrian linkage between Harrow town centre and Harrow on the Hill station

Cycling

- C1 Provide and promote cycle training for children and adults who work, study or live in the borough
- C2 Introduce measures and programmes to encourage persons from BAME and other statistically cycling adverse groups to take up cycling and to cycle more often
- C3 Promote recreational cycling – but give priority to increasing cycling as an alternative to car use
- C4 Encourage cycling generally and in particular for journeys to school
- C5 Provide additional cycle parking in schools, review and increase the level of safe and secure cycle parking available across the borough
- C6 Review cycle parking at stations, particularly at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and work towards cycling provision meeting likely demand at these stations and further afield

- C7 Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings
- C8 In partnership with WestTrans, trial and introduce dockless cycle hire in the town centre with a view to expanding the service throughout the borough
- C9 Review the existing cycle delivery plan with a view to expanding the network
- C10 Ensure the progressive delivery and maintenance of a high quality of cycle route provision, consistent with London Cycling Design Standards, as well as clear continuity and consistency in design; and ensure that, wherever practicable, provision is designed and implemented to cater for tricycles and bikes with trailers
- C11 Encourage the delivery of secure and weather-protected cycle-parking at sites generating/attracting significant numbers of cycling trips – most particularly, at strategic interchanges and stations and at local shopping areas; and encourage other authorities with specific responsibilities within the borough to do the same
- C12 Encourage employers to make provision for employees wishing to cycle to a similar standard to that required from new development including the provision of “cycle pools”
- C13 Work with TfL to contribute to delivery of strategic cycle routes including Quietways

Schools

- S1 Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment
- S2 Encourage and support schools, higher and further education establishments to review their own travel plans and to achieve and improve TfL accredited status where appropriate
- S3 Encourage cycling generally and in particular for journeys to school
- S4 Provide and promote cycle training for children and adults who work, study or live in the borough
- S5 Work with schools to set up additional school walking buses
- S6 Work with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers
- S7 Work with TfL to ensure take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils
- S8 Work with TfL to ensure take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools
- S9 Provide road safety education events at schools and colleges throughout the borough
- S10 Work with schools to identify local air quality issues surrounding schools and where appropriate access the Mayor’s Air Quality Fund to provide appropriate solutions and raise awareness of the issue
- S11 Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality
- S12 Work with schools to promote travel training for children and young people with learning difficulties

- S13 Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities

Public transport

- PT1 Seek to secure a fully integrated approach to the provision and operation of public transport services within Harrow, including:
- Improving the ease and convenience of approach routes to service access points, and the quality and clarity of the access signing
 - Taking account of the specific needs of people with impaired sight or impaired mobility
 - Improved taxi facilities at rail and underground stations
- PT2 In partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the borough are progressively improved with the intention of developing at access points, a fully wheelchair-accessible boarding / alighting points, as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- PT3 Support the extension of additional taxi rank operational hours where this supports late travel such as the night time running of the Jubilee Line
- PT4 Seek to work with public transport providers and regulators to ensure that engineering works and service closures are coordinated to minimise passenger inconvenience
- PT5 Deploy full range of available bus priority measures ensuring that measures are designed to reduce problems for all modes
- PT6 Liaise with the Public Carriage Office regarding improving the accessibility of taxi ranks in the borough
- PT7 Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
- PT8 Work with TfL to assess suggested service improvements for the Heathrow bus link route 140 as well as any additional routes needed to support the proposed Heathrow expansion

Road safety

- RS1 Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041
- RS2 Employ a road danger reduction approach to design, using the streets toolkit for designers, Road Safety Audit, and Healthy Streets Check for Designers
- RS3 Prioritise schemes that maximise casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance

- RS4 Ensure that the safety concerns of all road users, including pedestrians, cyclists, horse riders and those in motorised vehicles are considered when developing any traffic scheme
- RS5 Prepare a programme of 20 mph zones in the borough and incorporate these into schemes for future TfL funding
- RS6 Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school
- RS7 Work with the parking service and police to enforce and promote safe driving and parking in school zones
- RS8 Where possible use engineering solutions to minimise the need for additional road safety enforcement
- RS9 Maintain an effective method of accident monitoring for the borough
- RS10 Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions
- RS11 Support the police in targeting illegal and non-compliant behaviour that puts motorcyclists at risk, using data to focus on the roads with a higher risk of motorcyclist collisions
- RS12 Educate road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist/cyclist skills training and communications
- RS13 Promote Motorcycle Industry Association (MCIA) accredited training providers to motorcyclists looking to undertake Compulsory Basic Training
- RS14 Provide BikeSafe vouchers for subsidised courses delivered by local Motorcycle Industry Association (MCIA) accredited training providers
- RS15 Improve the safety of street design by following the design guidance set out in TfL's Urban Motorcycle Design Handbook
- RS16 Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location
- RS17 Support the police in targeting illegal and non-compliant behaviour that places other road users at risk
- RS18 Carry out road safety audits of all new significant traffic and highway proposals
- RS19 Deliver appropriate road safety interventions and resources for road users aged 60+ by targeting community groups, day centres and social clubs, facilitating bespoke workshops and presentations and providing road safety literature
- RS20 Support the police to maintain focus on disrupting the criminal gangs involved in motorcycle theft and enabled crime
- RS21 Improve lighting across the borough by a change to LED lighting
- RS22 Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths
- RS23 Support the police to address anti-social behaviour around Harrow bus station

Parking and Enforcement

- PE1 In the development and operation of parking schemes and to ensure transparency, the council will follow the guidelines as outlined in the parking management strategy which will be regularly reviewed and updated
- PE2 Promote and secure the adoption of consistent and complementary strategies at national, regional, London, sub-regional and neighbouring local authority levels and through the restraint-based car-parking standards
- PE3 Ensure that charges for parking support the economic vitality of all town centres
- PE4 Support local businesses by giving priority to short stay on-street parking and by discouraging on-street long-stay parking
- PE5 Charges are set to discourage the use of private cars, however where off-street parking is available, ensure that charges for off-street parking:
- Support the economic vitality of all town centres
 - Finance progressive improvements to the standards of the council owned car parks
 - Consider price competitiveness with comparable privately operated car parks
 - Reduce the demand on surrounding on-street long stay pay and display parking
 - Are set with the aim of car parks being 85% full in peak periods
 - Are self financing
- PE6 Where practicable, seek to secure consistent cross-boundary parking charges in conjunction with neighbouring authorities
- PE7 Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion
- PE8 Work with the parking service and police to enforce and promote safe driving and parking in school zones
- PE9 Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority.
- PE10 Monitor and review the provision and operation of CPZs in all areas of the borough that are experiencing on-street parking stress and install new CPZs subject to, demand and consultation with the local community
- PE11 For new CPZs, and as CPZs are reviewed, change the operational hours of enforcement to target the busiest times of the location
- PE12 Review the parking regulations in the Opportunity Area to ensure that the needs of planned growth are appropriately addressed
- PE13 In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered
- PE14 Ensure adequate provision of blue badge parking is available in all town centres
- PE15 Provide reduced cost residential and other relevant parking permits for appropriate greener vehicles
- PE16 Review the viability of introducing a revised parking permit structure based on vehicle emissions

- PE17 Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles
- PE18 Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised
- PE19 Consider introducing virtual permitting system for most permit types across the borough where practicable and following this remove free parking for motorcycles borough wide

Social inclusion

- SI1 Prioritise in all new schemes the needs of those with mobility difficulties who need to walk, cycle or drive to work, shops or other facilities and local amenities
- SI2 Consider accessibility improvements in all new schemes, such as dropped kerbs, tactile paving and audible signals
- SI3 Work towards introducing a fully integrated, accessible bus and underground station at Harrow on the Hill
- SI4 Seek to ensure that all stations and bus stop locations in the borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
- SI5 Petition TfL to improve the accessibility of all stations in the borough where there is no disabled access
- SI6 Consider the provision of additional seating in all new schemes to benefit the needs of those with mobility difficulties, giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes
- SI7 Continue to support the expansion of the Harrow Shopmobility services and their opening hours
- SI8 Work with schools to promote travel training for children and young people with learning difficulties
- SI9 Ensure convenient car parking for people with disabilities is considered in the development of all parking schemes
- SI10 Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised
- SI11 Ensure adequate provision of blue badge parking is available in all town centres
- SI12 Liaise with the Public Carriage Office regarding improving the accessibility of taxi ranks in the borough
- SI13 Ensure that all aspects of a safe environment, including improved lighting, better sight lines particularly for vulnerable road users and well-lit waiting areas, are effectively considered when delivering works for all new schemes
- SI14 In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered
- SI15 Work with schools to promote travel training for children and young people with learning difficulties

- SI16 Work with Harrow Association of Disabled People and other disability organisations to address a range of accessibility issues

Public Realm

- PR1 Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport
- PR2 Continue to support the Harrow town centre neighbourhood of the future and deliver new NOFs across the borough
- PR3 Work with TfL to expand Legible London throughout the Harrow Opportunity Area and into more areas in Harrow such as Stanmore and Headstone Lane
- PR4 Improve on the condition of Harrow roads by continuing to prioritise road maintenance in Harrow's capital and revenue budgets in line with best practice asset management principles
- PR5 Ensure that all aspects of a safe environment, including improved lighting, better sight lines particularly for vulnerable road users and well-lit waiting areas, are effectively considered when delivering works for all new schemes
- PR6 Increase the amount and variety of trees and plants across the borough's open spaces and within streetscapes
- PR7 Seek opportunities for new tree planting in the Opportunity Area
- PR8 Ensure that all new public realm improvements and neighbourhood schemes consider their impact on heritage assets and their setting alongside the local archaeological potential as well as designated and non-designated assets
- PR9 Ensure that road markings to better enable bus priority enforcement are prioritised in all schemes

Development and regeneration

- R1 Ensure all projects consider their air quality and noise impact and that where possible mitigation is introduced to minimise adverse impacts
- R2 In all liveable neighbourhoods schemes the borough will consider planting and street greening to provide shade and shelter and to create a more attractive environment, the potential reallocation of road space to benefit sustainable transport, as well as road traffic restrictions and the possible introduction of play streets
- R3 In all new neighbourhood schemes the borough will consider the Healthy Streets checklist
- R4 Improve pedestrian and cycle wayfinding across the borough and work with TfL to expand Legible London in Harrow
- R5 Promote growth in areas of greatest public transport to encourage residual travel by public transport, walking and cycling
- R6 Promote mixed use development in growth locations to reduce the need to use a vehicle for trips between residential, retail, leisure and employment areas
- R7 Consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas

- R8 Secure deliverable Travel Plans for major trip generating development
- R9 Ensure convenient access for walking, cycling and public transport be required in the design and layout of new development
- R10 Use the planning process on major planning applications to require a Construction Logistics Plan that reduces the environmental impact through the use of lower vehicle emissions and reduced noise levels; improves the safety of road users; reduces vehicle trips particularly in peak periods and encourages efficient working practices
- R11 Improve the environment for pedestrians and cyclists in the whole borough and particularly within the Harrow Opportunity Area
- R12 Ensure that all schemes implemented follow the Harrow public realm design guides ensuring best practice for materials, reducing street clutter and conserving the local environment
- R13 Use the planning process to ensure that the discharge rate for new development is restricted to the Greenfield run off rate using various SUDS measures
- R14 Use Section 106 Planning Agreements to secure developer contributions towards the costs of meeting and ameliorating the travel demand generated by development through improvement to public transport, walking and cycling, installing parking controls and, where necessary, creating regulated and controlled public car-parks
- R15 In considering planning applications for non-residential development the council will have regard to the specific characteristics of the development including provision made for:
- Operational parking and servicing needs
 - Convenient car-parking for people with disabilities
 - Car parking related to shift and unsociable hours working
 - Convenient and secure parking for bicycles
 - Needs of parking for motorcyclists
- R16 For new residential developments, parking permits will be restricted for all developments in areas of PTAL 5/6. Permits may also be restricted in new residential developments in areas of lower PTAL rates at the discretion of Harrow Highway's Service. This will not apply to residents with blue badges.
- R17 Where accessibility by non-car modes is particularly good or can be made so, the council will actively seek to secure lower levels of car parking provision or even zero provision in developments, and require the completion of a binding agreement to introduce residential permit restrictions on the developments to limit the increase in car use and ensure that any measures necessary to improve accessibility by non-car modes are secured
- R18 For new larger developments, use travel plan bonds, for failure to meet performance of agreed travel plans and secure Developer funding to pay to monitor the travel plans; monitoring will continue for at least five years following development completion.
- R19 When considering housing developments the council will encourage developers to explore the potential for schemes to provide access to cars without individual ownership, possibly linked to inducements to use other modes

- R20 In preparing Transport Assessments and Transport Statements to demonstrate sufficient/appropriate levels of car parking provision for location outside of high PTAL areas, trip generation data should be assessed alongside Census travel to work and car ownership data for the relevant ward or Middle Super Output Layer (Office for National Statistics)
- R21 Ensure that walking permeability (a multiplicity of routes to give easy accessibility to, from and within a site) is assessed and prioritised for all new residential or business developments
- R22 Use its powers as local planning authority to make planning permission for future development conditional upon the availability of an appropriate level of pedal cycle parking and facilities such as showers and lockers and encourage provision of “cycle pools”
- R23 Use the planning process on major planning applications for larger developments to require a Construction Logistics Plan that reduces the environmental impact through the use of lower vehicle emissions and reduced noise levels; improves the safety of road users; reduces vehicle trips particularly in peak periods and encourages efficient working practices
- R24 Require, as a condition of securing planning permission, that development proposals make proper off-street provision for servicing and loading/unloading within the development site, in such a way that all vehicles entering or leaving a site are enabled to do so in a forward gear
- R25 Maximise training, apprenticeship and employment opportunities on all schemes to ensure residents benefit from the economic opportunities generated by transport infrastructure programmes and journey to work times are reduced.

Freight

- F1 Work with GPS providers to ensure that freight routes are appropriately guided within the borough and avoid residential areas
- F2 Ensure that freight movement, delivery and servicing within the borough is provided for in an environmentally sensitive, economic and efficient manner and ensuring appropriate routing avoiding residential areas while reducing impacts and conflicts with other modes, for example bus lanes, cycle lanes
- F3 Periodically review the provision in town centres and the Harrow Opportunity Area for all aspects of servicing, delivery, loading/unloading and freight movement, with particular regard to its impact on all other modes of transport, the local economy and the local environment
- F4 Seek to provide adequate delivery and servicing access to shops, businesses and residential premises and in particular to provide convenient on-street short-stay spaces for servicing / delivery vehicles
- F5 Produce and publish a map setting out key information in respect of restrictions on lorry movement within the borough, in terms of:
 - Width, weight and length restrictions
 - Low bridges
 - Loading bans

- Access restrictions, including pedestrian areas
 - Preferred routes for lorries
- F6 Work with WestTrans to develop a freight heat map enabling the borough to be better informed about the parking and loading needs of freight in the borough
- F7 Support and seek, via the responsible regional/subregional authorities, appropriate sub-regional provision of break-bulk, consolidation, distribution and modal-transfer facilities for freight management, and appropriate and effective access to those facilities from the borough
- F8 Promote and maintain local area lorry bans together with supporting initiatives to move freight by non-road transport modes

Highway Management

- H1 Maximise the efficiency and reliability of the operation of the road network through methods outlined further in Harrow's Highway Network Management Plan
- H2 Reduce traffic volumes on local roads through traffic management techniques and where possible by diverting traffic to main arterial/distributor roads

Changing behaviour

- CB1 Promote and support the development of travel plans in accordance with TfL guidelines either for individual organisations or on an area wide basis as appropriate
- CB2 Promote sustainable and healthy travel choices through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking environment
- CB3 Encourage modal shift towards more sustainable forms of transport and in developing travel plans work with businesses to give consideration to support switching deliveries from vans to sustainable travel modes including cargo bikes
- CB4 Provide effective alternatives to the car to encourage modal shift
- CB5 Seek to ensure that new facilities to reduce car dependency e.g. real time public transport information and shopping lockers are placed in shopping centres
- CB6 Work with the Mayor, the GLA and the Government to pursue the progressive removal / control of "free" parking – through planning agreements (new development), through voluntary initiatives (retail partnerships) or by extending the principle of charging for car parking spaces
- CB7 Improve transport connectivity within the Opportunity Area between Harrow Town Centre and Wealdstone including the provision of in station cycle parking
- CB8 Promote the use of travel plans for all educational establishments, hospitals and other places of work and where appropriate work with organisations to improve site specific travel plans
- CB9 Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport
- CB12 Review the Harrow Rights of Way Improvement Plan with a view to increasing active travel through Harrow's parks and open spaces

Environmental issues

- E1 Provide additional public electric charging points at key locations and consider the provision of rapid charging points to assist taxis, freight vehicles and car clubs
- E2 Review the viability of introducing a revised parking permit structure based on vehicle emissions
- E3 Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles
- E4 Request all providers or users of Council transport fleets to consider how they can move towards the use of less polluting vehicles
- E5 Support the introduction of rapid electric charging facilities for freight, taxis and car club vehicles to enable the introduction of Zero Emission Capable (ZEC) taxis
- E6 Raise awareness among residents about the planning requirements around paving over front gardens and opportunities to use permeable surfacing
- E7 In addition to flood protection, create surface flood storage areas in parks and open spaces to improve water quality and increase biodiversity
- E8 For all new schemes, review opportunities to introduce rain gardens, additional trees and protect existing grass verges to increase local biodiversity.
- E9 Use new polymer modified materials with EME material (Enrobé a Module Élevé) a derivative for use on bus stops where there is heavy static loading and low speed heavy movements for road surfacing to reduce noise, increase durability and increase the roads lifespan. New materials and better road conditions can reduce noise by up to 20%
- E10 Maximise procurement opportunities for SMEs and local suppliers to minimise supply chain journeys

Partnership working

- PW1 Work with TfL to improve the frequency and reliability of weekend and late night public transport services to/from Central London
- PW2 Work with TfL to improve the penetration and expansion of local bus services into every local neighbourhood area – either by extending existing routes or, where necessary, by promoting new routes – this will be subject to the evaluation of the local impact of any additional bus services
- PW3 Persuade TfL to concentrate on continuing to improve public transport service reliability ensuring improved radial and orbital services
- PW4 Work with TfL to improve bus service reliability and to improve orbital bus links between the town centres and major employment locations and to other key destinations within Harrow and neighbouring boroughs
- PW5 Work with the key regulators and providers of rail, Underground and bus services within the borough to progressively improve the network in terms of capacity and reliability.

- PW6 Build on existing liaison arrangements with those parties responsible for regulating and operating public transport services in the borough – issues discussed will include concerns of public transport users with both TfL bus and all rail operators and will include bus driving standards, bus emissions, driver behaviour, bikes on buses and trains, as well as general service provision
- PW7 Work with TfL to prioritise available resources to provide the road space and traffic regulatory / management infrastructure to support development of the bus services as well as additional bus services
- PW8 Work with TfL and bus operators to ensure adequate off-highway facilities are available for the storage and maintenance of buses at appropriate locations and to ensure that bus stands are appropriately located
- PW9 Work in partnership with public transport service providers and regulators to seek to ensure that all stations and bus stop locations in the borough are progressively improved to offer a safe, secure and passenger-friendly environment and appropriate ‘state-of-the-art’ passenger interchanges, including adequate and secure cycle parking facilities
- PW10 Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality
- PW11 Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities
- PW12 Work with TfL to expand Legible London throughout the Harrow Opportunity Area and into more areas in Harrow such as Stanmore and Headstone Lane
- PW13 Work with schools and police to address perceptions of personal safety on buses
- PW14 Work with the Metropolitan Police to consider introducing traffic calming to lower speed and reduce impact of hostile vehicles in selected locations
- PW15 Work with Harrow Association of Disabled People and other disability organisations to address a range of accessibility issues
- PW16 Work with schools and police with regard to issues of traffic noise pollution, particularly from motorcycles

Glossary

BAME	Black Asian and Minority Ethnic
CO ₂	Carbon Dioxide
CCG	Clinical Commissioning Group
CCS	Community Car Service
CIL	Community Infrastructure Levy
CPT	City Planning Tool
CPZ	Controlled Parking Zone
CTAL	Cycling Transport Accessibility Level
EQIA	Equality Impact Assessment
IMD	Index of Multiple Deprivation
LIP	Local Implementation Plan
LIP3	3 rd Local Implementation Plan
LLCS	London Lorry Control Scheme
LEV	Low Emission Vehicle
LSCB	Local Safeguarding Children Board
LSOA	Lower layer Super Output Area
MAQF	Mayor's Air Quality Fund MAQF
MTS	Mayor's Transport Strategy
MiDAS	Minibus Driver Awareness Scheme
MCIA	Motorcycle Industry Association
NOF	Neighbourhood Of the Future
NOx	Nitrogen Oxide
PHV	Private Hire Vehicle
SCA	Strategic Cycling Analysis
SEA	Strategic Environmental Assessment
SEND	Special Educational Needs and Disability
SME	Small and Medium-sized Enterprises
SPD	Supplementary Planning Document
SuDS	Sustainable Drainage System
TfL	Transport for London
TARSAP	Harrow Traffic and Road Safety Advisory Panel
TLRN	Transport for London Road Network
ULEV	Ultra-Low Emission Vehicle
ZEC	Zero Emission Capable

Harrow Road Safety Strategy 2019



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1. Introduction

This strategy is being prepared to show how the borough delivers road safety improvements through the use of engineering, education, training and enforcement. The strategy also shows that the borough complies with the statutory duties as laid out in the 1988 Road Traffic Act and the Mayor's Transport Strategy 2018 (MTS). This road safety strategy will replace the previous road safety plan that was prepared in 2015.

Since the previous road safety plan was produced, there has been a new Mayor's Transport Strategy, with changes in priorities and the adoption by the Mayor of London and by Harrow Council of a Vision Zero approach to road safety.

Every year more than 2,000 people are killed or seriously injured on the roads in London. In 2017, 69 people were killed or seriously injured on the roads in Harrow. This is far too many. These casualties also significantly impact on the friends and families of the people killed or seriously injured.

Across London, more people are now walking, cycling and using motorcycles. This is all being encouraged through the political agenda. In particular walking and cycling are being promoted to encourage better health, more sustainable transport, to reduce motorised dominance of roads and to improve air quality. However people walking, cycling and using motorcycles are all vulnerable to road casualties and have an increased road casualty risk.

1.1 Legislation

Harrow has a statutory duty in regards to road user safety. This is based on the Road Traffic Act 1988 and also the Mayor's Transport Strategy 2018.

1.1.1 *The 1988 Road Traffic Act, Section 39*

The 1988 Road Traffic Act, Section 39, puts a "statutory duty" on all local authorities to undertake studies into road traffic collisions, and to take steps both to reduce and prevent them.

The significant wording in the Act is as follows:

- Each local authority must prepare and carry out a programme of measures designed to promote road safety and may make contributions towards the cost of measures for promoting road safety taken by other authorities or bodies.

Each local authority -

- Must carry out studies into accidents arising out of the use of vehicles on roads or parts of roads, other than trunk roads, within their area
- Must, in the light of those studies, take such measures as appear to the authority to be appropriate to prevent such accidents, including the dissemination of information and advice relating to the use of roads, the giving of practical training to road users or any class or description of road users, the construction, improvement, maintenance or repair of roads for which they are the highway authority and other measures taken in the exercise of their powers for controlling, protecting or assisting the movement of traffic on roads

1.1.2 *Mayor's Transport Strategy 2018*

Road safety is a priority for London and the Mayor's Transport Strategy sets out the objective of eliminating all deaths and serious injuries on the city's network by 2041. This is known as Vision

Zero. The key policies and proposals in the MTS that drive Harrow's road safety initiatives are as follows:

Policy 3

The Mayor, through TfL and the boroughs, and working with stakeholders, will adopt Vision Zero for road danger in London. The Mayor's aim is for no one to be killed in or by a London bus by 2030, and for all deaths and serious injuries from road collisions to be eliminated from London's streets by 2041.

Proposal 9

The Mayor, through TfL, the boroughs and policing and enforcement partners, will seek to reduce danger posed by vehicles by:

- a) Introducing lower speed limits and improving compliance with speed limits through design, enforcement, technology, information and appropriate training.
- b) Conducting a systematic review of all road junctions, introducing road danger reduction measures at locations that pose significant risk to vulnerable road users.
- c) Working to ensure that vehicles driven on London's streets adhere to the highest safety standards, starting with a new Direct Vision Standard for HGVs and including the introduction of new vehicle technologies such as Intelligent Speed Assistance and Automatic Emergency Braking.
- d) Delivering a programme of training, education and (working with the police) enforcement activities to improve the safety of vulnerable road users, including the delivery of improved and new training for motorcyclists and working with stakeholders, including the freight industry, to improve standards of professional driving.
- e) Working with stakeholders to improve the emergency response to collisions, support victims of road crime, improve accountability and transparency, and learn from collisions.

Proposal 10

The Mayor, through TfL and the boroughs, will collaboratively set out a programme to achieve the Vision Zero aim of reducing the number of people killed or seriously injured on London's streets to zero.

1.2 Harrow transport objectives

As part of developing Harrow's Local Implementation Plan 2019/20-2021/22 (LIP3), Harrow developed objectives that drive transport delivery in the borough. These objectives were widely consulted on as part of the LIP3 consultation and are all provided in

Appendix A - Harrow's transport objectives. Key to road safety in the borough are objectives 1 and 2. These are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough

1.3 Harrow road safety policies

Harrow's Transport LIP3 also developed road safety policies that were also widely consulted on as part of the LIP3 consultation. These policies are as follows:

- RS1 Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041
- RS2 Employ a road danger reduction approach to design, using the streets toolkit for designers, Road Safety Audit, and Healthy Streets Check for Designers
- RS3 Prioritise schemes that maximise casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance
- RS4 Ensure that the safety concerns of all road users, including pedestrians, cyclists, horse riders and those in motorised vehicles are considered when developing any traffic scheme
- RS5 Prepare a programme of 20 mph zones in the borough and incorporate these into schemes for future TfL funding
- RS6 Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school
- RS7 Work with the parking service and police to enforce and promote safe driving and parking in school zones
- RS8 Where possible use engineering solutions to minimise the need for additional road safety enforcement
- RS9 Maintain an effective method of accident monitoring for the borough
- RS10 Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions
- RS12 Educate road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist/cyclist skills training and communications
- RS13 Promote Motorcycle Industry Association (MCIA) accredited training providers to motorcyclists looking to undertake Compulsory Basic Training
- RS14 Provide BikeSafe vouchers for subsidised courses delivered by local Motorcycle Industry Association (MCIA) accredited training providers
- RS15 Improve the safety of street design by following the design guidance set out in TfL's Urban Motorcycle Design Handbook
- RS16 Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location
- RS18 Carry out road safety audits of all new significant traffic and highway proposals

- RS19 Deliver appropriate road safety interventions and resources for road users aged 60+ by targeting community groups, day centres and social clubs, facilitating bespoke workshops and presentations and providing road safety literature
- RS22 Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths

Other agreed school transport policies relating to road safety and included in LIP3 are as follows:

- S4 Provide and promote cycle training for children and adults who work, study or live in the borough
- S6 Work with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers
- S7 Work with TfL to ensure take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils
- S8 Work with TfL to ensure take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools
- S9 Provide road safety education events at schools and colleges throughout the borough
- S11 Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality

2. Vision zero

Vision Zero is a multi-national project that aims to achieve a highway system with no road traffic fatalities or serious injuries. A core principle of Vision Zero is that 'life and health can never be exchanged for other benefits within the society'. Prior to Vision Zero, measures to address road casualties were considered using a social cost benefit analysis.

Vision Zero started in Sweden, but has now been introduced to varying extents in Germany, the Netherlands, Canada, the USA and the UK.

The Mayor's Vision Zero Action Plan identifies and addresses the key issues for road safety in London which are safe speeds, safe streets, safe vehicles, safe behaviours and the post-collision response.

The Vision Zero target for London is the elimination of all deaths and serious injuries from London's streets by 2041. Harrow has adopted this target for the borough.

3. Healthy streets approach

The Healthy Streets approach is the underlying framework for the Mayor of London's Transport Strategy. The Healthy Streets Approach is a system of policies and strategies to put people, and their health, at the centre of decision making. Harrow has adopted the healthy streets approach to all transport initiatives in the borough and in particular to deliver improvements that will enable the borough to improve road safety.

Adopting the Healthy Streets approach is intended to ensure that the whole community feels comfortable and safe on the streets and do not feel worried about road danger.

The healthy streets approach will help the borough work towards creating a safer, healthier and more attractive street environment. The healthy streets approach is not a quick fix to deliver change, it is a long-term plan for improving people’s experiences of streets, helping everyone to be more active, safer and enjoy the health benefits of an improved environment.

Figure 1 shows the ten indicators that are used to measure Healthy Streets.

Figure 1: Healthy Streets indicators



4. Harrow road safety objectives

Based on the Harrow LIP3 and the Mayor of London’s Transport Strategy 2018, the following are the road safety objectives for Harrow:

1. Use engineering and enforcement measures to improve borough road safety
2. Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough
3. Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills
4. Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads

The road safety objectives fit well with the Healthy Streets indicators and this is shown in Table 1.

Table 1: Road safety objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores
------------	--

	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Use engineering and enforcement measures to improve borough road safety	✓	✓				✓	✓		✓	
Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough					✓	✓	✓		✓	✓
Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills	✓					✓	✓			✓
Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads	✓					✓	✓			

5. Accident causes

Most road accidents have several causes, the main ones being human error, environmental problems and mechanical faults. Human error is a factor in over 90% of all road collisions in London. Vehicles travelling at inappropriate speed are a key factor in many of these accidents. Other issues that need to be addressed to reduce road casualties include making the streets feel safer, improving the safety of vehicles and encouraging safer road user behaviour.

Recent analysis of accident data has shown that people are more at risk per journey when walking and cycling in outer London than in central London. The absolute numbers of injuries among people who walk, cycle and use motorcycles are highest in inner London. However those walking or cycling in outer London boroughs are at most risk per kilometre travelled. This is concerning as the borough needs to encourage increased walking and cycling in order to ensure sustainable growth across the borough, to improve personal health, address climate change and to ensure a sustainable future.

The borough can play a significant role in reducing traffic speeds, removing the dominance of the car in town centres, improving the street environment and improving road user behaviour.

5.1 Speed

The speed at which people are travelling is the single most important determinant of both the likelihood of a collision occurring and the severity of the outcome. If a pedestrian is hit by a vehicle at 20mph, they are about five times less likely to be killed than if they were hit at 30mph. Inappropriate speed is a factor in up to 37 per cent of collisions resulting in death or serious injury on London's streets. To address speed on the roads in Harrow, the borough has a programme of rolling out 20mph zones around schools in the borough. Around 50% of the road network is covered by 20mph speed restrictions and the borough will work to increase this.

5.2 Street environment

Reducing danger at locations where the likelihood of injury is higher than in other places helps to make the streets feel safer. This is particularly a problem at junctions where cyclists and motorcyclists are most vulnerable. In Harrow, improving the safety of streets is delivered through introducing local safety schemes, 20mph speed limits and also by reducing the dominance of motor vehicles in the streets and particularly in town centres.

Local safety schemes are introduced where clusters of accidents have occurred. The types of improvements that can be made to improve safety for in local safety schemes are: improved and new crossing facilities such as Countdown times, Zebras, Pelican, Puffin and Toucan crossings, or all red phased signalled crossings; traffic speed limit signs; vehicle activated traffic speed signs; improved lighting; and changes to parking regulations to improve visibility for pedestrians.

Reducing the dominance of motor vehicles in the streets is best done through introducing liveable neighbourhoods. Harrow has a programme of liveable neighbourhood schemes that the borough would like to implement, however funding for these schemes has not yet been secured.



5.3 Road user behaviour

Streets can often feel as safe as the physical and social environment created by the local surroundings. Risk-taking, stupidity, carelessness and antisocial behaviour can all cause traffic collisions and are also particularly dangerous for those walking, cycling or using motorcycles.

Police data shows that 93 per cent of all factors contributing to collisions in London are due to a limited number of behaviours:

- Inappropriate speed
- Risky manoeuvres
- Distraction
- Drink/drug driving
- Vehicular and driver/rider non-compliance

6. Targets

The following table shows the Mayor's Transport Strategy agreed targets for London and the associated Harrow target.

MTS Target	Harrow baseline	Harrow target	Year
Reduce the number of people who are killed or seriously injured by 65 per cent against 2005-09 levels	109	38	2022
Reduce the number of people who are killed or seriously injured by 70 per cent against 2010-14 levels	79	24	2030
Eliminate all deaths and serious injuries from road collisions from London's streets		0	2041

7. Casualty data reporting

STATS 19 is the protocol used by the police for recording road accident data which is compiled by the Department of Transport. This is used for all injury crash data reported to the police.

Legislation defines the duty of the public to report a personal injury road accident. The Road Traffic Act 1988 stipulates that all fatal or injury accidents on public roads involving at least one mechanically propelled vehicle should be reported by the public to the police unless insurance documents, name and address, and details of vehicle ownership and registration are exchanged between drivers.

Since November 2016, the police have used a new method of assessing injuries and collision reporting. Under the new systems officers use an 'injury-based assessment' as well as online self-reporting. This contrasts with the previous system where officers recorded whether, in their judgement, an injury was 'slight' or 'serious'. The use of these new systems has resulted in improved accuracy in the recording of injury type, with more injuries being classified as serious rather than slight. These changes are expected to provide a better assessment of injury occurrence and severity but have made data collected from November 2016 onwards difficult to compare with earlier data.

The introduction of online self-reporting has made it easier for members of the public to report collisions to the police. A result of this is that there has been an increase in the number of self-reported casualties during 2017 compared to 2016. This has contributed to an overall increase in the number of casualties reported on London's roads during 2017.

Following the changes in reporting, TfL commissioned the Transport Research Laboratory (TRL) to undertake a back-casting exercise to enable pre November 2016 data to be compared with post November 2016 data. This back-casting data has been used in this report for all data other than that shown in the maps.

8. Casualty Analysis

Casualty data analysis is crucial in determining that road safety engineering as well as education and enforcement are appropriately directed to ensure the best results.

More than twice as many men than women were killed or seriously injured on roads in Harrow in 2017. This may be the result of higher risk taking by the male population but there may also be many other factors involved. Increased numbers of older people are involved in accidents, but this is partly because people are living longer and many are more mobile than in previous years. Studies have also shown that people from more deprived areas, some ethnic minorities, disabled people, children and older people are all disproportionately affected by road danger.

Road casualties are influenced by a combination of issues. These include:

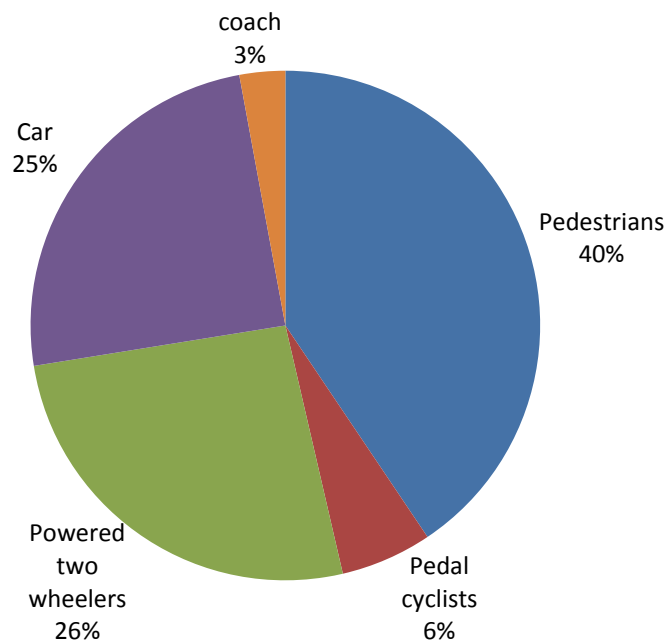
- The distance people travel
- Modes of transport used
- Behaviour and speed of driver and of other travellers - drivers, passengers, cyclists, motorcyclists, pedestrians, alcohol consumed, tiredness
- Weather and lighting such as snow, ice, poor lighting etc.

The available casualty data is used to influence the road safety initiatives introduced.

Travel mode KSIs in Harrow

Figure 2 show the vulnerability of pedestrians and motorcyclists in being injured on the roads in Harrow. The relatively low number of cyclist KSIs is partly a result of the low number of people cycling in the borough. Cycling numbers are also low partly as a result of the long distances needed to travel to inner-London jobs.

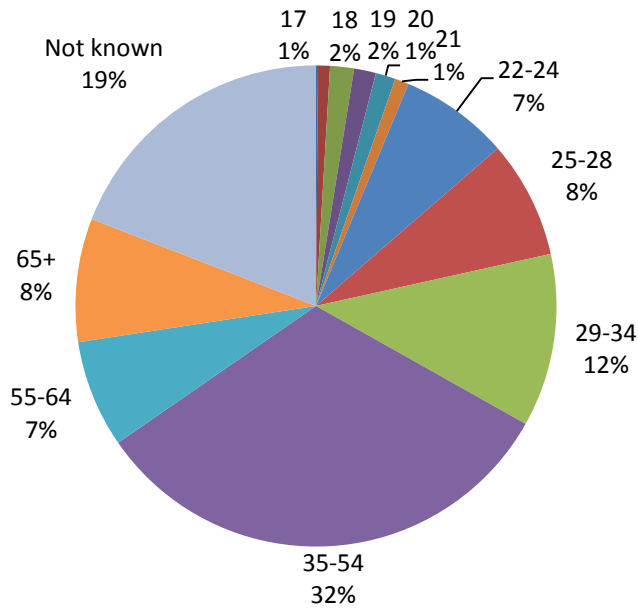
Figure 2: Fatal and serious casualties by mode in Harrow, 2017



Driver age group

Figure 3 shows the ages of drivers involved in collisions in the borough. This will help to direct educational and promotional road safety resources to the right age groups.

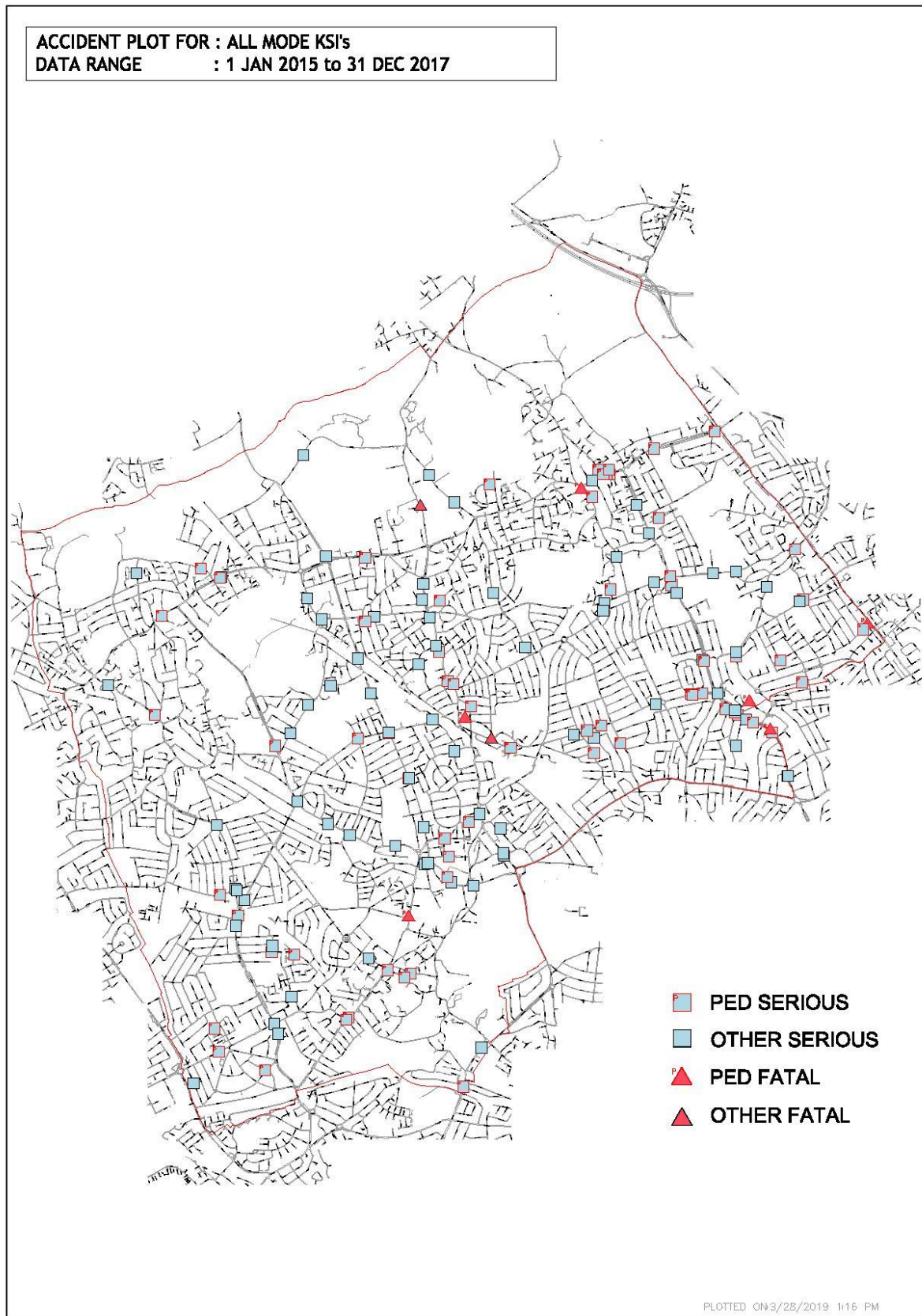
Figure 3: Driver age group for vehicles involved in collisions in Harrow, 2017



8.1 Casualty patterns

Figure 4 shows all mode KSIs only in the borough between 2015 and 2017. These maps show that there are no discernible clear patterns of KSIs in the borough. This is partly as a result of the overall low casualty rates.

Figure 4: All modes KSI 2015-2017



Motorcyclists, cyclists and pedestrians are most vulnerable on the roads. For this reason, these accidents are looked at particularly carefully. Figure 5, Figure 6 and Figure 7 show KSI borough maps separately for each of these road user types.

Figure 5: Pedestrian KSIs 2015-2017

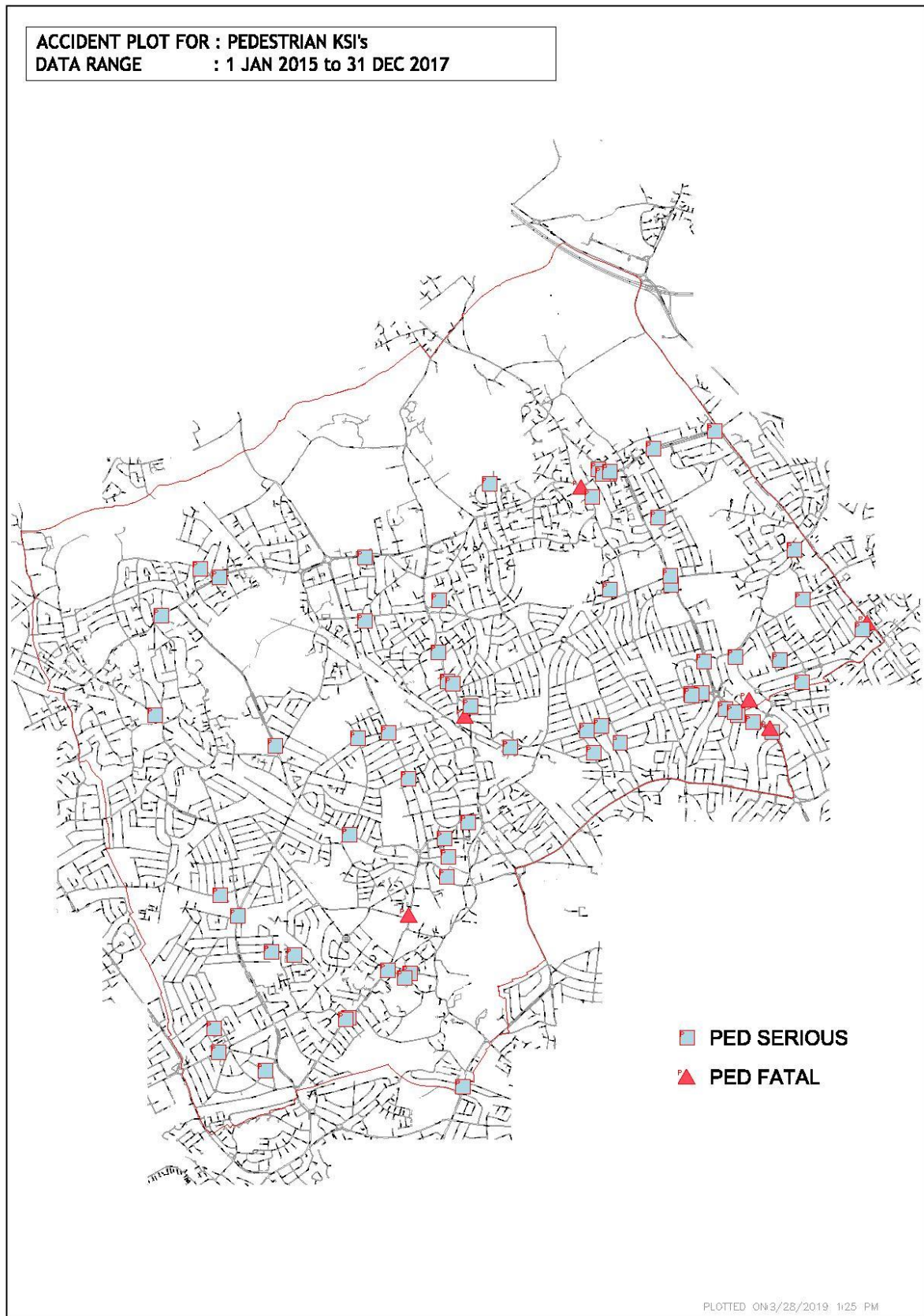


Figure 6: Cyclist KSIs 2015-2017

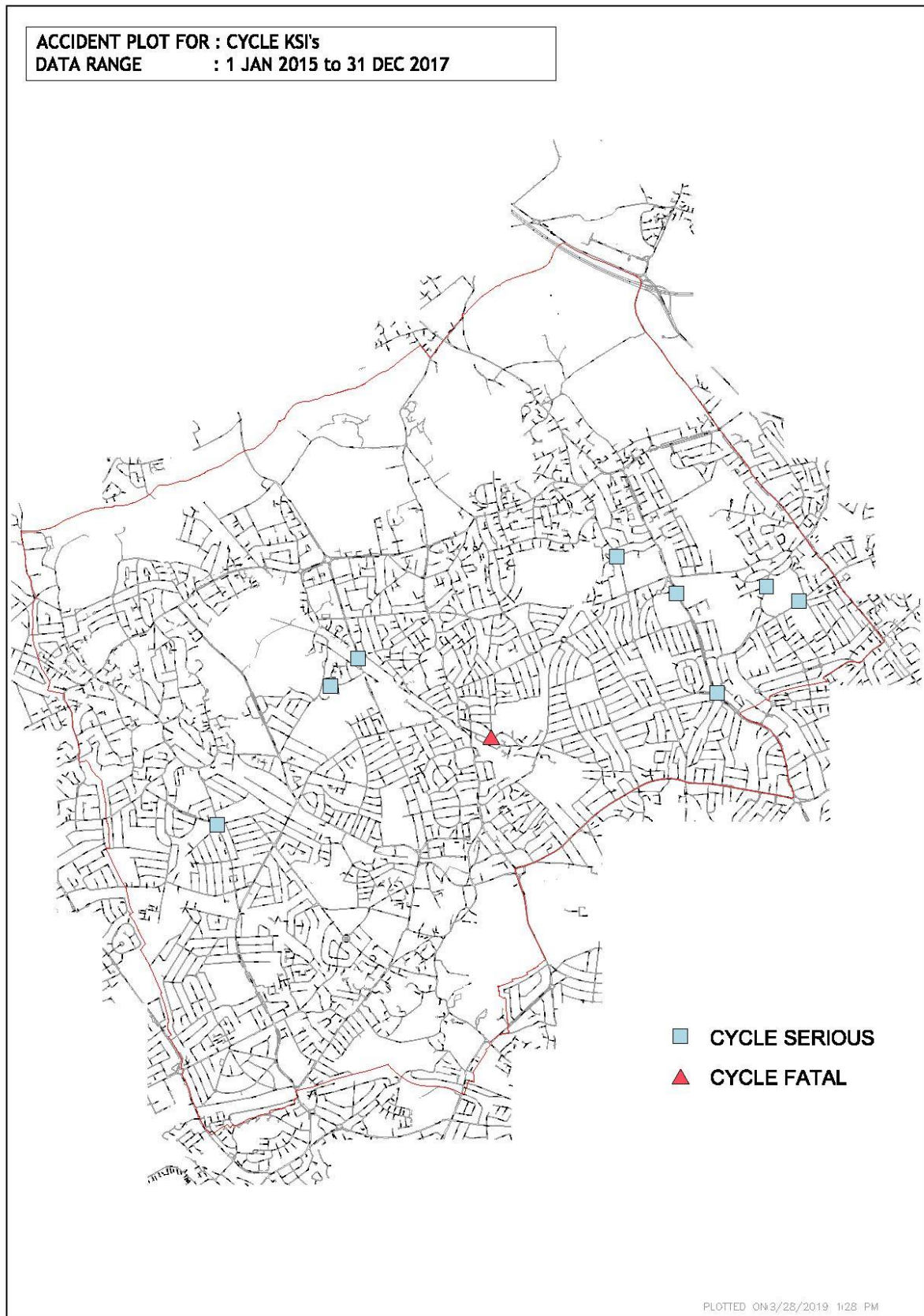


Figure 7: Motorcycle KSIs 2015-2017

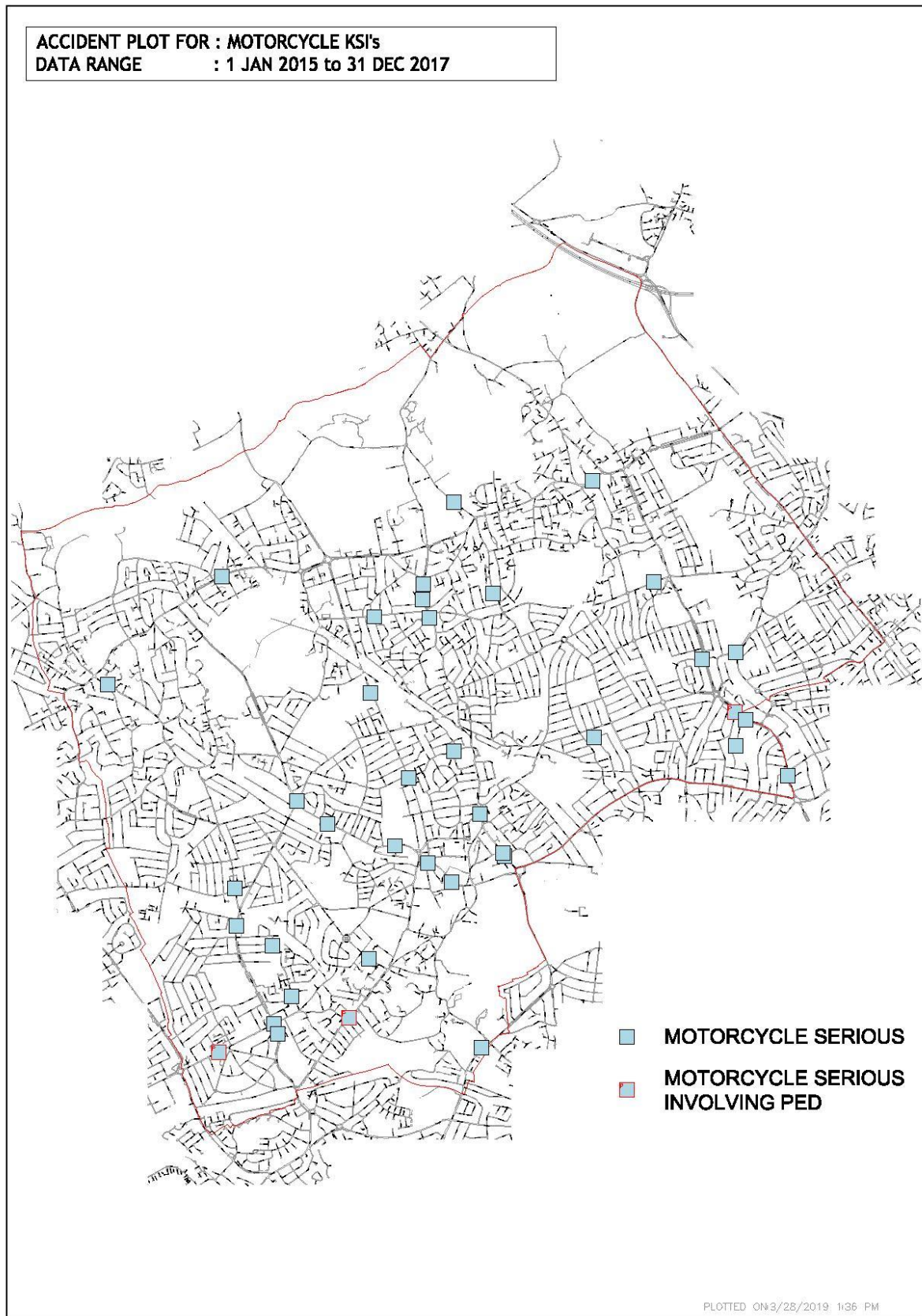
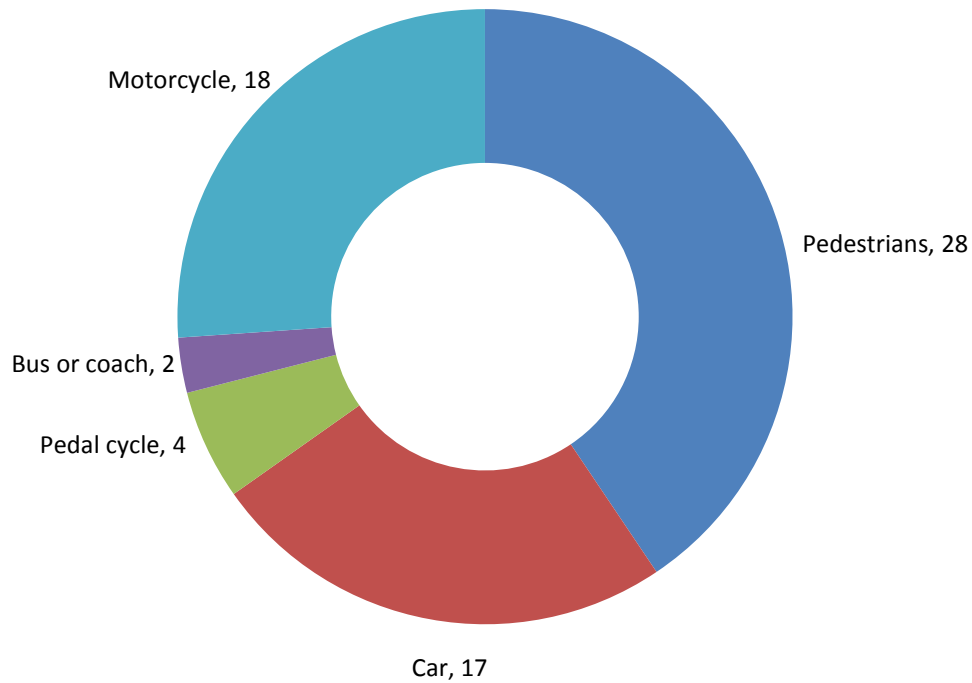


Figure 8 shows the vulnerability of pedestrians and motorcyclists on roads in the borough. The low number of cyclist KSIs is partly due to the fact that rates of cycling in Harrow are so low. However it is the proportion of accidents per mode user that is most important.

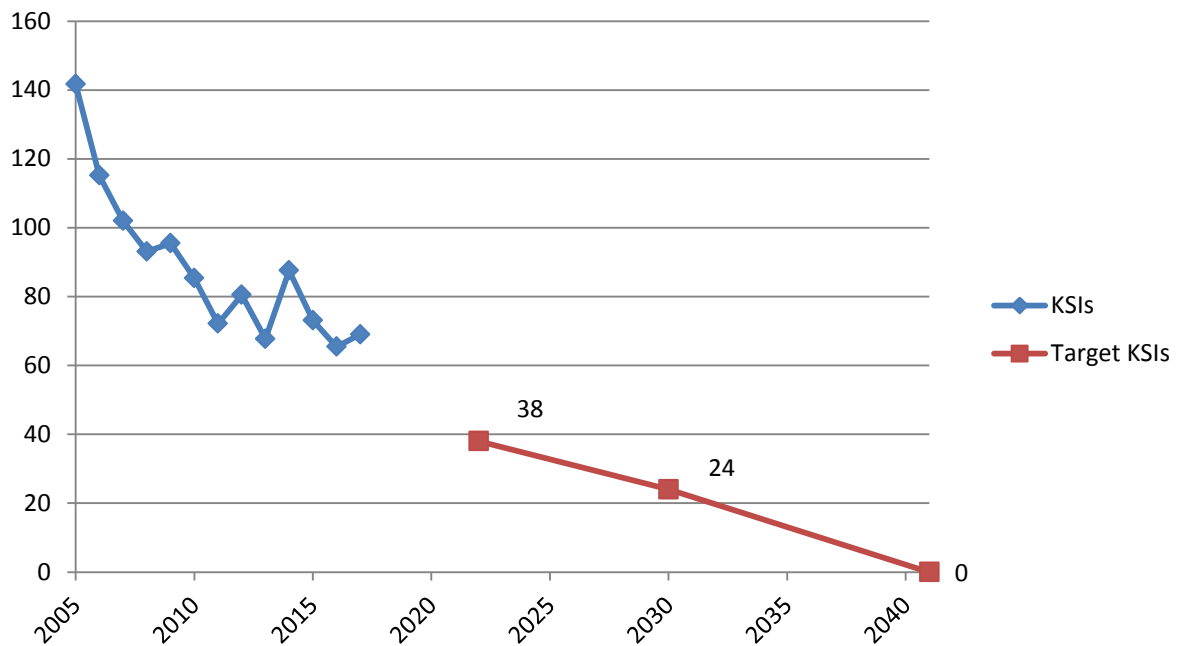
Figure 8: People killed or seriously injured casualty type 2017



8.2 Casualty trends

Figure 9 shows the borough KSI data along with the long term KSI targets. Although the KSI target is challenging, it is clearly achievable. A major component of delivering lower KSIs will depend on reducing borough speed limits in more locations.

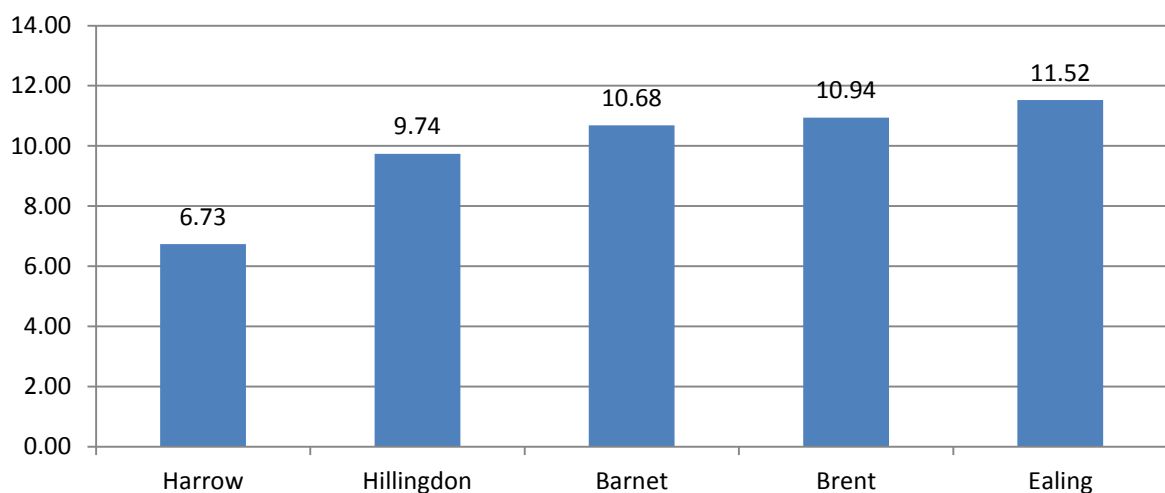
Figure 9: Harrow KSIs and target



8.3 Casualty comparisons

Figure 10 shows the total casualties (2015-2017) per 1000 population (2017) for Harrow and neighbouring boroughs. The chart shows that Harrow has less casualties per 1000 population than all neighbouring boroughs.

Figure 10: Total casualties (2015-2017) per 1000 population



Population source: UK National Statistics 2017

9. Achieving Harrow objectives

9.1 Road Safety objective 1: Use engineering and enforcement measures to improve borough road safety

The borough employs a road danger reduction approach to design, using the streets toolkit for designers, Road Safety Audit, Healthy Streets Check for Designers and TfL’s Urban Motorcycle Design

Handbook. Road safety schemes are prioritised that maximise the casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance.

To address safety issues relating to traffic speed, the borough routinely reviews existing speed limits to ensure that they are appropriate to the location. The borough will increase the extent of 20mph roads across the borough and also expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school. The borough has a future programme of 20mph zones and these are incorporated into future schemes for TfL funding.

In all new schemes, engineering solutions that minimise the need for additional road safety enforcement are always prioritised. Road safety audits are always carried out on all new significant traffic and highway proposals

9.1.1 20mph zones

20mph zones create a safer environment for all road users and are introduced to encourage modal shift from the private car to sustainable modes of transport such as walking and cycling. They not only improve the safety of an area, but also improve the perception of safety.

Harrow has introduced 20mph zones around most of the schools in the borough. A few of the schools in the borough are located in areas where it is not possible to introduce a 20mph zone such as being located by a main road.

Figure 11 shows schools in the borough as well as the existing 20mph zones in the borough.



Around 50% of the road network is covered by 20mph speed restrictions and the borough will work to increase this.

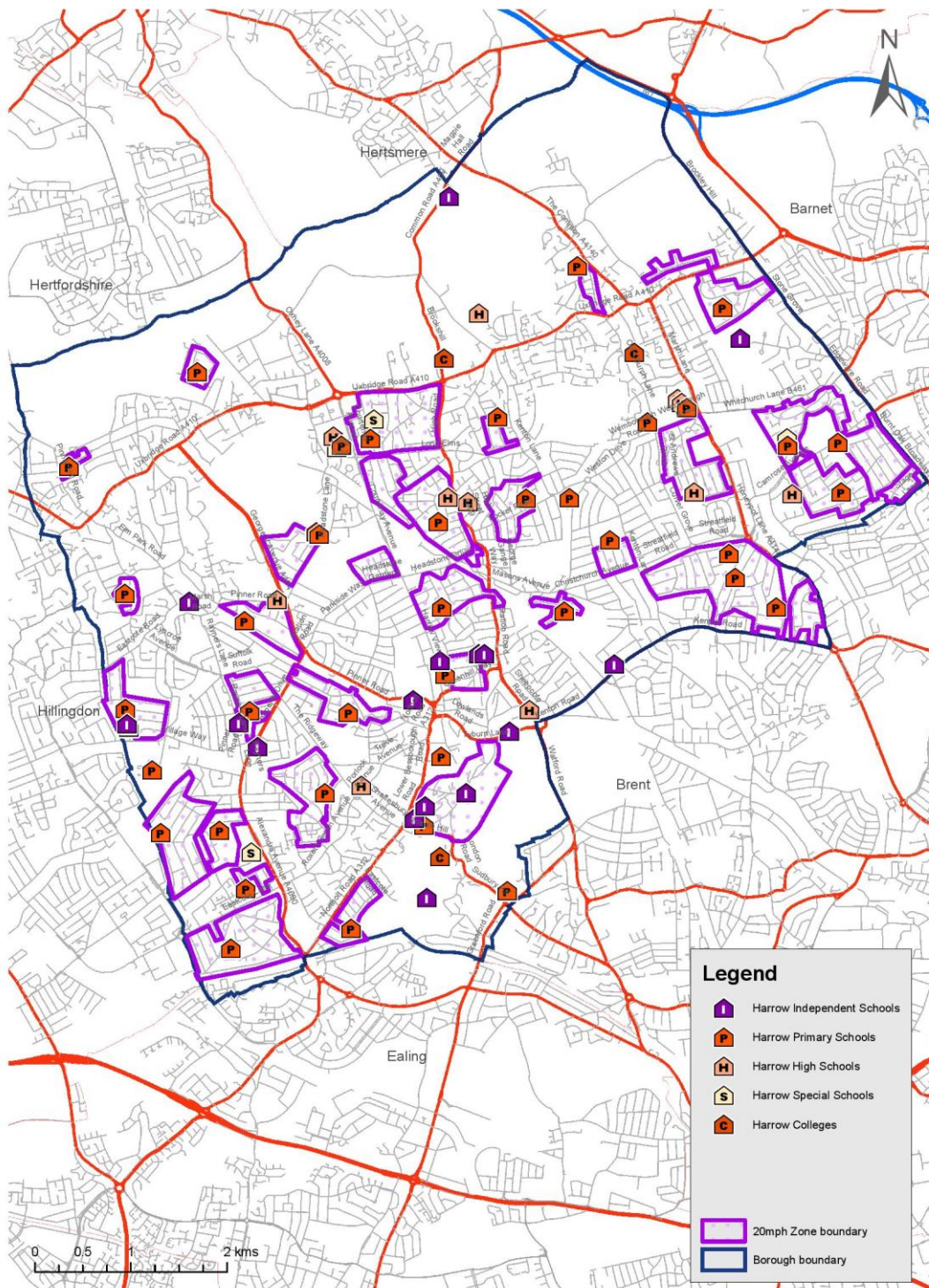
Harrow 20mph zones are designed to be "self-enforcing" due to traffic calming measures which are introduced along with the change in the speed limit. Speed humps, chicanes, road narrowing, and other measures are typically used to both physically and visually reinforce the slower speed limits.

The main aims of the introduction of a 20mph speed limit in an area are to:

1. improve road safety
2. discourage passing through traffic
3. encourage walking and cycling
4. improve the local environment

Before and after site surveys such as speed surveys are undertaken to monitor the impact of the measures introduced. The borough shares recorded speed survey data with the police at quarterly traffic liaison meetings so they can decide whether they should target their resources in the area.

Figure 11: 20mph zones and schools



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9.1.2 Local safety schemes

Local Safety schemes form part of the Mayor of London's vision zero transport strategy for deaths and serious injuries to be eliminated from all road collisions on London streets by 2041. They are introduced to reduce casualties in any area where clusters of accidents occur. Section 8.1 on Casualty patterns provides more information on where casualties have occurred in Harrow.



Pedestrians crossing roads are particularly vulnerable when involved in accidents with motorised vehicles. The risk is even greater when vehicles are travelling at speed. The types of improvements that can be made to improve safety for pedestrians in these schemes are: improved and new crossing facilities such as Countdown times, Zebras, Pelican, Puffin and Toucan crossings, or all red phased signalled crossings; traffic speed limit signs; vehicle activated traffic speed signs; improved lighting; and changes to parking regulations to improve visibility for pedestrians.

Cycle safety can be addressed in local safety schemes. Three-quarters of collisions with cyclists happen at junctions. The types of improvements that can be made to improve safety for cyclists are: separating cycling from motorised vehicles, providing dedicated cycle lanes or advisory lanes and providing advanced stop lines for cyclists at junctions. Cycling advanced stop lines are designed to allow cyclists to pull away in front of traffic at signals where they change to green.



An analysis into the effectiveness of local safety schemes is shown in Appendix B – Effectiveness of Local Safety Schemes. This shows that since 2010, there has been a reduction in KSIs of 84% following implementation of local safety schemes and a reduction of 75% in all casualties.

9.1.3 Local safety parking schemes

Local safety parking schemes are introduced to improve local pedestrian access and also to protect dropped crossings. These schemes often also improve visibility for pedestrians crossing roads and may involve changes to road markings or operational hours of controlled parking bays.

9.1.4 School travel plan engineering measures

All schools in Harrow are encouraged to develop travel plans to promote and encourage safe, active and sustainable travel on the school journey. A school travel plan (STP) is a document produced by a school that promotes sustainable ways for the whole school community to travel to and from school. When STPs identify engineering measures that would help make journeys to the school safer, healthier and more environmentally friendly, the measures are given a high priority for implementation.

9.1.5 Speed limit reviews

Speed limits of 20mph will be introduced on all central London roads managed by TfL within the Congestion Charging Zone by 2020. The borough also intends to reduce speed limits on more roads and speed limits on all roads in the borough are regularly reviewed.

The primary purpose of a speed limit is to indicate the maximum permitted speed to be driven on a road or within a defined area. Speed limits need to be set appropriate for the particular road and the purposes for which it is used. Speed limits should fit into a rational and easily understood hierarchy if they are to be observed by drivers. Before deciding to change an existing speed limit the Traffic Authority must consider all the relevant factors, including:

- accident and casualty savings
- improvement to the environment
- improvement in conditions and facilities for vulnerable road users
- reduction in public anxiety
- increased journey times for motorised traffic
- costs of implementation
- costs of engineering measures and their maintenance
- negative environmental impact of engineering measures
- costs of enforcement

If it is considered that a change in the speed limit is the best course of action, then a speed limit Order has to be made. This involves a statutory legal process.

9.1.6 Community roadwatch

Community roadwatch gives local residents the opportunity to work side by side with their local police teams, and use speed detection equipment to identify speeding vehicles in their communities. When vehicle speeding is identified, warning letters can be issued by the police where appropriate, and the information can help to inform the future activity of local police teams. Community roadwatch events happen throughout the year at various sites across the borough where requests for speed enforcement have been received by the public.

9.1.7 Speed activated signs (SAS)

Speed (or vehicle) activated signs are used to address the problem of inappropriate speed where conventional signing has not been effective or where engineering measures would be unsuitable or unfeasible due to site constraints.

Speed activated signs are considered for use in residential streets where traffic speeds are regularly observed above 30 mph. In these cases, the borough shares recorded speed survey data with the Police at quarterly traffic liaison meetings so that they are aware of where the signs are installed and so that they can decide whether they should target their resources to enforce them.

When considering future SAS sites the borough looks at all sites consistently and considers a



number of factors including:

- 1 The existing accident collision history
- 2 The existing 85% tile speed of traffic (This would need to be over 110% + 1mph over the posted speed limit)
- 3 The presence and condition of existing signing and lining
- 4 Whether other measures may be recommended or be more suitable e.g. road markings, warning signs
- 5 Whether a suitable location exists for an SAS

Additionally, the borough considers other factors at some sites such as whether a SAS is suitable for the requested site (e.g. if it's in a conservation area).

9.1.8 Pedestrian crossings

The types of crossings available in any location, impact on pedestrian safety and also on pedestrian perceptions of safety. Road junctions and crossing points are, by definition, locations where conflicting movements between motor traffic, cyclists, pedestrians and mobility impaired users are concentrated. The type of crossing introduced at any location is chosen based on the local environment, the pedestrian and cycle flows and also traffic volumes and speed. Replacing any crossing facility has cost implications and for this reason, crossings in Harrow are primarily replaced where a need based on safety or improved accessibility has been identified.



9.1.9 Countdown timers

Pedestrian countdown timers show the amount of time left to cross the road before the red man appears. This allows pedestrians to decide if they have enough time to cross the road. The countdown display is shown on the opposite side of the road, next to the green and red man signals. After the green man has signalled to pedestrians to start crossing the road, there is a 'blackout' phase where no pedestrian signals are shown. During the blackout phase, the countdown begins, ending with a red man pedestrian signal. The duration of the countdown varies depending on the signal timings at the junction.

The advantages of these timers are as follows:

- Pedestrians feel less rushed when crossing
- Gives more confidence to mobility impaired pedestrians, who may cross more slowly
- Pedestrians who didn't see a green man signal can decide if they have enough time to cross the road
- Some installations can allow a small reduction in delay to motorised vehicle traffic

Harrow is reviewing all controlled crossings at junctions for suitability for introducing countdown timer crossings and will introduce these where deemed most beneficial in terms of safety benefits.

9.1.10 Enforcement cameras

Speed and red light cameras have been introduced at sites where people have been killed or seriously injured due to a driver going too fast or running a red light. As road safety has significantly improved across the borough, no new speed or red light cameras have been introduced since 2010. This [link](#) to the TfL website provides a map showing the existing locations of enforcement cameras in Harrow and all across London.

The criteria for introducing new speed or red light cameras is as follows:

Speed Cameras

In the most recent 36 month period there must be a collision history along the length of road of 4 Killed or Seriously Injured collisions, 2 of which must be speed related.

Red Light Cameras

In the most recent 36 month period there must be a collision history at the junction, and on the same arm, of 1 Killed or Seriously Injured collision and 1 other personal injury collision (slight). Both of these collisions must have been caused by a vehicle 'Disobeying Automatic Traffic Signals' (running a red light).

School keep clear enforcement

Mobile and static CCTV cameras are used to monitor School Keep Clear restrictions, which are areas specifically designed for the safe access of pupils, staff and the emergency services to and from the school premises by deterring obstructive and dangerous parking. Automatic Number Plate Recognition (ANPR) cameras are used by the mobile CCTV vehicles.



Vehicles are not permitted to wait, stop or park on a restricted area outside a school at any time during the prescribed hours of restriction.

9.2 Road Safety objective 2: Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough

Cycle training is an effective way of increasing confidence among adults, children and families, and encouraging more people to cycle. More confident cyclists get out on their bikes more often. Cycle training in Harrow is delivered to achieve various levels of bikeability proficiency.

To encourage increased cycling, cycle training is offered to all schools in the borough as well as offered outside the school environment. Cycle training is also facilitated for Special Educational Needs and Disability (SEND) schools providing an extended duration of training and adapted bikes

for pupils to participate in training. Some SEND training is delivered within schools and tailored to each school's requirements. Due to the variation of capabilities, not every child is able to participate. SEND training is also available to adults once requested. Training sessions are tailored to accommodate the requirements of the trainee.

To ensure that those who need to benefit from the health of increased cycling, promotional leaflets are provided across Harrow in doctor's surgeries and libraries, leisure centres, community notice boards, social media accounts/council website, Harrow People Magazine and Annual Council Tax guide promoting the health benefits of cycling and also providing information on how to access cycle training.

All cycle training courses are also promoted via the council website and with schools and businesses in the borough. Anyone who lives, studies or works in the borough is eligible to participate in cycle training. Cycle training courses are free beyond the initial £5 administrative fee. Training courses last approximately 90 minutes and are run throughout the year on Saturdays.

9.2.1 Bikeability training and courses

Bikeability training levels are as follows:

At **Bikeability Level 1** new riders learn to control and master their bikes in a space away from traffic such as a playground or closed car park. Trainees will usually be trained in a group of 2-12, though individual training may also be available.

Bikeability Level 2 takes place on local streets, giving trainees a real cycling

experience. Trainees learn how to deal with traffic on short journeys such as cycling to school or the local shops. Trainees are usually trained in small groups – up to 6 trainees per instructor – though individual training may also be available.

Bikeability Level 3 equips trainees with skills for more challenging roads and traffic situations – busier streets, queuing traffic, complex junctions and roundabouts. It also includes planning routes for safe cycling. Level 3 training is delivered one-to-one or in groups of up to 3 so can be tailored to a trainee's individual needs, such as a route to work or school.

Bikeability trained cyclists receive a badge and a certificate in recognition of the level they've achieved. The certificate also includes areas for further practice noted by the instructor.

Approximately 1100 - 1200 children across the borough are trained to bikeability levels 1 or 2 per annum. Bikeability courses are delivered during term time at primary schools for children in year 4 - 6 and in selected secondary schools for year 7 - 8.



9.2.2 *Women-only cycle training*

The Council provides women-only bike sessions which provide a supportive, social and fun environment for women aged 14+ to build their confidence and fitness. There is no required cycling ability or fitness level. These sessions are for complete beginners, nervous riders and women who are returning to cycling. Women who are not complete beginners can learn to cycle with road cyclists and women building their fitness for weekend adventures. Providing these courses encourages women's uptake of cycling in the borough. The courses aim to build up attendees' confidence level until they are riding for leisure or even part of their daily commute. Women's only sessions were introduced to not only encourage more women to cycle but appeal to women that were restricted in engaging in mixed gender activities due to cultural/religious aspects.

9.2.3 *Balance and Ride courses for children*

Learn to Balance and Ride courses take place after school and during school holidays in schools across Harrow. Courses are available for children aged 3-11 years who cannot yet ride a bike on two wheels. During these sessions, free bicycles are provided to children to help them to learn the core fundamentals of cycling. These sessions are free but require prior booking.

9.3 **Road Safety objective 3: Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills**

Harrow provides a range of road safety educational events to schools and colleges across the borough. Active travel maps are also made available for all schools in the borough to help pupils and parents choose sustainable, safe and healthy ways to travel to school.

TfL provides road safety educational information and materials to assist with road safety training in schools. The borough works with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers; take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils; and take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools.

9.3.1 *Children's Traffic Club*

The Children's Traffic Club (CTC) London is a free education programme covering road safety, walking, scooting and cycling for preschool-aged children, their parents and carers. It is fully funded by Transport for London. The programme has reached over three million under 5s and their families over the past 25 years. CTC aims to:

- Create positive travel 'habits'
- Influence children's long-term behaviour
- Promote active travel choices like cycling, scooting and walking
- Indirectly benefit whole family
- Reduce environmental impact relating to travel choices
- Inspire, involve and motivate young children
- Contribute to the reduction of child casualties

CTC London provides a structured scheme for parents, carers, and nurseries to teach road safety and travel skills to their pre-school children. Parents are invited to register their child through their early years setting/nursery, but can also sign up directly on the CTC London website.

9.3.2 Theatre in education

Theatre in Education provides a theatre production across selected primary schools in the borough and aims at encouraging sustainable travel for the children through an interactive experience. The show lasts for under an hour, it is a high energy enthusiastic show which is then followed by an interactive game to ensure that the children have understood the issues raised in the play. Issues raised in the play include:

- Car sharing
- Public transport
- Walking
- Fuel pollution
- Climate change
- Walking and cycling being fun, healthy and sociable
- Basic road safety

This play is always well received by schools, teachers and children.

9.3.3 Safety and Citizenship

TfL's Safety and Citizenship team provide pre-transition safe and responsible behaviour sessions for Year 6 pupils across London. Presentations and resources are designed to support the school Personal, Social, Health and Citizenship Education (PSHCE) curriculum. Sessions are adapted to ensure the best learning experience for each audience and can be adapted as needed to suit different community groups.

9.3.4 Safe Drive Stay Alive

Safe Drive Stay Alive is a production which shows graphic film footage featuring scenes from a horrific car crash, interspersed by live speakers who provide an account of their personal experiences of collisions in a bid to shock young people into taking more care when getting behind the wheel. It is aimed at reducing the disproportionate number of road casualties among young road users and making young people aware of their responsibilities as drivers, and passengers, whilst travelling, and to positively influence their attitude. The production aims to educate students about road risks, and to enable them to identify the common causes for crashes.

9.3.5 Junior Travel Ambassadors

The Junior Travel Ambassador (JTA) scheme encourages safer, active and independent travel within the school community, with a focus on year 6 pupils as they prepare for the transition to secondary school.

The scheme involves recruiting a team of JTAs; year 5 and 6 pupils who work to promote active travel and road safety to their peers through a range of activities.

TfL provides all the resources and guidance needed for the school to set up and run the school's JTA team.

9.3.6 Youth Travel Ambassadors

The Youth Travel Ambassadors (YTA) programme provides young people aged 11 to 19 with the skills and confidence to address transport issues affecting the school community.

YTA teams research and develop campaigns to change people's behaviour. They focus on walking and cycling, road safety and improving passengers' experiences. They are supported by TfL, the borough and school staff.

Schools usually recruit between 6 and 12 YTA students who deliver behaviour change campaigns to their peers over the course of the academic year. Campaign initiatives can include themed assemblies, walking and cycling competitions, creative workshops, films and community events.

9.3.7 School active travel maps

Active travel maps are available for all schools in the borough to help pupils and parents choose sustainable, safe and healthy ways to travel to school. The maps show the sustainable travel options available to each school and are tailored to include:

- local public transport facilities (e.g. tube and train stations, and bus route information) – showing which bus routes travel on roads close to the school.
- 5 and 10 minute walking zones – showing approximate 5 and 10 minute walking distances from the school site.
- cycling route information – roads are colour-coded to Bikeability training and confidence levels to enable cyclists to plan routes according to individual abilities.



The maps can be used by anyone travelling to the school including pupils, parents, staff and visitors.

9.4 Road Safety objective 4: Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads

Road safety campaigns are aimed at encouraging safe and considerate driving, at appropriate speeds. Road safety training provided in Harrow educates all road users on the shared responsibility for safer cycle and motorcycle journeys. Certain groups are at greater risk of more severe casualties and to address this specific road safety campaigns and training are aimed at different groups - older people, motorcyclists, cyclists and school pupils.

9.4.1 Road safety week

Many schools in Harrow take part in Road Safety Week. This is an opportunity to engage the community, launch campaigns, and work towards safer streets – using resources provided by the road safety charity Brake. During road safety week, schools hold special assemblies addressing road safety and often the school youth travel ambassadors talk about the risks they face on the road and what they can do to stay safe. Pupils are encouraged to write a road safety



pledge and post a “selfie” holding the sign on social media to help spread the road safety message. Typical pledges are 'look out at junctions' to 'take headphones out when crossing the road'.

9.4.2 *Motorcycle safety training*

To improve motorcycle safety standards, the borough promotes Motorcycle Industry Association (MCIA) accredited training providers to motorcyclists to undertake Compulsory Basic Training. BikeSafe and ScooterSafe vouchers are offered for subsidised courses delivered by local Motorcycle Industry Association (MCIA) accredited training providers.

These are available to all those who live, study or work in the borough. This enables participants to undertake a Rider Skills Day course – designed to improve riding ability and safety on the roads. The courses offer expert advice and observed rides on urban and rural roads. Information on other rider assessment courses is also cascaded to relevant stakeholders.

The borough also cascades information on 1-2-1 motorcycling skills and ‘Beyond CBT (Compulsory Borough Training)’ to relevant stakeholders i.e. fast food delivery restaurants, tyre fitters, dealers.

9.4.3 *Motorcycle road safety campaigns*

Motorcycle safety is encouraged through a combination of campaigns and safer riding training. With P2Ws collisions typically occurring at junctions and in situations where other vehicles are performing manoeuvres such as overtaking and U-turns, the borough has used lamppost banners to portray road safety messages to raise awareness about the vulnerability of motorcyclists. These have been displayed at specific motorcycle casualty hotspots within the borough and aimed to be visually striking, concise, easily interpretable and reminding motorists to watch out for motorcyclists.



9.4.4 *Older people road safety*

Community workshops are delivered for older people to explore ways of making journeys safer for older and vulnerable road users. These workshops aim to engage older road users in discussions about road safety, raise awareness in age related decline in relation to road safety, increase confidence for participants, provide opportunities for participants to be heard and provide further information on relevant road safety resources available in the borough. Feedback from courses run has stated that it has made participants think more about their own actions when out and about and in some cases modify their own actions.

9.4.5 *Driver behaviour*

Encouraging improved driver behaviour is necessary if road accidents are to decline. Many campaigns to encourage improved driving standards are national. However Harrow has run visual

campaigns during the festive period and major sports events such as the UEFA World Cup and Euro football competitions to educate motorists about the dangers of drink and drug driving.

In addition to the drink driver campaign, Harrow has run a visual campaign 'Clear your windscreen'. This was publicised in the winter to highlight the dangers of driving with a frosty windscreen. Harrow is working jointly with other boroughs to launch a new mobile phone campaign to improve road safety.

9.5 Delivering the road safety objectives

The long-term road safety targets for road safety that were agreed as part of LIP3 are shown in Table 2.

Table 2: Long term road safety targets

Long term target	Latest available data	Target	Year
Eliminate all deaths and serious injuries from road collisions from London's streets	433 collisions in Harrow in 2017	0	2041
Reduce the number of people who are killed or seriously injured by 70 per cent against 2010-14 levels	69 KSIs in 2017	24	2030
Reduce the number of people who are killed or seriously injured by 65 per cent against 2005-09 levels	69 KSIs in 2017	38	2022

Table 3 shows the targets that will be used to measure the delivery of the road safety objectives.

Table 3: Road safety targets to deliver objectives

Road safety objectives	Targets to monitor progress	Current status	Target and year
Use engineering and enforcement measures to improve borough road safety	Introduce countdown crossings to 20% of all controlled crossings	10% of all controlled crossings are currently countdown crossings.	20% by 2021/22
	Reduce pedestrian KSIs to 15 KSIs by 2022	28 pedestrian KSIs in 2017	15 pedestrian KSIs in 2022
Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough	Reduce number of vulnerable road user KSIs to 28 by 2022	50 vulnerable road user KSIs in 2017	28 vulnerable road users in 2022
	Provide cycle training for over 1500 children and over 100 adults	176 adults trained in 2018/19 1026 children trained in 2018/19	114 adults in 2019/20 1590 children in 2019/20

Road safety objectives	Targets to monitor progress	Current status	Target and year
Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills	Provide theatre in education in 50% of all secondary schools Deliver practical pedestrian training to at least 40% of all primary schools Deliver road safety presentations to at least 50% of primary schools Deliver appropriate road safety interventions to at least 40% of all colleges/6 th forms	60% of secondary schools receiving theatre in education 40% of schools receiving practical pedestrian training 50% of schools receiving road safety presentations 60% of colleges/6 th forms receiving young motorist intervention	70% by 2021/22 50% by 2021/22 60% by 2021/22 70% by 2021/22
Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads	Design and deliver at least 2 targeted campaigns annually Provide older people community workshops at least 5 times per year	2 campaigns delivered in 2018-19 10 delivered in 2017/18	2 campaigns per annum 5 workshops per annum

10. Funding the road safety action plan

Table 4 shows the key funding sources used for Harrow road safety initiatives.

Table 4: Key funding source for road safety initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Road safety objective 1: Use engineering and enforcement measures to improve borough road safety					
20mph zones	✓				
Local safety schemes	✓				
Local safety parking schemes	✓				
School travel plan engineering measures	✓				
Speed limit reviews	✓				
Community roadwatch	✓				
Speed activated signs	✓				
Pedestrian crossings	✓				
Countdown timers	✓				
Enforcement cameras	✓				
Road safety objective 2: Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough					
Bikeability training and courses	✓				
Women only cycle training	✓				
Balance and ride courses for children	✓				
Road safety objective 3: Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills					
Children's Traffic Club					
Theatre in education	✓				
Safety and Citizenship					
Safe Drive Stay Alive					
Junior travel ambassadors					
Youth travel ambassadors					
School active travel maps	✓				
Road safety objective 4: Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads					

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Road safety week					
Motorcycle training	✓				
Motorcycle road safety campaigns					
Older people road safety					

11. Road Safety Action Plan

Table 5 shows the borough road safety action plan and how the agreed borough LIP3 policies fit with the new road safety objectives. The table also shows the outputs to be delivered relating to each policy.

Table 5: Road safety action plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Road safety objective 1: Use engineering and enforcement measures to improve borough road safety		
Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041 (RS1)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Employ a road danger reduction approach to design, using the streets toolkit for designers, Road Safety Audit, and Healthy Streets Check for Designers (RS2)	Reduced KSIs on Harrow roads	Ongoing
Prioritise schemes that maximise casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance (RS3)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Ensure that the safety concerns of all road users, including pedestrians, cyclists, horse riders and those in motorised vehicles are considered when developing any traffic scheme (RS4)	Reduced vulnerable road user KSIs for on Harrow roads	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Prepare a programme of 20 mph zones in the borough and incorporate these into schemes for future TfL funding (RS5)	Increased walking and cycling and reduced KSIs. 20mph zones at the following locations: Clitheroe Avenue, Rayners Lane, Kingshill Avenue – all to be introduced by 2019/20. Further locations will be selected based on agreed criteria.	Ongoing
Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school (RS6)	Increased walking and cycling and reduced KSIs. 20mph zones at the following locations: Clitheroe Avenue, Rayners Lane, Kingshill Avenue – all to be introduced by 2019/20. Further locations will be selected based on agreed criteria.	Ongoing
Work with the parking service and police to enforce and promote safe driving and parking in school zones (RS7)	Less driving for school journeys. Modal shift for school journeys. Improved air quality in school zones.	Ongoing
Where possible use engineering solutions to minimise the need for additional road safety enforcement (RS8)	Increased use of chicanes, road humps and kerb buildouts	Ongoing
Maintain an effective method of accident monitoring for the borough (RS9)	More targeted approach to addressing road accidents	Ongoing
Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions (RS10)	More targeted approach to addressing road accidents, particularly those involving motorcyclists	Ongoing
Improve the safety of street design by following the design guidance set out in TfL's Urban Motorcycle Design Handbook (RS15)	Less motorcycle casualties. Better street design	Ongoing
Carry out road safety audits of all new significant traffic and highway proposals (RS18)	Reduced road casualties on all Harrow roads.	Ongoing
Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality (S11)	Improved air quality around schools Reduced car mode share of school journeys	Ongoing
Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths (RS22)	Reduced cycling on pavements	Ongoing
Road safety objective 2: Provide cycle training to Bikeability standards for children and adults who work, study or live in the borough		

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041 (RS1)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Provide and promote cycle training for children and adults who work, study or live in the borough (S4)	Increase in number of adults and children cycling Reduced car use, improvements to air quality, health and reduced congestion	Ongoing
Road safety objective 3: Provide road safety education events in schools and road safety support for pre-schoolers to develop traffic awareness and road safety skills		
Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041 (RS1)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions (RS10)	More targeted approach to addressing road accidents, particularly those involving motorcyclists	Ongoing
Work with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers (S6)	Reduced child road casualties	Ongoing
Work with TfL to ensure take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils (S7)	Reduced child road casualties	Ongoing
Work with TfL to ensure take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools (S8)	Reduced school pupils involved in road casualties	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Provide road safety education events at schools and colleges throughout the borough (S9)	Reduced casualties for pupils on school journeys	Ongoing
Road safety objective 4: Conduct road user safety campaigns and road safety training courses aimed at reducing the number of collisions on the roads		
Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041 (RS1)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Use accident statistical data to recognise trends and deliver targeted educational and engineering initiatives, with a focus on roads with a higher risk of motorcyclist collisions (RS10)	More targeted approach to addressing road accidents, particularly those involving motorcyclists	Ongoing
Educate road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist/cyclist skills training and communications (RS12)	Less motorcyclist and cycling casualties	Ongoing
Promote Motorcycle Industry Association (MCIA) accredited training providers to motorcyclists looking to undertake Compulsory Basic Training (RS13)	Less motorcyclist casualties	Ongoing
Provide BikeSafe vouchers for subsidised courses delivered by local Motorcycle Industry Association (MCIA) accredited training providers (RS14)	Less motorcyclist casualties	Ongoing
Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location (RS16)	Less road casualties	Ongoing
Deliver appropriate road safety interventions and resources for road users aged 60+ by targeting community groups, day centres and social clubs, facilitating bespoke workshops and presentations and providing road safety literature (RS19)	Less road casualties for those aged 60+ using various modes of transport	Ongoing

GLOSSARY

ANPR	Automatic Number Plate Recognition
CTC	Children's Traffic Club
JTA	Junior Travel Ambassador
LIP	Local Implementation Plan
MCI	Motorcycle Industry Association
MTS	Mayor's Transport Strategy
P2W	Power two wheelers
PSHCE	Personal, Social, Health and Citizenship Education
SAS	Speed Activated Signs
SEND	Special Educational Needs and Disability
STP	School Travel Plan
TRL	Transport Research Laboratory
YTA	Youth Travel Ambassadors

Appendix A - Harrow's transport objectives

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
4. Improve freight servicing and delivery arrangements to reduce congestion and delays on the network and consider other types of freight delivery options that could reduce traffic congestion
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
6. Encourage the uptake of ultra-low emission vehicles instead of fossil fuel powered vehicles through the use of promotional activities, increased Ultra Low emission zones, neighbourhoods of the future, and greater availability of electric charging facilities, thereby improving air quality, reducing traffic noise and reducing CO₂ emissions throughout the borough
7. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
8. Improve transport connectivity throughout the Harrow and Wealdstone Opportunity Area and particularly between Harrow-on-the-Hill station/ Harrow bus station and Harrow & Wealdstone station
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes

Appendix B – Effectiveness of Local Safety Schemes

Scheme Name	Date scheme implemented	Before implementation			After implementation		
		Killed	Seriously injured	slights	Killed	Seriously injured	slights
George V - traffic signals	Sep-10	0	2	11	0	0	1
Northolt Road	Dec-10	0	1	36	0	2	7
Uxbridge Road to Hatch End	Apr-11	2	6	12	0	0	2
Old Redding	Dec-13	0	5	24	0	1	5
Old Church Lane	Jan-14	0	0	6	0	0	2
Marsh Road / High Street	Feb-14	0	3	6	0	0	9
TOTAL		2	17	95	0	3	26

This shows a reduction in KSIs of 84% following implementation of local safety schemes and a reduction of 75% in all casualties.

Harrou Walking, Cycling and Sustainable Transport Strategy 2019



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1. Introduction

The way we live our lives and travel around our locality feels personal and private but the impacts are far wider. The choices we make impact climate change, the environment and the health and life expectancy of those living around us. Choosing to use motorised vehicles does not just impact on our own personal health, it also impacts the health and well-being of the surrounding population.

Walking and cycling are the healthiest and most sustainable ways to travel, either for whole trips or as part of longer journeys on public transport. The borough policies included in this strategy aim to increase the number of people participating in active travel and to encourage and enable more people to walk and cycle more often. More active travel can improve our health as well as our psychological well-being. For transport to have long term sustainability, it must also minimise environmental damage which is a key policy priority for Harrow.

This strategy has been prepared to show how Harrow encourages sustainable transport choices and to provide more information to support the Harrow Transport Local Implementation Plan 2019/20 - 2021/22 (LIP3).

Although different transport modes are discussed separately in this strategy, they are never considered in isolation. In all locations, the issues are addressed holistically and all modes of travel are always considered. This is further ensured through Harrow's adoption of the Healthy Streets approach.

1.1 Why it matters

In London around half of nitrogen oxides (NO_x), around half of PM₁₀ and over half of PM_{2.5} emissions come from road transport sources. Breathing in air pollution can increase the risk of heart disease and stroke, worsen asthma symptoms, contribute to lung cancer, exacerbate other health conditions and shorten lives. The communities suffering the most from poor air quality are often the most vulnerable in society. Outdoor air pollution is responsible for the equivalent of up to 36,000 premature deaths a year in the UK¹.

Greater London Authority research has shown that if every Londoner walked or cycled for 20 minutes a day, it would save the NHS £1.7bn in treatment costs over the next 25 years. This includes 85,000 fewer people being treated for hip fractures, 19,200 fewer people suffering from dementia, and an estimated 18,800 fewer Londoners suffering from depression.

In Outer London only 60 per cent of journeys are done on foot, by cycle or using public transport, with cars currently being used for the remaining 40 per cent. While about 80 per cent of these car journeys are short enough to feasibly be switched to active, efficient and sustainable modes, such a switch is dependent on providing more appealing alternatives and also changing attitudes.

Sources of greenhouse gas emissions in London are dominated by buildings and transport. It is estimated that in 2015, 24 per cent of emissions in London were generated from transport.

The Mayor of London aims for London to be a zero carbon city by 2050. The 2008 Climate Change Act established a target for the UK to reduce its carbon emissions by at least 80% from 1990 levels by 2050 to limit global warming to 2°C. The climate change agreement in Paris in December 2015 agreed to limit global temperature increases to 1.5°C and the need to achieve zero net global carbon emissions by the second half of this century to achieve this. To meet these targets and to reduce premature deaths and emissions related illnesses, we all need to act now.

¹ Committee on the Medical Effects of Air Pollutants (COMEAP)

1.2 The challenge

London faces significant projected population growth (70,000 every year), reaching 10.5 million in 2041. This means that just to meet demand, at least 66,000 new homes need to be built in London every single year. In Harrow, the borough needs to build 13,920 new homes by 2028/29² to meet the growing demand.

If the population growth results in increased traffic volumes, there are economic, environmental and health consequences. The road and public transport network are already under pressure with congestion occurring on a daily basis. Sustained growth in demand for motorised travel will outstrip the available supply of land. Travel by car will therefore become even more difficult and the only way to address this demand is to spread the travel demand across a wider range of mode choices.

Continued growth in the borough population, the increase in single occupancy households and the increase in the proportion of people aged over 85 all need considering in terms of their impact on transport. Increased traffic volumes are likely to increase traffic congestion and worsen air pollution. Traffic congestion also damages the economy. Health of the borough will also be impacted. Two thirds of adults and one fifth of children start school overweight in Harrow, and diabetes rates in the borough are higher than the England average. Both these conditions are exacerbated by increasingly sedentary lifestyles. These are all issues that can be significantly addressed through ensuring a more active population living in a healthier environment.

To encourage those with access to a car to walk, cycle or use public transport, the alternatives need to compete favourably against the car in terms of journey times and reliability, comfort and personal independence. Active travel is far cheaper and in many cases quicker than other transport modes, but people are not always aware of this.

To ensure this Harrow has a sustainable future, the borough needs to reduce reliance on non-sustainable forms of transport, wherever possible remove motorised vehicle domination of neighbourhoods and create a better and healthier environment for sustainable forms of transport. Streets need to be inviting places for all, so that residents, visitors, employers and employees can better appreciate them.

This report will show how Harrow is addressing these issues and working towards a more sustainable future.

1.3 LIP3 objectives

LIP3 sets out long terms goals and transport objectives for the borough for the next 20 years, proposes a three-year programme of investment starting in 2019/20, and includes a delivery plan for the period 2019/20 - 2021/22. It also includes the targets and outcomes the borough is seeking to achieve.

The plan identifies how the London Borough of Harrow will work towards achieving the MTS priorities which are:

- Healthy Streets and healthy people
- A good public transport experience
- New homes and jobs

As part of developing LIP3, the following transport objectives were agreed:

² Draft London Plan, December 2017

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
4. Improve freight servicing and delivery arrangements to reduce congestion and delays on the network and consider other types of freight delivery options that could reduce traffic congestion
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.
6. Encourage the uptake of ultra-low emission vehicles instead of fossil fuel powered vehicles through the use of promotional activities, increased Ultra Low emission zones, neighbourhoods of the future, and greater availability of electric charging facilities, thereby improving air quality, reducing traffic noise and reducing CO₂ emissions throughout the borough
7. Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
8. Improve transport connectivity throughout the Harrow and Wealdstone Opportunity Area and particularly between Harrow-on-the-Hill station/ Harrow bus station and Harrow & Wealdstone station
9. Ensure that the vitality of all town centres are supported through good transport links prioritising sustainable modes of transport
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, support increased bus priority to deliver a more reliable, faster and more accessible public transport experience
11. Prioritise sustainable travel improvements for all new developments to support population growth and housing needs identified in the London Plan and local development framework
12. Prioritise the transport needs of the Harrow and Wealdstone Opportunity Area
13. Keep the transport network in good condition and serviceable to encourage the use of sustainable transport modes

1.4 Sustainable transport choices

For the purposes of this document, sustainable transport includes walking, cycling, scooting and the use of low emission vehicles such as electric vehicles and public transport.

1.5 Healthy streets approach

The Healthy Streets approach is the underlying framework for the Mayor of London's Transport Strategy. This approach is a system of policies and strategies to put people, and their health, at the heart of decision making. Harrow has adopted the healthy streets approach to deliver improvements that will enable the borough to improve people's experience of walking, cycling and using public transport and also encourage fewer trips by car.

Healthy streets can provide high-quality environments with enough space for walking, cycling and public transport use. Streets can be enhanced with seating, shade, trees and greenery, and reduced dominance of vehicles by designing for slower vehicle speeds. They can hold events and activities that entice people out to shop, play and socialise. Adopting the healthy streets approach will help the

borough work towards creating a healthier and more attractive street environment, increasing the number of people walking, cycling and using public transport and changing streets so that quality of life for all people is improved, enabling people to live well and also to reduce inequalities.

The healthy streets approach is not a quick fix to deliver change, it is a long-term plan for improving people’s experiences of streets, helping everyone to be more active and enjoy the health benefits of an improved environment.

Figure 1 shows the ten indicators that are used to measure Healthy Streets. Using these evidence based indicators will help to ensure that streets are made to be more attractive places. This will enable Harrow to work towards creating a healthier street environment increasing the number of people walking, cycling and using public transport and improve streets so that all people are included and can live well.

Figure 1: Healthy Streets indicators



1.6 Targets

The Mayor of London’s Transport Strategy (MTS) puts active travel at its heart and sets the following targets for London:

- Mode share - 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041 (from 63 per cent in 2015)
- Physical activity - all Londoners to do at least the 20 minutes of active travel they need to stay healthy each day by 2041

As part of Harrow’s Transport Local Implementation Plan 2019/20 - 2021/22, Harrow has adopted these targets. In addition, Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041.

1.7 The benefits of active travel

Active travel includes walking, cycling and scooting. Daily physical activity is hugely important for maintaining health, and inactivity directly contributes to one in six deaths in the UK.

If more people walk or cycle and consequently fewer people drive, the direct benefits from the increased active travel are:

- Improved physical and psychological wellbeing
- Reduced social exclusion

- Reduced traffic volumes
- Reduced traffic congestion
- Reduced air pollution
- Less traffic noise
- Reduced carbon emissions
- Streets and neighbourhoods that are more pleasant

For the individual, the benefits of walking and cycling are:

- Improved personal health including weight loss – particularly of benefit to those with high blood pressure, obesity and type 2 diabetes but also of benefit to people with stressful lives
- Less breathing problems - pollution levels are lower in the open air than in motor vehicles
- Improved personal fitness level
- Improved sleep
- Increased independence
- An improved local environment
- Faster journeys particularly for shorter journeys where cycling is often the fastest modes of transport
- More money as walking and cycling are low cost modes of travel
- More accurately estimated journey times
- Improved access to essential services and facilities
- Increased social inclusion
- Reduced parking problems

Just 10 minutes physical activity a day has a big benefit to a person’s health and wellbeing. Harrow residents have reported that the barriers to being active are cost and time. Taking an active way to travel to work, school or recreational activities helps reduce these barriers.

1.8 Barriers to walking and cycling

Addressing the reasons that we don’t walk or cycle more is a key way to encourage increased active travel. Table 1 shows many of the reasons people give for not actively travelling.

Table 1: Barriers to walking or cycling

	Walking	Cycling/ Scooting
Not enough time	✓	✓
Security / safety concerns	✓	✓
Route safety perceptions	✓	✓
Bad weather	✓	✓
Not fit enough / too tired to walk or cycle or use scooter	✓	✓
Have a disability that makes it harder to walk/cycle/use scooter	✓	✓
Public anti-social behaviour	✓	✓
Unfamiliar with route	✓	✓
Car is more convenient	✓	✓
Habit	✓	✓
Distance perceived as too far	✓	✓

	Walking	Cycling/ Scooting
Too many hills	✓	✓
Need to carry heavy goods	✓	✓
Need car for next part of journey	✓	✓
Streets are dirty and too much litter everywhere	✓	✓
Poor lighting increasing perceptions of danger	✓	✓
Don't own a bike or scooter		✓
Concerns about cycle /scooter theft		✓
No seating along the route to rest	✓	
Footways cluttered and too often obstructed by cars, street furniture, signage	✓	
Poorly designed streets	✓	
Lack of tactile paving	✓	
Lack of safe crossings	✓	
Illegal cycling on the footpath makes journey feel unsafe	✓	
Fear of being involved in a collision		✓
No segregated cycle routes		✓
Nowhere weatherproof to leave bicycle		✓
Nowhere to shower / change at destination		✓
Nowhere safe to leave bicycle at destination		✓

1.9 Funding improvements

The key source of funding for most sustainable transport schemes is the borough's TfL LIP allocation funding. However lack of funding and supporting resources constrain the amount that the borough is able to deliver. The borough also hopes to achieve TfL Strategic and Discretionary funding for some schemes which is dependent on negotiations with TfL and successful bids. There is also a small amount of borough funding available for selected schemes.

1.10 Borough programme entry system

There is not sufficient funding or resources to address all of the issues identified in this plan. For this reason, Harrow has developed a formal framework for assessing and prioritising all suggestions for projects, schemes or works. This framework is known as the borough programme entry system. This enables the borough to develop a ranking list for each work category type. The work categories used in the programme entry system are based around the MTS and latest LIP. Those cases that satisfy the criteria and meet a set threshold are then used to inform the development of future programmes of investment.

2. Walking

Walking is one of the simplest ways to keep healthy, save money and help the environment, yet people are still too often reticent to choose to walk.

According to a Diabetes Care Report 2018 for Harrow, only 76.9% of people in Harrow do any walking at least once a week which is below the England average of 80.6%. Harrow has the 2nd lowest levels of walking in London. Nearly one in three (31%) of the adult population in Harrow is classed as physically inactive falling into the Chief Medical Officer's "high risk" health category. Not exercising enough can have serious health implications including childhood obesity and diabetes.

Fourteen per cent of Londoners say London is not pedestrian friendly, and 11 per cent say this of their local area. Sixty-six per cent of Londoners say they would walk more if routes were improved to give greater priority to people walking. People need space for walking as well as safe and convenient crossings.

This strategy has been developed to show how Harrow is working to improve the environment for walking and encouraging everyone to walk more. The plan supports the Harrow Transport Local Implementation Plan 2019/20 - 2021/22 (LIP3) by providing more details on the work that Harrow is doing.



2.1 Existing walking targets

Targets are important to ensure that borough progress in delivering sustainable transport can be monitored.

The following targets have all been agreed as part of LIP3:

1. By 2041, 64% of daily trips should be made by foot, cycle or public transport in Harrow
2. By 2041, 70% of Harrow residents will do at least 20 mins active travel each day
3. Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041

2.2 Objectives for walking

Based on the Harrow LIP3 and the Mayor of London’s Transport Strategy 2018, the following are the objectives for walking in Harrow:

1. Improve the quality and experience of walking throughout the borough
2. Improve the perceived and actual safety of pedestrians
3. Improve health of borough residents by promoting healthy walking and encouraging active travel and recreational walking

The walking objectives fit well with the Healthy Streets indicators and this is shown in Table 2.

Table 2: Walking objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Improve the quality and experience of walking throughout the borough	✓	✓	✓	✓	✓	✓	✓		✓	✓
Improve the perceived and actual safety of pedestrians	✓	✓			✓	✓	✓		✓	✓
Improve health of borough residents by promoting healthy walking and encouraging active travel and recreational walking	✓					✓	✓		✓	✓

2.3 Walking objective 1: Improve the quality and experience of walking throughout the borough

Good infrastructure enables more active travel. People walking need good routes and crossings, and uncluttered and attractive streets. The borough needs to improve the environment for pedestrians and cyclists in the whole borough and particularly within new growth areas such as the Harrow Opportunity Area.

Adopting the healthy streets approach will enable the borough to improve people’s experience of walking and also encourage fewer trips by car. Streets need to be inviting for everyone to spend time in and enjoy. Over the longer term, this plan aims to improve people’s experiences of the streets, helping everyone to be more active and enjoy the health benefits of an improved environment.

2.3.1 Local walking schemes

These schemes are introduced to address local barriers to walking at crossing points and to address severance issues that arise from heavily trafficked roads. The aim of walking schemes is to provide easy and safe access to local amenities and facilities within communities and particularly better access for people with mobility impairments.

The typical measures introduced in these schemes include pedestrian crossings, controlled crossings, signal pedestrian phases, pedestrian route signing as well as the introduction of new pedestrian routes and links. New schemes are prioritised using a formal framework for assessment based on the local environment.

2.3.2 Liveable neighbourhoods

A Liveable Neighbourhood is an area that provides attractive, healthy, accessible and safe neighbourhood for people. Typically, this may involve changes to town centres and their surrounding residential areas to improve conditions for walking and cycling and reduce traffic dominance. Liveable neighbourhoods will often also include increased planting and street greening.

Liveable neighbourhoods improve people's experience of walking, cycling and using public transport and encourage fewer trips by car. However they are expensive to introduce and the borough needs external financial support to enable their delivery. The borough has a long term aspirational programme for delivering liveable neighbourhoods over the next 15 years.

To identify the future programme for liveable neighbourhoods, a wide range of issues are considered. These include local health issues, poor air quality, local connectivity and high indices of multiple deprivation.

2.3.3 Public realm improvements

Harrow and Wealdstone Intensification Area will be the focus for growth in the borough. Wealdstone and Station Road will become the focus of regeneration efforts, providing for a substantial proportion of the Borough's future housing growth. Growth areas will be accompanied by large scale public realm improvements. These public realm improvements will include an improved walking environment that considers safety, accessibility, signing, seating, street greening and lighting etc.

2.3.4 Legible London

Legible London is a wayfinding project designed to provide better information throughout London for people who walk. The signs offer a consistent experience and information about distances between areas. The signs are also well integrated with other transport modes, so when people are leaving the tube they can quickly identify the route to their destination.

Legible London maps and signs help people find their way by detailing the landmarks they'll pass on their journey and estimate the time it will take to reach their destination. The signs are orientated to face the same way as the user is facing. This helps people understand their immediate environment more easily.

Harrow began rolling out Legible London in the borough in 2013. So far it covers all the underground and overground stations in the borough, all the town centres including Harrow, Wealdstone, Pinner, Stanmore, Hatch End, West Harrow, North Harrow, South Harrow, Sudbury Hill and Headstone Manor. As the signs are rolled out they encourage residents and visitors to the borough to walk more and to further explore local areas.



Previously the signs were supported financially by TfL funding. This will no longer happen and future support for these schemes will be dependent on receiving S106 funding from developers as part of the planning approval process.

2.3.5 Preventing parking on verges and footways

Parking on verges and footways anywhere in London is illegal, unless adjacent signs indicate otherwise. Doing so is obstructive to pedestrians, blind people, those with mobility difficulties and to people with pushchairs. It also causes additional maintenance costs, environmental damage and risk of infrastructure damage. Driving onto the pavement or footway (to park or otherwise) is an offence under Section 72 of the *Highways Act 1835*.

There are a few locations across the borough where regular and illegal footway parking has occurred. This was the result of the high number of cars needing to park in densely populated locations. There are some locations in the borough where footway parking is allowed. At these locations, marked bays are shown on the footway and it is clearly signed as such. Parking on footways or verges across the borough has been reviewed and in the future will be better enforced to ensure that the pavements and verges are kept clear for pedestrians and those with mobility difficulties.

2.3.6 Improving pedestrian access to green spaces

Green spaces provide social, environmental, and economic benefits which both directly and indirectly enhance an individual's quality of life. Access to green space improves quality of life and general well-being, aids in the treatment of mental illnesses, can reduce health inequalities, help remedy depression and generally improves the physical and mental health of individuals.



Rights of way

The borough's countryside comprises green belt, open spaces and parks. Harrow's rights of way run through much of these green areas. Rights of way in Harrow include footpaths, bridleways and byways. An annual survey is undertaken to review the condition of the rights of way and to identify remedial actions needed. Issues identified include extending the rights of way network to include new routes and also improving the overall accessibility of the network to all users, particularly those with mobility difficulties. Typical measures to improve the rights of way include way marking signage, handrails, seating along long routes, new rights of way and replacing stiles with kissing gates to improve accessibility.

Green grid

The Green Grid is a network of interlinked, multi-purpose open and green spaces with good connections to the places where people live and work. The Harrow Green Grid is part of a wider London Green Grid, and includes projects that will help develop and improve the network.

The All London Green Grid (ALGG) is a strategic project which provides a framework for the creation, enhancement and management of multifunctional green and open spaces across the whole of Greater London. It is an important initiative in facilitating green infrastructure projects across the capital.

The ALGG aims to:

- increase access to open space
- conserve landscapes and the natural environment and increase access to nature
- adapt the city to the impacts of climate change

- make sustainable travel connections and promote cycling and walking
- encourage healthy living
- promote sustainable food growing
- enhance visitor destinations and boost the visitor economy
- promote green skills and sustainable approaches to design, management and maintenance

Green grid funding is usually provided through Section 106 funding or CIL funding as part of the planning process.



2.3.7 Road maintenance

Poor road conditions can deter people from walking and can also be dangerous. All of Harrow roads and pavements are inspected regularly by a team of Highways Inspectors.

The council has put in place a system for reviewing and prioritising all highways maintenance defects to ensure resources are used in the most effective way through two main areas of work:

- Reactive maintenance which deals with immediate risks to the public from minor defects and,
- Structural maintenance which addresses large scale refurbishment due to significant deterioration of the highway structure.

Reactive repair works

All footways and carriageways in the borough are inspected by the council's highway inspectors on a cyclical routine inspection regime, between three and four times a year. As a result of these inspections localised minor works and repairs are implemented where a defect exceeds the council's intervention levels, and is considered to be a potential hazard to pedestrians or vehicles. This work is aimed at keeping the highway asset condition safe for the travelling public and complies with national guidance set out in the "Well Managed Infrastructure Code of Practice".

The public can also report defects that they see and the highway inspectors will undertake additional safety inspections to investigate these reports and implement repairs where the intervention levels are met.

Structural maintenance programmes

Major work programmes are developed on the basis of annual condition surveys undertaken to an agreed UK pavement management assessment system undertaken by specialised highway surveyors. The surveys are reviewed by the Council in accordance with the principles of the Council's highway asset management strategy to determine the maintenance priorities for the year. As far as practicable the Council produces a targeted programme of works that takes account of the condition surveys, traffic usage, reactive maintenance history and any other identified risks. The aim is to achieve the maximum benefit from the resources available so that the longevity of the highway is maximised and the speed of deterioration and any future maintenance costs are minimised. There are two main structural maintenance programmes, one for carriageways resurfacing and the other for footways reconstruction.

2.4 Walking objective 2: Improve the perceived and actual safety of pedestrians

Harrow has an excellent record in road safety and is one of the safest boroughs in London. However, busy roads, junctions and high-speed traffic all impact pedestrian safety and perceptions of safety and discourage walking.

One of the most effective ways of improving pedestrian safety is reducing vehicle speeds. Even at a relatively low impact speeds, pedestrians receive more severe injuries than many other road user groups, when involved in collisions, because often their only protection is their clothes.

The Council provides road safety courses at Harrow schools and more information on these is provided in the School Sustainable Mode of Travel strategy.

Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and the work identified in this section, all contribute to Harrow's vision zero approach to road safety.



2.4.1 20mph zones

20mph zones create a safer environment for all road users. They not only improve the safety of an area, but also improve the perception of safety.

Harrow has introduced 20mph zones around most of the schools in the borough. A few of the schools in the borough are located in areas where it is not possible to introduce a 20mph zone such as being located by a main road. Figure 2 shows schools in the borough as well as the existing 20mph zones in the borough. Around 50% of the road network in the borough is covered by 20mph speed restrictions and the borough will work to increase this.

Harrow 20mph zones are designed to be "self-enforcing" due to traffic calming measures which are introduced along with the change in the speed limit. Speed humps, chicanes, road narrowing, and other measures are typically used to both physically and visually reinforce the slower speed limits.

The main aims of the introduction of a 20mph speed limit in an area are to:

1. improve road safety
2. discourage passing through traffic
3. encourage walking and cycling
4. improve the local environment

Before and after site surveys such as speed surveys are undertaken to monitor the impact of the measures introduced. The borough shares recorded speed survey data with the police at quarterly traffic liaison meetings so they can decide whether they should target their resources to the area.

2.4.2 Local safety schemes

Local Safety schemes form part of the Mayor of London's vision zero transport strategy for deaths and serious injuries to be eliminated from all road collisions on London streets by 2041. They are introduced to reduce casualties in any area where clusters of accidents occur.

Pedestrians crossing roads are particularly vulnerable when involved in accidents with motorised vehicles, particularly when vehicles are travelling at speed. The types of improvements that can be made to improve safety for pedestrians in these schemes are: improved and new crossing facilities such as Countdown times, Zebras, Pelican, Puffin and Toucan crossings, or all red phased signalled crossings; traffic speed limit signs; vehicle activated traffic speed signs; improved lighting; and changes to parking regulations to improve visibility for pedestrians.



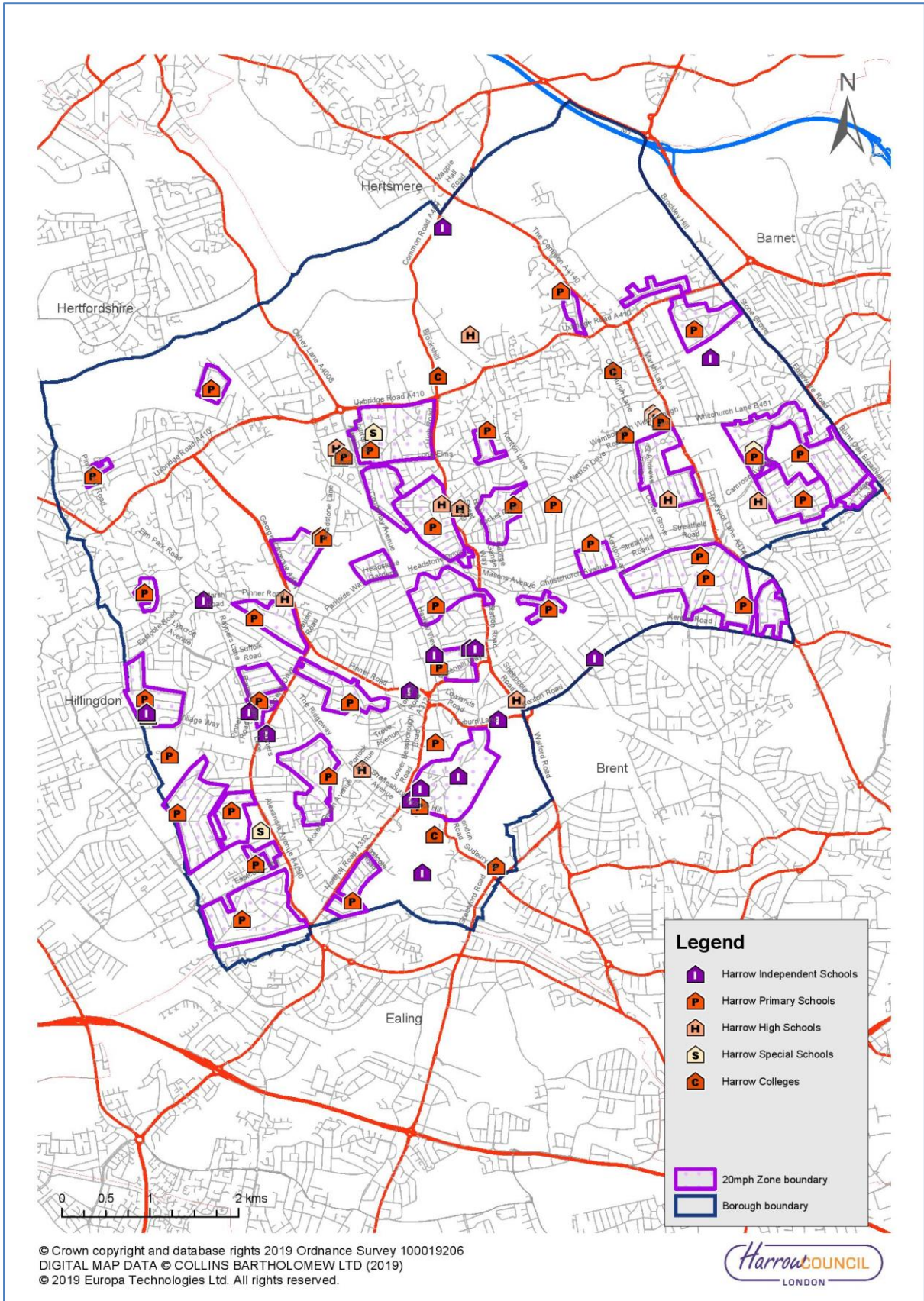
2.4.3 Local safety parking schemes

Local safety parking schemes are introduced to improve local pedestrian access and also to protect dropped crossings. These schemes often also improve visibility for road crossings and may involve changes to road markings or operational hours of controlled parking bays.

2.4.4 Community roadwatch

Community roadwatch is a scheme that gives local residents the opportunity to work side by side with their local police teams and use speed detection equipment to identify speeding vehicles in their communities. Warning letters are issued where appropriate, and the information can help to inform the future activity of local police teams. Community roadwatch events happen throughout the year at various sites across the borough where requests for speed enforcement have been received by the public.

Figure 2: Schools and 20mph zones in Harrow



2.4.5 Pedestrian crossings

The types of crossings available in any location, impact on pedestrian safety and also on pedestrian perceptions of safety. Road junctions and crossing points are, by definition, locations where conflicting movements between motor traffic, cyclists, pedestrians and mobility impaired users are concentrated. The type of crossing introduced at any location is chosen based on the local environment, the pedestrian and cycle flows and also traffic volumes and speed. Replacing any crossing facility has cost implications and for this reason, crossings in Harrow are primarily replaced where a need based on safety or improved accessibility has been identified.

Countdown timers

Pedestrian countdown timers show the amount of time left to cross the road before the red man appears. This allows pedestrians to decide if they have enough time to cross the road. The countdown display is shown on the opposite side of the road, next to the green and red man signals. After the green man has signalled to pedestrians to start crossing the road, there is a 'blackout' phase where no pedestrian signals are shown. During the blackout phase, the countdown begins, ending with a red man pedestrian signal. The duration of the countdown varies depending on the signal timings at the junction.

The advantages of these timers are as follows:

- Pedestrians feel less rushed when crossing
- Gives more confidence to mobility impaired pedestrians, who may cross more slowly
- Pedestrians who didn't see a green man signal can decide if they have enough time to cross the road
- Some installations can result in a small reduction in delay to motorised vehicle traffic

Harrow is reviewing all controlled crossings at junctions for suitability for introducing countdown timer crossings and will introduce these where deemed most beneficial in terms of safety benefits.

Zebra Crossing

Zebra crossings have two sets of flashing amber beacons. They have an area of road between them that's painted in black and white stripes. Drivers are legally obliged to give way to pedestrians waiting to cross. Failing to give way to pedestrians is a criminal offence that can result in points on a driving licence, or on a provisional licence.



Pelican Crossing

Pelican crossings use buttons, lights and sounds to allow pedestrians to cross the road safely. Pelican is short for Pedestrian Light Controlled Crossing. Pelican crossings differ from Zebra crossings in that the flow of traffic is controlled by traffic lights. Pedestrians waiting at a Pelican crossing are able to press a button that changes the traffic lights to red after a timed delay.

Puffin Crossing

At Puffin crossings the red and green man aspects are housed on the pole as part of the push button unit instead of on the far side of the road. This gives the waiting pedestrians a good view of

approaching traffic as they wait for the green man signal. A Puffin crossing has its sequences controlled by sensors mounted on the lights, rather than a timer.

Puffin is short for Pedestrian User Friendly Intelligent crossing. The crossing operates in a very similar way to the Pelican crossing, however they are fitted with smart sensors. These can tell when the crossing is clear to release the traffic with a green light, or when a pedestrian may be taking longer to cross the road and so can hold the traffic at a red light a little longer. If a pedestrian walks away without crossing the road, before the green man is shown, then the pedestrian demand is cancelled and the traffic signals stay at vehicle green. As a result, a Puffin crossing is more efficient for both pedestrians and traffic.

Toucan Crossing

Toucan crossings are designed so both pedestrians and cyclists can safely cross a road side-by-side. Apart from the addition of a cyclist crossing they are almost identical to Puffin crossings. They are slightly wider in order to accommodate both pedestrians and cyclists together. On the newer Toucan crossing installations the crossing time is determined by on-crossing detectors like at a Puffin crossing.

Pegasus Crossing

Also known as an Equestrian Crossings, Pegasus crossings are designed for pedestrians and horses to cross the road safely together. These are not currently used in the borough.

2.5 Walking objective 3: Improve health of borough residents by promoting healthy walking and encouraging active travel and recreational walking

People living in traffic-calmed environments feel safer and use public space more often. A safer environment means that children are more likely to be allowed outside on their own, where they will play for longer, and their physical activity will increase.

The borough encourages walking to school through the development of school travel plans. These plans include supporting and promoting events such as local walking campaigns, Walk on Wednesdays, Theatre in Education and encouraging school walking buses.

2.5.1 Walking for health

Harrow provides free Health Walks for local residents with an opportunity to walk regularly in a relaxed and friendly environment and enjoy some of Harrow's green spaces. The walks are varied in length and level and are all led by qualified and insured volunteer walk leaders, who encourage participants to walk at their own pace. Around 300 people every month participate in the walks. These walks are free and are advertised on the Harrow website and also at libraries and doctors' surgeries. Walks often start at schools, train stations and GP surgeries and provide



people with a social way to enjoy walking.

School walking bus

A walking school bus is a group of children walking to school with one or more adults. The aim of the walking school bus is to encourage children to walk to school together. Walking buses help to promote road safety, health and exercise however they also often reduce absence levels and improve attendance. School walking buses are dependent on support from local parents and staff and for this reason are often hard to keep going. In several schools across the borough school walking buses have started but have not managed to maintain ongoing support.

2.5.2 Walk Once a Week (WOW)

WOW is Living Streets' year-round walk to school challenge. Pupils record how they get to school each day on the interactive WOW Travel Tracker and those who walk (skate, scoot, cycle or Park & Stride!) at least once per week for a month are rewarded with a themed badge. In the future, the information will be recorded on the Internet via traveltracker.org.uk. WOW is aimed at changing the habits of children's travel on the school journey in hope that the children and parents will learn from a small change in the way they travel once a week to changing their behaviour further. The programme is aimed at ages 4-11 children in key stages 1 and 2.

2.5.3 International walk to school month

International Walk to School Month is held in October every year in a bid to promote the health and environmental benefits of avoiding cars. Schools across the world join forces to promote walking to schools and raise awareness of environmental issues. The aim of the month is to promote fun events and activities and to raise awareness about walking to school. It gives children, parents, school teachers and community leaders an opportunity to be part of a global event as they celebrate the many benefits of walking. Walkers from around the world walk to school together hoping to create communities that are safe places to walk.

2.5.4 Theatre in education

Theatre in Education provides a theatre production across selected primary schools in the borough and aims at encouraging sustainable travel for the children through an interactive experience. The show lasts for under an hour, it is a high energy enthusiastic show which is then followed by an interactive game to ensure that the children have understood the issues raised in the play. Issues raised in the play include:

- Car sharing
- Public transport
- Walking
- Fuel pollution
- Climate change
- Walking and cycling being fun, healthy and sociable
- Basic road safety

This play is always well received by schools, teachers and children.

2.5.5 School active travel maps

Active travel maps are provided to all schools in the borough to help pupils and parents choose sustainable, safe and healthy ways to travel to school. The maps show the sustainable travel options available to each school and are tailored to include:

- local public transport facilities (e.g. tube and train stations, and bus route information) – showing which bus routes travel on roads close to the school.

- 5 and 10 minute walking zones – showing approximate 5 and 10 minute walking distances from the school site.
- cycling route information – roads are colour-coded to Bikeability training and confidence levels to enable cyclists to plan routes according to their individual cycling abilities
- school keep clear markings and park entrances

The maps can be used by anyone travelling to the school including pupils, parents, staff and visitors. The maps are also available on Harrow’s website and have been designed for display in a highly visible location in the school such as notice boards and school foyers.

2.5.6 Active Harrow Strategic Group

Traffic and Highways are part of the Active Harrow Strategic Group. Active travel initiatives are promoted with this group and with other council and community and voluntary sector partners. The strategic group is also developing a multi-agency focus on two geographical areas of higher obesity and physical inactivity in the borough; an action plan will be developed to promote community led opportunities to be more active in South Harrow and a Superzone pilot based in Wealdstone which will look at a whole system approach to improving the health of the urban environment.

2.5.7 Walking campaigns and promotions

Various walking campaigns and promotions are run throughout the year including walk once a week, international walk to school month and theatre in education. Many of the campaigns involve school competitions linked to events such as road safety week.

The Living Streets Walk to School campaign is aimed at encouraging more parents, children and young people to make walking to school part of their daily routine. The Council supports this by providing schools with additional Living Streets resources to engage pupils in the campaign such as badges for reaching specific targets, wall charts to enable classroom discussions, calendars, T-shirts, pencils and certificates for participating.





Car owners in London are **2 – 3 times less** likely to do **half an hour of activity** in a day than those who don't own cars

Nearly **1/2** of car trips made by London residents could be **cycled** in around **10 minutes**



More than **1/3** of car trips made by Londoners as a driver or passenger could be **walked** in **under 25 minutes**

2/3 of car trips made by London residents could be **cycled** in under **20 minutes**



Only **1/3** of car trips are longer than **5km**. Some of these could be **cycled** in around **20 minutes**

2.6 Delivering the walking objectives

The long-term targets for walking that were agreed as part of LIP3 are shown in Table 3.

Table 3: Long term walking targets

Long term targets	Latest available data	Target and year
Physical activity - all Londoners to do at least the 20 minutes of active travel they need to stay healthy each day by 2041	2014/15 to 2016/17 25%	2041 70%
Mode share of all trips to be made on foot, by cycle or using public transport	2014/15 to 2016/17 48%	2041 64%

Table 4 shows the targets that will be used to measure the delivery of the walking objectives.

Table 4: Walking targets to deliver objectives

Walking objectives	Targets to monitor progress	Current status	Target and year
Improve the quality and experience of walking throughout the borough	Delivery of Wealdstone Square, Greenhill Place and Harrow Square	Wealdstone Square is currently being built	2021
	Maintain current urban tree stock levels		2021/22
Improve the perceived and actual safety of pedestrians	Increase proportion of network covered by 20mph speed restriction to 60% by 2021/22	50% of road network covered by 20mph restrictions in 2019	60% by 2021/22
	Introduce countdown crossings to 20% of all controlled crossings	10% of all controlled crossings are currently countdown crossings.	20% by 2021/22
	Reduce pedestrian KSIs to 15 KSIs by 2022	28 pedestrian KSIs in 2017	15 pedestrian KSIs in 2022
	Reduce number of vulnerable road user KSIs to 28 by 2022	50 vulnerable road user KSIs in 2017	28 vulnerable road users in 2022

Walking objectives	Targets to monitor progress	Current status	Target and year
Improve health of borough residents by promoting healthy walking and encouraging active travel and recreational walking	75% of children using sustainable modes to travel to school by 2020/21	65% based on latest hands up surveys	75% by 2020/21
	Provide cycle training for over 1500 children per annum	1026 children trained in 2018/19	1500 per year
	Maintain at least 20 health walks a week	20 health walks each week	Annual

2.7 Funding the walking action plan

Table 5 shows the key funding sources used for Harrow walking initiatives.

Table 5: Key funding source for walking initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Walking objective 1: Improve the quality and experience of walking throughout the borough					
Local walking schemes	✓				
Liveable neighbourhoods		✓			
Public realm improvements			✓		✓
Legible London	✓		✓		
Preventing parking on verges and footways				✓	
Rights of Way			✓	✓	
Green grid			✓	✓	
Road maintenance				✓	
Walking objective 2: Improve the perceived and actual safety of pedestrians					
20mph zones	✓		✓		
Local safety schemes	✓		✓		
Community roadwatch	✓				
Pedestrian crossings	✓		✓		
Walking objective 3: Improve health of borough residents by promoting healthy walking routes to school and encouraging active travel including recreational walking for all					
Walking for health	✓			✓	
School walking buses					
Walk Once a Week	✓				
International walk to school month	✓				
Theatre in education	✓				
School active travel maps	✓				
Active Harrow strategic group					
Walking campaigns and promotions	✓				

2.8 Walking Action Plan

Table 6 shows the borough walking action plan and how the agreed borough LIP3 policies fit with the new walking objectives. The table also shows the outputs to be delivered relating to each policy.

Table 6: Walking action plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Walking objective 1: Improve the quality and experience of walking throughout the borough		
Ensure that all aspects of the walking environment including links to parks and open spaces are effectively considered when delivering works for liveable neighbourhoods and corridor schemes (W9)	These are all dependent on TfL funding. However programme is as follows: Harrow and Wealdstone 2020-2025 Rayners Lane 2022-2027 Stanmore 2024-2029 Edgware 2026-2031 South Harrow 2028-2033	2021-2033

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale										
Improve the environment for pedestrians and cyclists in the whole borough and particularly within the Harrow Opportunity Area (R11)	<p>Local Safety Schemes to be introduced by 2019/20:</p> <p>Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow</p> <p>Further locations will be selected based on KSIs.</p> <p>Delivering liveable neighbourhoods. However these are all dependent on TfL funding. The proposed programme is as follows:</p> <table border="0"> <tr> <td>Harrow and Wealdstone</td> <td>2020-2025</td> </tr> <tr> <td>Rayners Lane</td> <td>2022-2027</td> </tr> <tr> <td>Stanmore</td> <td>2024-2029</td> </tr> <tr> <td>Edgware</td> <td>2026-2031</td> </tr> <tr> <td>South Harrow</td> <td>2028-2033:</td> </tr> </table> <p>Additional walking schemes</p>	Harrow and Wealdstone	2020-2025	Rayners Lane	2022-2027	Stanmore	2024-2029	Edgware	2026-2031	South Harrow	2028-2033:	Ongoing
Harrow and Wealdstone	2020-2025											
Rayners Lane	2022-2027											
Stanmore	2024-2029											
Edgware	2026-2031											
South Harrow	2028-2033:											
Improve access to Harrow’s green spaces and historic areas and improve pedestrian walkways that use and link existing parks and open spaces with the town centre and transport interchanges (W10)	Increased green grid and rights of way improvements	Ongoing										
Improve pedestrian linkage between Harrow town centre and Harrow on the Hill station (W11)	Reengineer the public realm as part of developments within the town centre area											
Prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is prioritised (SI10)	<p>Reduction in illegal parking on footways and verges</p> <p>Review of parking strategies to develop policies to reduce the amount of illegal parking on footways and verges</p>	Ongoing										

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Consider the provision of additional seating in all new schemes to benefit the needs of those with mobility difficulties, giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes (SI6)	Additional public seating provided – most likely to be part of major public realm squares	Ongoing
Improve pedestrian and cycle wayfinding across the borough and work with TfL to expand Legible London in Harrow (R4)	Subject to funding, Legible London to be extended as follows: Rayners Lane area 19/20 Sudbury area 21/21 North Harrow area 21/22 Queensbury area 22/23	2020-2023
Increase the amount and variety of trees and plants across the borough's open spaces and within streetscapes (PR6)	More trees planted than removed as part of new transport schemes	Ongoing
In all liveable neighbourhoods schemes the borough will consider planting and street greening to provide shade and shelter and to create a more attractive environment, the potential reallocation of road space to benefit sustainable transport, as well as road traffic restrictions and the possible introduction of play streets (R2)	More street planting and greening	Ongoing
Walking objective 2: Improve the perceived and actual safety of pedestrians		
Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school (RS6)	20mph zones at the following locations: Clitheroe Avenue, Rayners Lane, Kingshill Avenue – all to be introduced by 2019/20. Further locations will be selected based on agreed criteria.	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Prioritise schemes that maximise casualty reduction predictions and pose the highest risk to vulnerable road users and in particular the numbers killed and seriously injured per annum for the available finance (RS3)	Local Safety Schemes to be introduced at following locations: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow – all to be introduced by 2019/20 - Further locations will be selected based on KSIs.	Ongoing
Provide road safety education events at schools and colleges throughout the borough (S9)	Delivery of Theatre in Education and Community Roadwatch Reduced casualties for pupils on school journeys	Ongoing
Work with the parking service and police to enforce and promote safe driving and parking in school zones (RS7)	Improved enforcement activity at schools and modal shift to sustainable transport	Ongoing
Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths (RS22)	Engagement with Harrow Safer Neighbourhoods Teams. Increased public enforcement of cycling on pavements	Ongoing
Walking objective 3: Improve health of borough residents by promoting healthy walking routes to school and encouraging active travel including recreational walking for all		
Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment (W1)	Increased number of schools with active travel plans Increased number of journeys to school made by active transport	Ongoing
Work with schools to set up additional school walking buses (W3)	This is part of school travel planning process. More school walking buses	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Encourage recreational walking as well as active walking as a mode of transport and support national walking campaigns (W2)	Increased participation in borough Health Walks including maintaining 20 walks a week Improved walking environment throughout borough but particularly in Opportunity Area	Ongoing
Promote the Walk London network and new leisure routes through Harrow's extensive green areas (W6)	Increased participation in borough Health Walks including maintaining 20 walks a week	Ongoing
Work with the Active Harrow Strategic Group to promote active and sustainable travel (W5)	Increased active travel and active travel events	Ongoing
Work in partnership with Public Health to promote walking and the Walking for Health scheme (W4)	Increased participation in borough Health Walks	Ongoing

3. Cycling

Increasing the take up of cycling in the borough will improve the health of all those participating, could reduce traffic congestion, traffic noise and air pollution and could also help address climate change. Unfortunately, the number of people choosing to cycle in Harrow is currently low and Harrow was ranked the lowest of the 33 London boroughs for residents who cycle to work in the 2011 census.

Despite the low take up of cycling, Harrow has been identified as an area where there is considerable scope to increase cycling and it has been estimated that there are a potential of 228,100 cyclable trips in the borough. This is a challenge for the borough. Encouraging more trips to be cycled will be done through improving the safety of cycling in the borough, training more people to cycle with confidence, improving cycle links across the borough, providing more facilities to support cycle journeys and also focussing on encouraging cycling for shorter journeys that are currently made by car.

Most cycling in London is undertaken by people who cycle regularly, and the majority of the population do not do this. Across London, people who currently cycle are more likely to be white, male and earning more than £20,000 each year, suggesting that the barriers to cycling are felt more acutely by women, BAME (black, Asian and Minority Ethnic) people and those earning less than £20,000 each year. Harrow's population is very ethnically diverse and more needs to be done to encourage all of society but in particular women and BAME groups in Harrow to cycle more.

Interventions used to increase cycling among under-represented groups include behaviour change and marketing campaigns and activities with schools through the STARS accreditation programme. TfL also delivers a programme of cycle grants to help communities and not-for-profit groups across London to develop initiatives targeting people who may not otherwise ride a bike (e.g. cycle training, guided rides, bike loans).

Across the borough a network of cycle routes currently provides a total of 41km cycle lanes. This represents around 10% of the Harrow road network.



This strategy has been developed to show how Harrow is working to improve the environment for cycling and encouraging everyone to cycle more. The plan supports the Harrow Transport Local Implementation Plan 2019/20 - 2021/22 (LIP3) by providing more details on the work that Harrow is doing.

3.1 Cycling vision

Harrow's vision for cycling is for the borough to be one where more people choose to cycle more often; where cycling is widely considered to be enjoyable, safe, practical, convenient and accessible; where cycle routes provide improved connections and faster trips to more destinations, where people of different ages and backgrounds cycle with confidence and where cycling in the borough is a normal every day transport option to choose to go to school, work, shop, visit friends or spend free time and where cycling is the preferred mode of travel for more people particularly for shorter distance journeys.

There is a lot to be done to deliver this vision. A change in attitudes is needed, as well as improvements to the quality and extent of the existing cycling infrastructure across the borough. Delivering this vision will improve the health of those choosing to cycle, potentially reduce levels of diabetes and obesity, improve air quality, reduce traffic congestion and help address climate change.

3.2 Existing cycling targets

Targets are important to ensure that borough progress in delivering sustainable transport can be monitored.

The following targets have all been agreed as part of LIP3:

1. By 2041, 64% of daily trips should be made by foot, cycle or public transport in Harrow
2. By 2041, 70% of Harrow residents will do at least 20 mins active travel each day
3. Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041.
4. By 2041, 51% of Harrow residents will live within 400m of the London-wide strategic cycle network

3.3 Objectives for cycling

Based on Harrow LIP3 and the Mayor's Transport Strategy, the following are the objectives for cycling in Harrow:

1. Make cycling journeys safer
2. Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel
3. Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes
4. Facilitate and support bicycle ownership/access and secure parking

3.3.1 Cycling objectives link to healthy streets

The cycling objectives fit well with the Healthy Streets indicators and this is shown in Table 7.

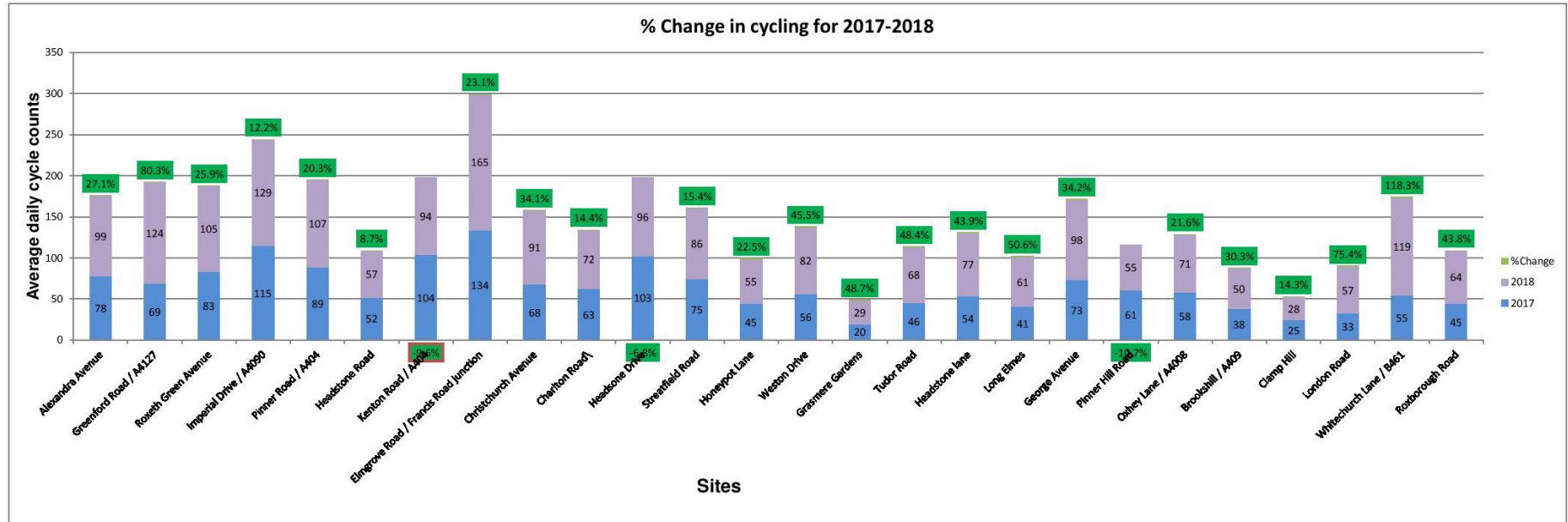
Table 7: Cycling objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Make cycling journeys safer					✓	✓	✓		✓	✓
Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel					✓	✓	✓		✓	✓
Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes					✓	✓	✓		✓	✓
Facilitate and support bicycle ownership/access and secure parking					✓	✓				✓

3.4 Cycle monitoring

In 2017, the borough introduced 26 new cycle counters across the borough at strategic locations. These have been introduced to show the impact of cycling measures introduced in the borough. The cycle counters have shown an average of 27.3% increase in cycling between 2017 and 2018. Figure 3 shows the percentage change at all locations across the borough.

Figure 3: Percentage change in cycling 2017-2018



3.5 Cycling objective 1: Make cycling journeys safer

The number of cycle casualties resulting from road collisions in the borough is low; this is partly as a result of the low number of cyclists in the borough. The main barrier to the take up of cycling is the fear of being involved in a collision.

It is essential to reduce road danger and also the perception of cycle safety. In Harrow this is being addressed through increased cycle training, giving cyclists the confidence they need to effortlessly choose to cycle as well as introducing schemes to address any locations where clusters of cycle casualties have occurred.

Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and the work identified in this section, all contribute to Harrow's vision zero approach to road safety.

3.5.1 Cycle training

Cycle training is an effective way of increasing confidence among adults, children and families, and encouraging more people to cycle. Cycle training is delivered to achieve various levels of bikeability proficiency.

To encourage increased cycling, cycle training is offered to all schools in the borough as well as offered outside the school environment. Cycle training is also facilitated for Special Educational Needs and Disability (SEND) schools providing an extended duration of training and adapted bikes for pupils to participate in training. Some SEND training is delivered within schools and tailored to each school's requirements.



Due to the variation of capabilities, not every child is able to participate. SEND training is also available to adults once requested. Training sessions are tailored to accommodate the requirements of the trainee.

To ensure that those who need to benefit from the health of increased cycling, promotional leaflets are provided across Harrow in doctor's surgeries and libraries, leisure centres, community notice boards, social media accounts/council website, Harrow People Magazine and Annual Council Tax guide promoting the health benefits of cycling and also providing information on how to access cycle training.

All cycle training courses are also promoted via the council website and with schools and businesses in the borough. Anyone who lives, studies or works in the borough is eligible to participate in cycle training. Cycle training courses are free beyond the initial £5 administrative fee. Training courses last approximately 90 minutes and are run throughout the year on Saturdays.

Bikeability training and courses

Bikeability training levels are as follows:

At **Bikeability Level 1** new riders learn to control and master their bikes in a space away from traffic such as a playground or closed car park. Trainees will usually be trained in a group of 2-12, though individual training may also be available.

Bikeability Level 2 takes place on local streets, giving trainees a real cycling experience. Trainees learn how to deal with traffic on short journeys such as cycling to school or the local shops. Trainees are usually trained in small groups – up to 6 trainees per instructor – though individual training may also be available.

Bikeability Level 3 equips trainees with skills for more challenging roads and traffic situations – busier streets, queuing traffic, complex junctions and roundabouts. It also includes planning routes for safe cycling. Level 3 training is delivered one-to-one or in groups of up to 3 so can be tailored to a trainee’s individual needs, such as a route to work or school.

Bikeability trained cyclists receive a badge and a certificate in recognition of the level they’ve achieved. The certificate also includes areas for further practice noted by the instructor.

Approximately 1100 - 1200 children across the borough are trained to bikeability levels 1 or 2 per annum. Bikeability courses are delivered during term time at primary schools for children in year 4 - 6 and in selected secondary schools for year 7 - 8.

3.5.2 Women-only cycle training

The Council provides women-only bike sessions which provide a supportive, social and fun environment for women aged 14+ to build their confidence and fitness. There is no required cycling ability or fitness level. These sessions are for complete beginners, nervous riders and women who are returning to cycling. Women who are not complete beginners can learn to cycle with other women building on their fitness for weekend adventures. Providing these courses encourages women’s uptake of cycling in the borough. The courses aim to build up attendees’ confidence level until they are riding for leisure or even riding for part of their daily commute. Women’s only sessions were introduced to not only encourage more women to cycle but appeal to women that were restricted in engaging in mixed gender activities due to cultural/religious lifestyles.

3.5.3 Balance and Ride courses for children

Learn to Balance and Ride courses take place after school and during school holidays in schools across Harrow. Courses are available for children aged 3-11 years who cannot yet ride a bike on two wheels. During these sessions, free bicycles are provided to children to help them to learn the core fundamentals of cycling. These sessions are free but require prior booking.

3.5.4 Improving bikeability of all routes in Harrow

A road’s bikeability provides information on the local road environment and the extent to which the area encourage cycling. Harrow works to improve the bikeability of all roads in the borough. However resources are focused on improving the identified aspirational network shown in Figure 5.

3.5.5 Local safety schemes

Local Safety schemes form part of the Mayor of London’s vision zero transport strategy for deaths and serious injuries to be eliminated from all road collisions on London streets by 2041. They are introduced to reduce casualties in any area where clusters of accidents occur.

Cycle safety can be addressed in local safety schemes. Three-quarters of collisions with cyclists happen at junctions. The types of improvements that can be made to improve safety for cyclists are: separating cycling from motorised vehicles, providing dedicated cycle lanes or advisory lanes and providing advanced stop lines for cyclists at junctions. Cycling advanced stop lines are designed to allow cyclists to pull away in front of traffic at signals where they change to green.

3.6 Cycling objective 2: Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel

Cycling should be fun. There is a sense of adventure for many cycle trips especially for young cyclists. It is also a sustainable way to travel. Cyclists save money and have more independent lives than those entirely reliant on cars and public transport.

3.6.1 National bike week

Bike Week is an annual opportunity to promote cycling at schools. Various kinds of activities are run during this week that encourage cycling. Most Bike Week events take place within the official event week in June.

3.6.2 Biking fun days

Biking fun days take place during National Bike Week. Biking fun days allows the children in key stage 1 the chance to learn balancing skills using balance bikes. At the end of the day, the whole school is treated to an assembly with a BMX stunt rider who focuses on safer cycling skills.

3.6.3 Biker's breakfast club

This is where a school offers cyclists a free breakfast on arrival at school for those who have cycled to school. This is to reward the cyclists and encourage others to get cycling by highlighting the benefits of active travel. Bikers' breakfasts also offer an opportunity to promote the school's other cycling initiatives and facilities such as cycling clubs, pool bikes, scooter schemes and Dr Bike sessions.

3.6.4 Dr Bike sessions

Dr Bike sessions provide an opportunity for bicycles to be checked over by an experienced cyclist and mechanic. Checks include the bicycle wheels, brakes, gears and tyre pressure, lights, racks, pedals, saddles and more. Minor adjustments can be made to the bike at the session and other issues that can't be fixed on site can be identified. Dr Bike sessions are provided to schools receiving Bikeability training before cycle training commences. This is to ensure that the pupil's bikes are road worthy.



3.6.5 E-bike trial

To encourage staff cycling, together with WestTrans, Harrow, took part in an e-bike trial. The aim of the trial was to see if electric bikes could play a role in shifting staff away from using the car for some shorter journeys to encourage modal shift. The trial involved six e-bikes being loaned to staff for a month at a time, to allow them to develop the habit of cycling to work and encourage them to purchase an e-bike for themselves. 36 staff and teams participated in trialling the bikes during the trial.

Civil Enforcement Officers (CEO) within the Parking Operations Team also participated in the e-bike trial and found that they could carry out some of their duties more quickly by e-bike than on foot. As a direct result the team purchased their own e-bike for use by the CEOs and may purchase additional bikes in the future.

The Council and WestTrans are in discussion regarding extending the trial and establishing whether it is possible to purchase the bikes used at a reduced cost.

3.6.6 School active travel maps

Active travel maps are available for all schools in the borough to help pupils and parents choose sustainable, safe and healthy ways to travel to school. The maps show the sustainable travel options available to each school and are tailored to include:

- local public transport facilities (e.g. tube and train stations, and bus route information) – showing which bus routes travel on roads close to the school.
- 5 and 10 minute walking zones – showing approximate 5 and 10 minute walking distances from the school site.
- cycling route information – roads are colour-coded to Bikeability training and confidence levels to enable cyclists to plan routes according to individual abilities.

The maps can be used by anyone travelling to the school including pupils, parents, staff and visitors. The maps are also available for download on Harrow's website.

3.6.7 Tour de Harrow

The Tour de Harrow is an annual week-long cycling roadshow combined with various cycling activities for adults and children. It was launched to boost the profile of cycling in the borough and aims to increase participation and interest in cycling as well as improving confidence and cycling competency for residents to make regular journeys by bike.

3.6.8 Tour de Salah

Tour de Salah is the largest Muslim cycling event in the UK and introduces cycling to novices within traditionally harder to reach groups. The event has been effective in encouraging more people in Muslim communities to engage in cycling. Participating cyclists cover up to 100km across the capitals iconic landmarks and mosques over one day. This year the Harrow Mosque is part of the route and the event is being promoted across the borough. This event helps to encourage increased BAME people to take up cycling.



3.6.9 BMX cycling facility

Harrow is proposing to construct a brand new BMX cycling facility to transform the lives of young people from disadvantaged communities and encourage the social and health benefits of cycling. The facility will serve the whole community and aims to increase cycling participation with young people from lower social grades and from BAME backgrounds to promote cycling in an exciting and engaging way. The facility will be based within one of the more deprived wards in the borough.

3.7 Cycling objective 3: Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes

New and enhanced cycling infrastructure is required to encourage more people to choose to cycle for commuter, shopping, educational and leisure trips. For new cycle routes in the borough, it is important that they provide new links both to educational institutions and where appropriate through to other boroughs. It is also important that existing and new routes take account of road conditions, local topology and traffic speeds to minimise cycling accidents. Reducing road danger and making Harrow streets more cycle friendly will enable the borough to unlock the existing cycling potential in the borough.

3.7.1 Creating a better cycle network

The existing cycle network in Harrow is integrated into the wider West London cycle network and provides some continuity of cycling to town centres located in adjacent boroughs. Figure 5 shows Harrow's aspirational strategic cycle network. The aspirational strategic network was identified by looking at TfL heat maps to create a network where cycling potential was greatest.



The network links up stations and local centres and as it is developed, the stations will become cycle hubs facilitating easy change between transport modes.

A recent review of the cycle network indicated that there are 50.6 km of on-road cycle routes, 4.8 km of off-road cycle routes and 7 km of Greenway cycle routes (off road routes through parks and green spaces) in the borough.

Harrow strategic cycle network

Harrow aspires to introduce a “tube map” of strategic cycle routes to provide a seamless, convenient and safe network of cycle routes across the borough. Figure 4 shows the connectivity being introduced with the proposed strategic cycle network. Figure 5 shows a further map of the aspirational strategic routes in the borough along with the delivery timetable. When completed, the network will improve connectivity across the Borough and also to key destinations in adjacent Boroughs.

Signage along the Harrow local cycle routes follow the colour codes of the London underground routes. For example the Metropolitan Route has purple signing along the route similar to the colour on the underground, the Jubilee Route is silver the Northern Route will be black etc.

The typical measures undertaken to improve the cycle network include junction improvements, cycle lanes and tracks, advance stop lines, signalised crossings and other crossing points. Funding for cycle lane improvements is predominantly from the TfL LIP programme of investment.

To ensure that improvements to the cycle network are effective, before and after site surveys are undertaken to monitor the impact of the measures to monitor mode shift.

Measures to improve the cycle network are prioritised based on agreed criteria.

Figure 4: Harrow cycling connectivity map

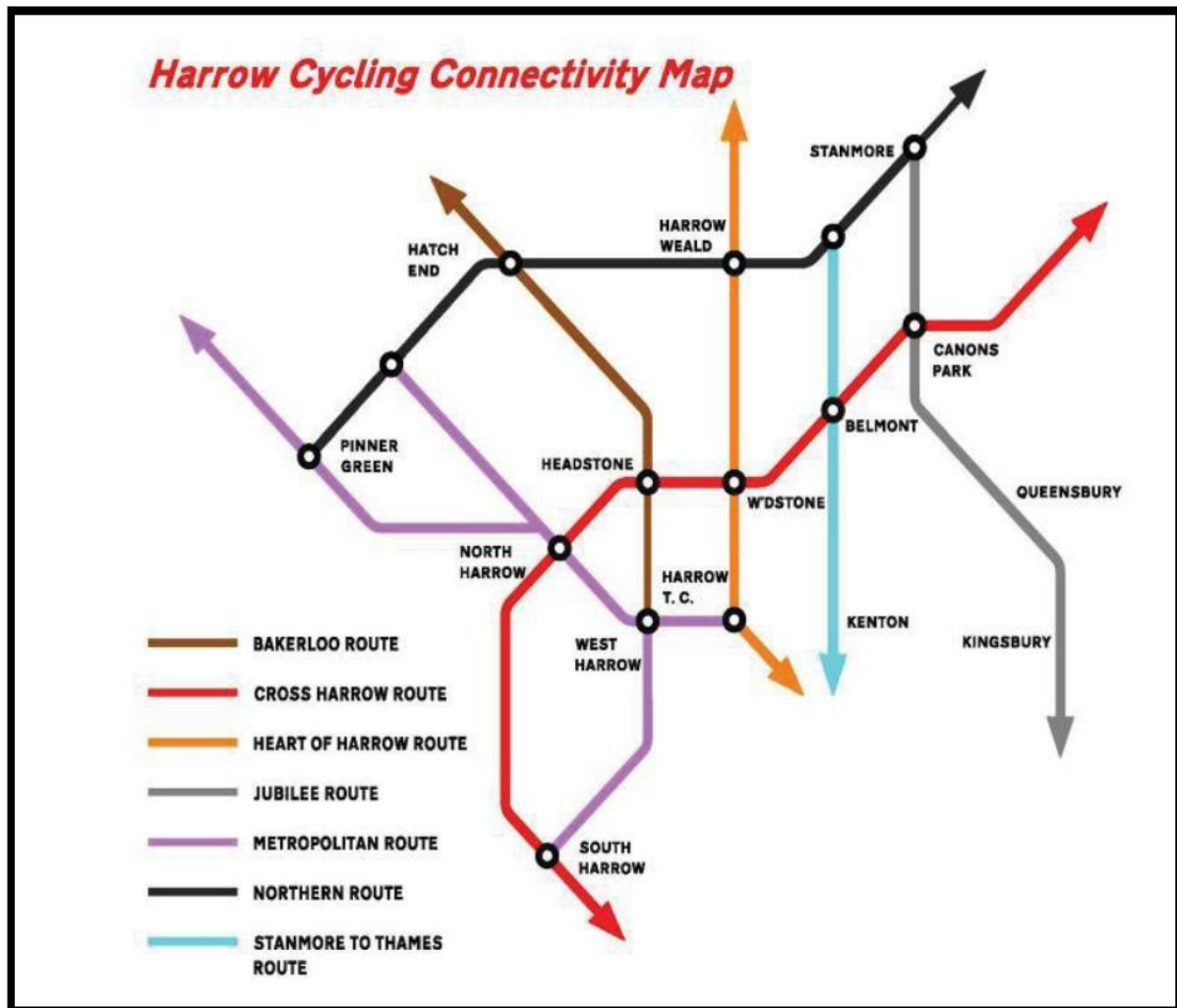
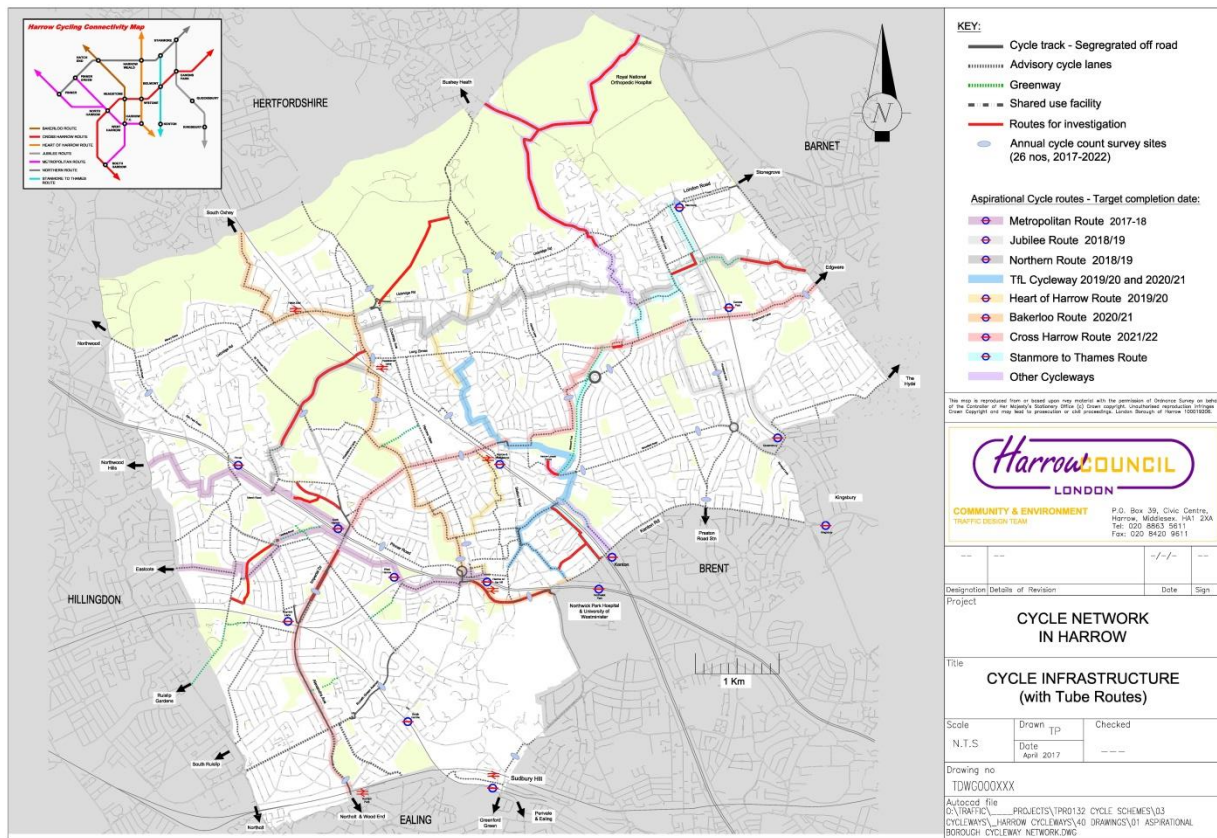


Figure 5: Harrow aspirational strategic cycle network



3.7.2 Harrow TfL Cycleway route

Cycleway³ routes are continuous and convenient cycle routes on less-busy backstreets across London. Cycleway routes are intended to form a network of radial and orbital cycle routes designed to overcome barriers to cycling and target cyclists who want to use quieter, low-traffic routes that provide a more suitable environment for those cyclists who want to travel at a gentler pace.

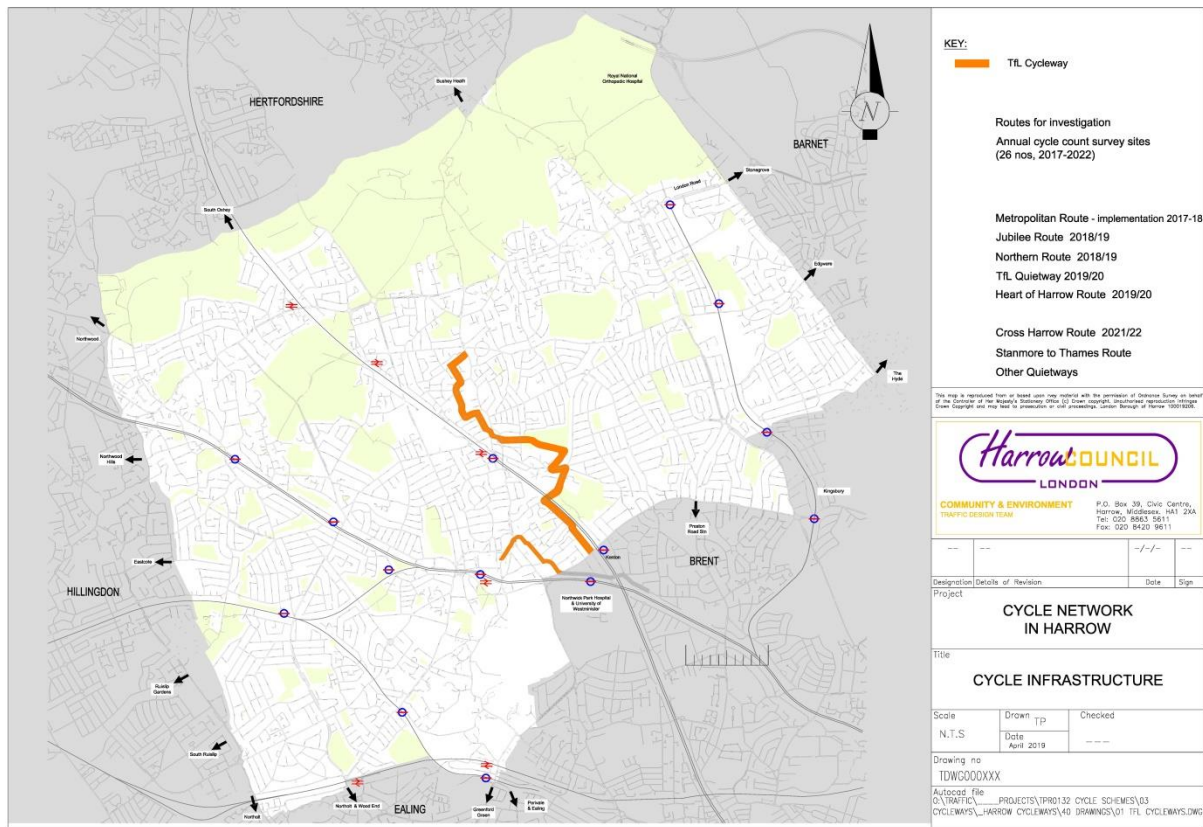
Cycleway routes are clearly marked with purple signs to help cyclists find their way along roads they may never have cycled along before. They are ideal for people who want to cycle on lower-traffic streets, especially if they are new to cycling in London.

A new Cycleway route is proposed in the borough which will link Harrow town centre and Wealdstone town centre via a network of quiet residential local streets to avoid the main heavily trafficked roads. The proposed route will run along a mainly north-south alignment between Harrow Weald and Kenton Road linking with Harrow town centre and passing through Wealdstone town centre for a distance of 6.35 km. The route will also utilise existing off road cycling facilities recently introduced in Station Road between Greenhill Way and Hindes Road. The route development and implementation will be funded by TfL.

Figure 6 shows the proposed cycleway route.

³ Previously known as Quietway routes

Figure 6: Proposed cycleway - Northwick Park to Harrow Weald



3.7.3 Recreational cycle network

To support the aspirational strategic cycling network, Harrow also supports additional cycling routes through parks and open spaces particularly to encourage recreational cycling. An additional green cycling route is proposed through the Kodak site. This route will run from Headstone Manor and crosses Harrow View near the large roundabout, continue through the development into Kodak East, run through the development and then come back out in Headstone Drive. It is being funded by Section 106 money and is estimated to be completed by 2023.

To allow increased cycling through parks, bylaws need to be changed and where possible, Harrow will consider making these changes.

3.7.4 Crossing signals for cyclists

Toucan Crossing

Toucan crossings are designed so both pedestrians and cyclists can safely cross a road side-by-side. The decision to implement a Toucan crossing is based on the numbers crossing and the local traffic flow. Apart from the addition of a cyclist crossing they are almost identical to Puffin crossings. They are slightly wider in order to accommodate both pedestrians and cyclists together. On the newer Toucan crossing installations the crossing time is determined by on-crossing detectors like at a puffin crossing.

3.8 Cycling objective 4: Facilitate and support bicycle ownership/access and secure parking

Safe, secure and weatherproof cycle parking needs to be available at both the start and end of journeys for cycling to even be considered. Cycle parking should be located in a way that avoids disruption to pedestrians, shoppers carrying goods and people with mobility difficulties and is in a

location that is visible to passers-by to limit the potential for theft and damage of bikes and also especially where bikes are likely to be well used.

3.8.1 Borough wide cycle parking survey

Harrow will commission a borough wide survey to identify locations where there is currently insufficient cycle parking. This survey will include the availability of cycle parking at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and will be completed in 2019/20. Following this review, the borough will increase cycle parking facilities to meet any latent demand.

3.8.2 Dockless Cycle Hire Scheme

The Council are considering developing a dockless cycle hire proposal and exploring the viability of a partnership with an existing dockless cycle hire operator to increase the uptake of cycling across the borough.

3.8.3 Electric Dockless cycle hire scheme



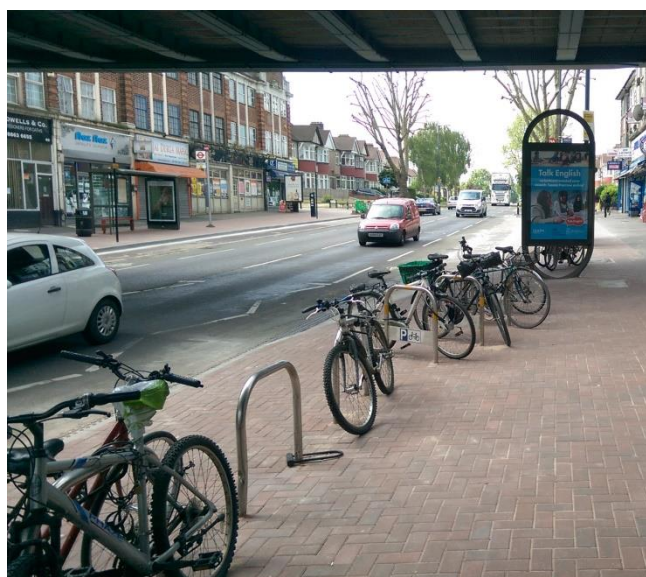
The introduction of electric dockless cycle hire to Harrow is being considered. These would help target the first and last miles of journeys that in many instances may otherwise be undertaken by car. It would also promote cycling as a leisure activity and provide an additional mode of transport for people to access shops, colleagues and local places of interest. This will most likely be progressed in partnership with neighbouring boroughs and an electric bike hire company.

3.8.4 Borrow a bike campaign

In order to encourage the use of bikes and bike ownership Harrow launched a campaign 'Borrow a Bike' to allow those who live, study or work in the borough to loan a bike of their choice over a four week period. During the loan, the participants are required to keep a log of trips/activities completed. At the end of the loan period, participants are able to purchase the bikes and necessary equipment at a discounted price.

3.8.5 Cycle parking

To encourage increased cycling, cycle parking needs to be readily available in local shopping centres, educational places, hospitals, council offices and at other local amenities. Gaps in the provision of available cycle parking spaces will be identified in a borough wide survey in 2019/20 and following this, a programme of additional cycle parking will be introduced.



School and college cycle parking

The Council supports schools by providing some funding for additional cycle parking at schools. When schools update their travel plans, schools identify the level of cycle parking they have. Following completion of their school travel plan, schools are able to apply for small grants funding from TfL to supply more school cycle parking spaces

Station cycle parking

Cycle parking at stations improves the accessibility of underground and rail transport to those living further away from stations and where walking is less practical. It is particularly important for those who are only able to cycle a short part of their overall journey or only feel sufficiently confident enough to just cycle a short distance.

Most stations in the borough have some level of cycle parking available at or near the station, however the quality of cycle parking provided is not always of the same standard. The borough continues to liaise with TfL and Network Rail regarding suitable, secure and increased cycle parking at stations.

Following the cycle parking review in 2019/20, the borough will work towards cycling provision meeting likely demand at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and at more stations further afield.

3.8.6 Cycle hubs

Harrow aspires to provide cycle hubs in Harrow town centre and Wealdstone Town Centres to support opportunities to introduce cycle hire schemes which may have a beneficial impact on increasing the take up of cycling. These would most likely be installed as part of a successful liveable neighbourhood funding bid to TfL. Cycle hubs will also be introduced at adjacent stations along the aspirational strategic cycle network as the network is delivered.



3.9 Delivering the cycling objectives

The long-term objectives for cycling targets that were agreed as part of LIP3 are shown in Table 8.

Table 8: Long term cycling targets

Long term targets	Latest available data	Target and year
Mode share of daily trips to be made by foot, cycle or public transport in Harrow	2014/15 to 2016/17 48%	64% 2041
Physical activity - all Londoners to do at least the 20 minutes of active travel they need to stay healthy each day by 2041	2014/15 to 2016/17 25%	70% 2041
Percentage of Harrow residents to live within 400m of the London-wide strategic cycle network	2016 0%	51% 2041

Table 9 shows the targets that will be used to measure the delivery of the cycling objectives.

Table 9: Cycling targets to deliver objectives

Cycling objectives	Targets to monitor progress	Latest available data	Target and year
Make cycling journeys safer	Harrow has adopted a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041.	Cyclists 2016 32KSIs	0KSIs 2041
Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel	Increase cycling by an average of 5% each year at existing cycle crossing counts	2132 cyclists passing cycle crossing counters in Harrow in 2018	2469 cyclists by 2021/22
	Provide cycle training for over 1500 children and over 100 adults	176 adults trained in 2018/19 1026 children trained in 2018/19	114 adults in 2019/20 1590 children in 2019/20
Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes	Deliver aspiration strategic cycling network Metropolitan route 2017/18 Jubilee route 2018/19 Heart of Harrow route 2019/20 Bakerloo route 2020/21 Cross Harrow route 2021/22	Metropolitan route delivered 2017/18 (6 miles)	2021/22

Cycling objectives	Targets to monitor progress	Latest available data	Target and year
Facilitate and support bicycle ownership/access and secure parking	Provide 50 additional cycle parking stands at strategic locations across the borough each year	700 stands in 2019.	800 stands by 2021/22

3.10 Funding the cycling action plan

Table 10 shows the key funding source used for Harrow cycling initiatives.

Table 10: Key funding sources for cycling initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Cycling objective 1: Make cycling journeys safer					
Cycle training	✓				
Women only cycle training	✓				
Balance and ride courses for children	✓				
Improving bikeability of all routes	✓				
Local safety schemes	✓				
Cycling objective 2: Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel					
National bike week	✓				
Biking fun days	✓				
Biker's breakfast club	✓				
Dr Bike sessions					
E-bike trial	✓				
School active travel maps	✓				
Tour de Harrow	✓				
Tour de Salah	✓				
BMX cycling facility	✓				
Try cycling events	✓				
Cycling objective 3: Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes					
Harrow strategic cycle network	✓		✓		
Harrow TfL Cycleway route		✓			
Recreational cycle network			✓		
Crossing signals for cyclists	✓		✓		

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Cycling objective 4: Facilitate and support bicycle ownership/access and secure parking					
Cycle parking survey	✓				
Dockless cycle hire scheme	✓				
Electric dockless cycle hire scheme	✓				
Borrow a bike campaign	✓				
Cycle hubs	✓		✓		
Cycle parking	✓		✓		

3.11 Cycling Action Plan

Table 11 shows the borough cycling action plan and how the agreed borough LIP3 policies fit with the new cycling objectives. The table also shows the outputs to be delivered relating to each policy.

Table 11: Cycling Action Plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Cycling objective 1: Make cycling journeys safer		
Adopt a Vision Zero approach towards eliminating all road deaths and serious injuries by 2041 (RS1)	Reduced KSIs on Harrow roads Local Safety Schemes to be introduced in 2019/20: Oxhey Lane / Uxbridge Road – Harrow Weald, Alexandra Avenue – Rayners Lane, Pinner Road / Station Road – North Harrow Further locations will be selected based on agreed criteria	Ongoing
Encourage cycling generally and in particular for journeys to school (C4)	Increased number of adults and children cycling Increase in pupils cycling to school Reduced car use, improvements to air quality, health and reduced congestion	Ongoing
Cycling objective 2: Promote cycling as a convenient, safe, healthy secure, inclusive and enjoyable activity and as a sustainable way to travel		
In partnership with WestTrans, trial and introduce dockless cycle hire in the town centre with a view to expanding the service throughout the borough (C8)	Dockless cycle hire throughout borough	2019/20
Promote recreational cycling – but give priority to increasing cycling as an alternative to car use (C3)	Increase in number of adults and children cycling Reduced car use, improvements to air quality, health and reduced congestion	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings (C7)	Maps are provided to all schools as part of school travel planning. These maps are all available for download on Harrow's website.	Ongoing
Introduce measures and programmes to encourage persons from BAME and other statistically cycling adverse groups to take up cycling and to cycle more often (C2)	Increase in women and BAME groups cycling	Ongoing
Cycling objective 3: Improve and extend the borough cycle network and cycling infrastructure to create a comprehensive network of comfortable and attractive cycle routes		
Review the existing cycle delivery plan with a view to expanding the network (C9)	Introduce the following cycle routes: Jubilee cycle route 2018/19 Heart of Harrow route 2019/20 Bakerloo route 2020/21 Cross Harrow route 2021/22 Reduced car use, improvements to air quality, health and reduced congestion	2019-2022
Work with TfL to contribute to delivery of strategic cycle routes including Cycleways (C13)	Conceptual design will start 2018/19 with a view to carrying out public consultation on sections of the route in the summer of 2019. Reduced car use, improvements to air quality, health and reduced congestion	2019/20
Ensure the progressive delivery and maintenance of a high quality of cycle route provision, consistent with London Cycling Design Standards, as well as clear continuity and consistency in design; and ensure that, wherever practicable, provision is designed and implemented to cater for tricycles and bikes with trailers (C10)	Introduce the following cycle routes: Jubilee cycle route 2018/19 Heart of Harrow route 2019/20 Bakerloo route 2020/21 Cross Harrow route 2021/22 Reduced car use, improvements to air quality, health and reduced congestion	2019-2022

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Improve pedestrian and cycle wayfinding across the borough and work with TfL to expand Legible London in Harrow (R4)	Improved wayfinding will occur along with the introduction of the cycle routes as follows: Jubilee cycle route 2018/19 Heart of Harrow route 2019/20 Bakerloo route 2020/21 Cross Harrow route 2021/22	2019-2022
Cycling objective 4: Facilitate and support bicycle ownership/access and secure parking		
Encourage employers to make provision for employees wishing to cycle to a similar standard to that required from new development including the provision of “cycle pools” (C12)	Negotiated through planning applications. More “cycle pools” for employees. Increased cycling	Ongoing
Encourage the delivery of secure and weather-protected cycle-parking at sites generating/attracting significant numbers of cycling trips – most particularly, at strategic interchanges and stations and at local shopping areas; and encourage other authorities with specific responsibilities within the borough to do the same (C11)	Cycle parking review to be completed 2019/20. New cycle parking programme to follow the review	2019/20 onwards
Provide additional cycle parking in schools, review and increase the level of safe and secure cycle parking available across the borough (C5)	More safe and secure cycle parking across the borough and particularly in schools	Ongoing
Review cycle parking at stations, particularly at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and work towards cycling provision meeting likely demand at these stations and further afield (C6)	Cycle parking review to be completed 2019/20. New cycle parking programme to follow the review	2019/20 onwards
Provide and promote cycle training for children and adults who work, study or live in the borough (C1)	Increase in number of adults and children cycling Reduced car use, improvements to air quality, health and reduced congestion	Ongoing

4. Public transport

Public transport is a key contributor to sustainable transport. In Harrow, bus, underground or trains provide the only realistic sustainable alternative to those private car journeys which are impractical on foot or by bicycle especially for longer journeys. To ensure public transport is considered for existing car journeys, it needs to be a more attractive alternative to private car use. This can be achieved in many different ways.



For many people, using public transport often includes an active travel element to their journeys. People using public transport typically do between eight and 15 minutes of active travel a day, compared to less than one minute for those using a car. Half of all walking journeys in London are to or from public transport stations and stops.

Transport for London (TfL) is an executive body of the Greater London Authority and is responsible for implementing the Mayor's Transport Strategy and managing public transport services across the Capital. This includes the management of nearly all buses in London and the London Underground service. TfL also manages all of the traffic lights and signals across London.

There are 37 bus routes, including 5 night bus services, serving areas within the borough and providing links to neighbouring boroughs. Harrow bus station is currently operating over capacity. There are also four London Underground lines and a London Overground line managed by TfL together with several rail services providers which provide important connections to Central London.

4.1 Managing public transport in Harrow

The provision of almost all public transport is the responsibility of TfL who specify bus and underground service levels. Whilst the Council does not have any direct controls over the running of any public transport it does have a key role working in partnership with TfL and the operators regarding improvements to services required. The Council also facilitates improved communication between public transport interest groups, other stakeholders and TfL.

Although the Council has limited direct influence on the running of public transport services, there are many ways the borough can improve public transport in the borough. These include:

- Ensuring bus stops are accessible, usually done through raising kerb heights to enable use by low floor buses
- Providing bus priority measures on the road network such as additional bus lanes, yellow box junctions, bus gates and recommended changes to bus lane operational hours
- Reducing congestion along bus routes by revising parking regulations and improved enforcement
- Liaising with TfL over routes, signals, timetables etc.

4.2 Harrow public transport liaison group

Harrow liaises with TfL, public transport operators and user groups through its regular Rail (including Underground) and Bus and Highway liaison group meetings. The borough works through these quarterly liaison meetings to review and improve standards to improve the attractiveness of bus, underground and rail travel in the borough. Nominated councillors, representatives from TfL, Harrow Public Transport Users Association (HPTUA), London TravelWatch and other stakeholder attend both meetings. London Underground, Rail and bus operators, TfL Bus operations also attend the relevant meetings.

London TravelWatch is the independent, statutory watchdog for transport users in and around London. It is funded by the London Assembly and represents all London transport users on all modes of transport. HUPTA represents the interests of all public transport users who live, work, or travel in Harrow.

4.3 Benefits of buses

Buses can move 70 people in the same amount of space taken up by about three cars. Many trips that people make by car, which they may not want or be able to make by foot or cycle, can be switched to the bus. This frees up street space and reduces the dominance of motor vehicles that can make streets unpleasant and discourage active travel.

Buses help to reduce traffic and therefore make streets safer and easier to cross. They provide essential local transport links, enabling people to reach high streets and town centres and support local economic vitality. For older and disabled people, and those travelling with young children, buses also offer an accessible form of transport. Buses are also one of London's most affordable public transport options and, for many, they are the easiest choice.

4.4 Benefits of Underground & Rail services

Underground and rail services provide the most practical option for travel into central London for most people. They are direct and operate clear of road congestion. These services also provide a practical sustainable alternative to the private car to many destinations outside London.

4.5 Existing public transport targets

The Mayor of London identifies the importance of delivering a good public transport experience as one of the strategic outcomes in his transport strategy. This outcome is to be delivered by 2041 and to achieve this, the Mayor has identified that the following need to be delivered:

- The public transport network will meet the needs of a growing London
- Public transport will be safe, affordable and accessible to all
- Journeys by public transport will be pleasant, fast and reliable

To ensure that Harrow also works towards delivering the Mayoral outcome, the following borough targets, to be achieved by 2041, have been agreed and were included in the Harrow LIP3 :

- 173,000 trips per day made by public transport.
- Achieve a 5 minutes difference between total public transport network journey time and total step free public journey time in Harrow
- Deliver an average bus speed of 12.7 mph

Table 12 shows how Harrow will work towards achieving these targets:

Table 12: Achieving public transport targets

Harrow target	Historic data	Method
173,000 trips made by public transport in 2041	117,000 trips per day were made by public transport between 2013/14 and 2015/16.	This target will be achieved by a combination of programmes and particularly development regulations (parking restrictions) but also as a result of younger people in general being less car-dependent.
Achieve a 5 minutes difference between total public transport network journey time and total step free public journey time in Harrow by 2041	The difference between total public transport network journey time and total step free public transport journey time in 2015 was 12 minutes.	Achieving this target will be dependent on TfL improving the accessibility of stations in the borough by introducing step free access.
Deliver an average bus speed of 12.7 mph by 2041	In 2015, bus speeds were 11.1mph	This will be achieved by bus priority and congestion reduction schemes, traffic signal changes and reduced car use.

4.6 Objectives for public transport

Based on Harrow LIP3, the following are the objectives for public transport in Harrow:

1. Improve the accessibility of the public transport network and ensure increased inclusivity
2. Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use
3. Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs

4.6.1 Public transport objectives link to healthy streets

The public transport objectives fit well with the Healthy Streets indicators and this is shown in Table 13.

Table 13: Public transport objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Improve the accessibility of the public transport network and ensure increased inclusivity	✓			✓		✓	✓			✓
Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use	✓	✓		✓	✓	✓	✓		✓	✓
Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs	✓	✓				✓				✓

4.7 Public transport objective 1: Improve the accessibility of the public transport network and ensure increased inclusivity

Making public transport more accessible and inclusive is critical to delivering a better whole journey experience for people with mobility difficulties and the growing number of older people. However the current public transport system presents a range of barriers to being used by these groups.

Addressing these barriers, to create a more accessible and inclusive public transport system, will enable new trips to be made by those with mobility difficulties and older people, as well as making their current trips easier and quicker. This will improve overall social integration by giving more people a chance to participate in the opportunities that London has to offer and helping to create a more inclusive city.

4.7.1 Bus stop accessibility

Buses are typically the most common form of public transport used by older people, people with mobility difficulties and those travelling with children, or with pushchairs. The entire TfL bus network is now operated using low-floor vehicles. At the passenger's request, low-floor buses can be lowered, or 'kneel' at the bus stop to reduce the step height at stops. This improves accessibility for

all passengers. Mobility impaired passengers, including wheelchair users, benefit most from low-floor buses, however people with pushchairs or carrying heavy shopping also benefit.

Bus stop accessibility improvements include improved signage, lining, hard standing, accessible kerbing and bus stop shelters.

To improve accessibility to buses, the kerb heights of bus stops across London have been raised to ensure that they are suitable for use by low floor buses. Doing this, enables buses to deploy their ramps safely. In Harrow, over 95% of bus stops are accessible for use by people in wheelchairs. Harrow will continue to ensure that stops are suitable for use by low floor buses and prioritise additional work where the bus stops do not comply with the disability discrimination legislative requirements.

4.7.2 Station step-free access

London's tube and rail network is not sufficiently accessible to enable many older or mobility impaired people to travel comfortably. Step-free journeys across the network take longer than those that are not step-free. TfL analysis suggests that journeys by step-free routes take about 15 per cent longer than the quickest route on average across London, although this is considerably higher in areas served by tube lines with few step-free stations.

Improving the accessibility of stations in Harrow is key to improving accessibility but it is also very expensive. The borough actively lobbies TfL to improve station accessibility and works with developers to secure additional Section 106 and CIL funding for work to progress. As a result, step-free access is now being introduced at Harrow-on-the-Hill station and is scheduled to be completed by 2020. This includes one lift on College Rd side and three lifts to platforms. If the development plans progress successfully, then the developer will fund a fifth lift on the Lowlands Recreation Ground side. This improved station accessibility will provide significant improvements regarding the accessibility of Harrow town centre. Further underground step-free accessibility improvements are required at Stanmore, South Harrow and Sudbury Hill Harrow. Stanmore station has some accessibility through the car park but it is far from adequate. Harrow will continue to lobby TfL for the improvements needed.

4.7.3 Accessible parking at stations

As stations become more accessible, it is important that those people dependent on cars for reasons of mobility are able to reach the newly accessible stations. This can only be achieved if appropriate parking is provided in appropriate locations for those with mobility difficulties. The borough will continue to review the existing disabled parking facilities particularly where public transport station improvements have been delivered.

4.8 Public transport objective 2: Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use

The reliability of bus routes can be improved by good design, better managed roadworks and well managed kerbside space through appropriate parking regulations and good enforcement. Introducing appropriate bus priority including additional bus lanes, bus gates, introducing signal reviews, changes to bus lane operational hours and accessible bus stops can all improve the reliability of bus services. The importance and reliability of the bus service is always considered in managing the road network in the borough and enforcement of road traffic, parking and waiting regulations is considered in the interests of improving bus priority.

4.8.1 Bus priority schemes

Bus Priority schemes are introduced to improve bus journey reliability times and the overall public transport experience. New schemes are selected based on information provided from a range of sources including HPTUA, TfL, area studies, ibus data and transport operators. Issues addressed include new bus routes or amendments to existing bus routes, improved accessibility, connectivity and bus journey time reliability. Typical measures introduced as part of bus priority include junction improvements, signalised bus priority, bus lanes, bus routes and bus stop locations, countdown and information systems.

To ensure the bus priority measures are effective, site surveys are usually undertaken to measure the impact of bus journey times before and after new measures are introduced.

Using ibus data and route studies

All 8,000 London buses have now been fitted with iBus, a state-of-the-art system which provides passengers with useful information about their bus service. The on board 'next stop' announcements that the system delivers mean passengers know exactly where their bus is and what the next stop and final destination will be, even on an unfamiliar route. It also allows TfL and bus operators to track the location of every bus in London by time and point. The information provided by ibus is used to determine any problems along a route and where bus priority measures might be introduced.



4.8.2 Wealdstone town centre bus priority

The borough will be introducing a major bus priority scheme in Wealdstone town centre. Planned redevelopment and regeneration will change travel patterns and increase travel demand in the area. There is an opportunity to achieve modal shift to more sustainable travel and enhance the public realm, especially around core retail areas, bus stops, and the train station

An Area Transport Study was undertaken in Wealdstone town centre to assess the impact of the planned population growth. The study identified the need to improve the local bus network service. The planned bus priority measures will reduce bus journey time delays and improve journey time reliability which are both key to accommodating the planned population growth in a sustainable manner. Improvements will also ensure that connections to public transport and interchange opportunities are improved, pedestrian and cycle access to the town centre and public transport services are further developed and that good bus stop accessibility is maintained.

4.8.3 Route 140 and other route studies

WestTrans is a partnership formed of six west London Boroughs, Brent, Ealing, Hammersmith & Fulham, Harrow, Hillingdon and Hounslow. They work with TfL to identify, develop and implement transport projects to the benefit of West London. Part of their work has involved carrying out bus route studies which consider potential improvements that can be made to benefit the entire bus route. Route 140 has been identified as a route where improvements are needed. The route runs from Long Elmes to Heathrow Central and passes through both Harrow Town Centre and Wealdstone. The borough will work with WestTrans to deliver recommended improvements.



4.8.4 Night buses

London's night-time economy accounts for 8 per cent of the city's GDP, contributing around £26.3bn annually and represents 40 per cent of the entire UK night-time economy. It also employs over 700,000 people in London. Night time public transport is therefore important to support London's growing night time economy and also to support those working at night.

Harrow currently benefits from a 24 hour seven days a week service on routes 140, N98 and N18 bus services but a 24 hour service at weekends only on the 183 and 114 service. This means that places such as Kenton, North Harrow and Pinner in the northern and western part of the borough only have a night time bus service on the weekends (to match the night tube service). However, the rest of the week they neither have night tube nor night bus services. Harrow will work with TfL to extend the coverage of night time bus services and improve the frequency and reliability of weekend and late night public transport services to and from Central London.

4.9 Public transport objective 3: Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs

The integration of public transport with other sustainable transport modes is fundamental to improving the whole journey experience. Poor quality stations and poor surroundings reduce the likelihood of regular use of public transport. If there is nowhere to park a bike at a station, no taxis available when using the night time running of the underground network or the access to the public transport system is uninviting then less people will want to change mode to using public transport.

4.9.1 Cycle parking at stations

Cycle parking at stations improves the accessibility of the underground and rail transport to those living further away from stations and where walking is less practical. It is particularly important for those who are only able to cycle a short part of their overall journey or only feel sufficiently confident enough to just cycle a short distance.

Most stations in the borough have some level of cycle parking available at or near the station, however the quality of cycle parking provided is not always of the same standard. The borough continues to liaise with TfL and Network Rail regarding suitable, secure and increased cycle parking at stations.

The borough will review cycle parking across the borough but will initially focus on reviewing cycle parking at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations. Following this review, the borough will work towards cycling provision meeting likely demand at these stations and further afield.



4.9.2 Cycle parking hubs at stations

The provision of cycle parking hubs at stations will help to improve the integration between cycling and public transport journeys. The borough intends to introduce cycle parking hubs at adjacent stations to the aspirational strategic cycle network as the aspirational strategic network is delivered.

4.9.3 Public realm improvements

Harrow and Wealdstone Intensification Area will be the focus for growth in the borough. Wealdstone and Station Road will become the focus of regeneration efforts, providing for a substantial proportion of the Borough's future housing growth. All of these growth areas will be accompanied by large scale public realm improvements. These improvements will also work to improve access to the public transport network.

Old, poorly maintained or poorly lit public transport facilities and their approaches leads to insecurity which is a barrier or at least a disincentive to using public transport and can discourage modal shift away from private cars. It particularly affects those who do not access to their own vehicle as it can limit the ability to travel at all.

Recent public realm improvements like Rayners Lane, Mollison Way, Station Road, Harrow town centre and Sudbury Hill, have not only improved the environment in the immediate area but have improved the accessibility of public transport for all and the efficiency of bus services by reducing congestion.

Planned public realm improvements are focused in the intensification area. These are often supported by S106 or CIL funding by the associated developments. At Harrow on the Hill the proposed residential development will include public realm improvements, step free access and opportunities to improve the transport interchange.

4.9.4 Taxis at stations

The Mayor introduced late night running on Fridays and Saturdays on the Victoria, Jubilee, and most of the Central, Northern and Piccadilly underground lines in London. Arriving late at any station can be difficult if there is no onwards travel available. This can be particularly difficult in a large borough such as Harrow where the final leg of the journey may be too far to go on foot. To support these journeys, the borough will consider extending the taxi rank operational hours where this supports late travel such as the night time running of the Jubilee Line. The borough will also liaise with the Public Carriage Office about improving the overall accessibility of taxi ranks in the borough.

4.10 Delivering the public transport objectives

Table 14 shows the targets that will be used to measure the delivery of the public transport objectives.

Table 14: Public transport targets to deliver objectives

Public transport objectives	Targets to monitor progress	Latest available data	Target and year
Improve the accessibility of the public transport network and ensure increased inclusivity	Percentage of accessible bus stops across the boroughs	98%	98% by 2021
	Improved accessibility of station taxi ranks	Taxi rank stations at Pinner station, Rayners Lane station and North Harrow station reviewed	2019/20
Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use	Delivery of Wealdstone town centre bus priority scheme	Transport Vissim model and business case prepared	2020/21
	Deliver road widening at Pinner Road/Station Road and at High Road/Harrow Weald to enable improved bus priority	Statutory undertakers plant being relocated	2019/20
	College Road bus and cycle only route	Experimental trial in operation	2019/20
	In conjunction with WestTrans and TfL review bus routes to identify future bus priority work	Route 140 reviewed and designs being implemented	Ongoing
Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs	Review cycle parking at stations		2020/21

4.11 Funding the public transport action plan

Table 15 shows the key funding source used for Harrow cycling initiatives.

Table 15: Key funding sources for public transport initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Public transport objective 1: Improve the accessibility of the public transport network and ensure increased inclusivity					
Bus stop accessibility	✓				
Station step-free access		✓	✓	✓	
Accessible parking at stations	✓				
Public transport objective 2: Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use					
Bus priority	✓	✓			
Wealdstone town centre bus priority	✓	✓			
Route 140 study	✓	✓			
Night buses		✓			
Public transport objective 3: Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs					
Cycle parking at stations	✓				
Cycle hubs at stations	✓				
Public realm improvements			✓	✓	✓
Taxis at stations		✓			✓

4.12 Public Transport Action Plan

Table 16 shows the borough public transport action plan and how the agreed borough LIP3 policies fit with the new public transport objectives. The table also shows the outputs to be delivered relating to each policy.

Table 16: Public transport action plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Public transport objective 1: Improve the accessibility of the public transport network and ensure increased inclusivity		
Seek to secure a fully integrated approach to the provision and operation of public transport services within Harrow, including: <ul style="list-style-type: none"> Improving the ease and convenience of approach routes to service access points, and the quality and clarity of the access signing Taking account of the specific needs of people with impaired sight or impaired mobility Improved taxi facilities at rail and underground stations (PT1)	Review of taxi facilities, disabled parking and all infrastructure arrangements at stations	2021/22
In partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the borough are progressively improved with the intention of developing at access points, a fully wheelchair-accessible boarding / alighting points, as a basis for supporting a network of fully wheelchair-accessible scheduled bus services (PT2)	Maintain high level of bus stop accessibility in the borough (currently 98%) and review bus stop accessibility provision in all new developments	Ongoing
Seek to ensure that all stations and bus stop locations in the borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services (SI4)	Increased fully accessible bus stops Improved drop off facilities for disabled people at stations	Ongoing
Liaise with the Public Carriage Office regarding improving the accessibility of taxi ranks in the borough (PT6)	Review taxi facilities in the borough	2021/22

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Support the extension of additional taxi rank operational hours where this supports late travel such as the night time running of the Jubilee Line (PT3)	Later operating taxi rank hours to support tube line	2021/22
Public transport objective 2: Improve the reliability of buses in the borough to encourage modal shift and enable buses to be a viable alternative to car use		
Deploy full range of available bus priority measures ensuring that measures are designed to reduce problems for all modes (PT5)	North Harrow - Complete Pinner Road / Station Road - road widening scheme and High Road Harrow Weald will be introduced in 2019/20 Wealdstone town centre bus priority scheme by 2020/21	2020/21
Work with TfL to assess suggested service improvements for the Heathrow bus link route 140 as well as any additional routes needed to support the proposed Heathrow expansion (PT8)	Route 140 bus priority measures introduced	2020/21
Seek to work with public transport providers and regulators to ensure that engineering works and service closures are coordinated to minimise passenger inconvenience (PT4)	Improved coordination of engineering works	Ongoing
Support improved orbital transport links across the borough and between outer London centres to provide wider access to employment opportunities and to enable journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment (PT7)	Borough support for improvements to route 140 which is an orbital route. Support for the development of the West London orbital Dudding Hill line. However the proposed route is unlikely to have a considerable impact on travel in the borough.	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Ensure that road markings to better enable bus priority enforcement are prioritised in all schemes (PR9)	Improved road marking for bus priority	Ongoing
Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority (PE9)	Better enforcement and improved bus reliability in the borough	Ongoing
Work with TfL and bus operators to ensure adequate off-highway facilities are available for the storage and maintenance of buses at appropriate locations and to ensure that bus stands are appropriately located (PW8)	Additional opportunities to support off-highway facilities identified through public transport user groups	Ongoing
Work with TfL to prioritise available resources to provide the road space and traffic regulatory / management infrastructure to support development of the bus services as well as additional bus services (PW7)	Work with TfL to deliver improved borough bus services	Ongoing
Work with TfL to improve the penetration and expansion of local bus services into every local neighbourhood area – either by extending existing routes or, where necessary, by promoting new routes – this will be subject to the evaluation of the local impact of any additional bus services (PW2)	Work with TfL to deliver improved borough bus services	Ongoing
Persuade TfL to concentrate on continuing to improve public transport service reliability ensuring improved radial and orbital services (PW3)	Improved connectivity to neighbouring boroughs	Ongoing
Work with TfL to improve bus service reliability and to improve orbital bus links between the town centres and major employment locations and to other key destinations within Harrow and neighbouring boroughs (PW4)	Increased employment levels and connectivity to neighbouring boroughs	Ongoing
Work with the key regulators and providers of rail, Underground and bus services within the borough to progressively improve the network in terms of capacity and reliability (PW5)	Improved public transport reliability and improved connectivity particularly to Central London	Ongoing
Build on existing liaison arrangements with those parties responsible for regulating and operating public transport services in the borough – issues discussed will include concerns of public transport users with both TfL bus and all rail operators and will include bus driving standards, bus emissions, driver behaviour, bikes on buses and trains, as well as general service provision (PW6)	Regular public Transport liaison meetings	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Public transport objective 3: Improve public transport integration with all sustainable transport modes and improve the cycling and walking environment at transport hubs		
Review cycle parking at stations, particularly at Harrow on the Hill, Wealdstone, Stanmore and Rayners Lane stations and work towards cycling provision meeting likely demand at these stations and further afield (C6)	Cycle parking review to be completed 2019/20. New cycle parking programme to follow the review	2019/20 onwards
Work in partnership with public transport service providers and regulators to seek to ensure that all stations and bus stop locations in the borough are progressively improved to offer a safe, secure and passenger-friendly environment and appropriate 'state-of-the-art' passenger interchanges, including adequate and secure cycle parking facilities (PW9)	Cycle parking review to be completed 2019/20. New cycle parking programme to follow the review	2019/20 onwards
Support the extension of additional taxi rank operational hours where this supports late travel such as the night time running of the Jubilee Line (PT3)	Increased operational hours for taxi rank supporting Jubilee Line late night running	2021/22

5. Low emission vehicles

Emissions from road transport make the largest contribution to poor air quality in Harrow and this has a detrimental impact on the health of those living, visiting or working in the borough. The use of both petrol and diesel also contributes to climate change. More deprived areas are disproportionately affected by vehicle pollution due to their proximity to heavily trafficked streets.

The Mayor's Transport Strategy and the London Borough of Harrow transport policy both focus on reducing car use and encouraging a switch to walking, cycling and public transport as the most effective ways to achieve air quality improvements. Choosing active travel also has considerable health benefits and can reduce traffic congestion and improve local air quality. However, for some people in certain situations, the use of vehicles is essential. When vehicles are needed, it is clearly desirable that they should be as clean and energy efficient as possible.

This strategy shows how Harrow is encouraging the necessary change in behaviour away from using polluting vehicles to choosing to use low emission vehicles.

5.1 Low emission vehicles vision

Harrow's vision is that in the future, low emission vehicles represent an increased proportion of all vehicles being used in the borough; where those who need to purchase a vehicle are not prohibited from purchasing a low emission vehicle by a lack of supporting charging infrastructure; where across the borough there is a network of supporting infrastructure that ensures low emission vehicles are an attractive choice for those needing private motorised transport; where the increase in uptake of quieter electric vehicles results in noticeably quieter roads; where the visible signs of air pollution in borough centres is significantly reduced and where those driving low emission vehicles in the borough can easily find the necessary charging facilities to support their journeys.

If this vision is realised, then streets will be healthier and quieter places with improved air quality. This is not something that the borough can deliver alone. Delivering this vision needs support from government, regulatory authorities and industry. The benefits of delivering this vision are far reaching and include health, the environment and reduced climate change, however it is a realistic but long term vision to deliver.

5.2 London initiatives to encouraging change to less polluting vehicles

The Mayor of London has committed to improving air quality in London. To support this commitment, all TfL buses will meet the Euro VI diesel standard for NO_x and PM by 2020 and all new single-deck buses will be zero emission from 2020. The commitment is also partly reliant on the introduction and use of more electric vehicles in place of diesel and petrol polluting vehicles. Delivering changes to increase the uptake of electric vehicles will require substantial expansion in the electric vehicle infrastructure provided all across London.

Several London wide initiatives to encourage a switch to lower emission vehicles have been introduced. These include the London Low Emission zone, the T-charge and the London Ultra Low Emission zone.

5.2.1 London Low Emission zone

The London Low Emission Zone (LEZ) covers most of Greater London and operates 24 hours a day, every day of the year. It was introduced in 2008 to encourage the most polluting heavy diesel vehicles driving in the Capital to become cleaner. The London LEZ is enforced through the use of that read vehicle number plates as they are driven within the LEZ and check it against a database of registered vehicles.

5.2.2 T-CHARGE

The T-Charge is an emissions surcharge which operates in the Congestion Charge zone and is part of the Mayoral commitment to help clean up London's polluted air. Older vehicles, including cars, vans, minibuses, coaches and HGVs driving in central London need to meet minimum Euro emission standards or pay an extra daily toxicity charge. This is in addition to the Congestion Charge.

The T-Charge will be replaced by the Ultra Low Emission Zone which will mean vehicles using central London will have to meet new, tighter emissions standards from 8 April 2019. This will affect all vehicles.

5.2.3 London Ultra Low Emission Zone

To help improve air quality, an Ultra Low Emission Zone (ULEZ) will be introduced in central London from 8 April 2019. Most vehicles including cars and vans will need to meet new, tighter exhaust emission standards (ULEZ standards) or pay a daily charge to travel within the area of the ULEZ. Ultra Low Emission Vehicles (ULEVs) include battery electric vehicles, plug-in hybrid vehicles, range-extended electric vehicles and hydrogen fuel cell electric vehicles.

From 25 October 2021, the ULEZ area will be expanded to include the inner London area bounded by the North and South Circular Roads.

Its objective is to help improve air quality in London, in particular with regards to nitrogen dioxide (NO₂) and particulate matter, both of which have an adverse effect on human health. It is expected that this will discourage the use of older, more polluting vehicles driving into and within central London.

5.3 Access to charging points

Studies of electric vehicle user behaviour show that access to a charging point is a pre-requisite to the purchase of an electric vehicle and that this is best achieved by access to home charging facilities. However this is not always possible. The provision of charge points which are accessible from home is therefore critical in facilitating electric vehicle uptake. Similarly, the lack of off-street parking in some residential areas prohibits uptake of electric vehicles in these areas.

Londoners with access to off-street parking have been the early adopters of electric vehicles as they can privately source their own domestic charge point. Having a driveway or garage means that drivers have a guaranteed place to park and charge their vehicle, as well as the ability to charge overnight. This has skewed early electric vehicle ownership to wealthier areas, leaving the less wealthy to pay more in fuel costs, Vehicle Excise Duty and paying to drive in the London Low Emission Zone.

According to Zap-Map, the TfL-recommended charging point database, the number of charging points in London grew from an average of 1,586 in 2017 to 1,869 in 2018 – an increase of 17 per cent. According to DfT data released so far (from December 2016 to September 2017), the number of electric vehicles in London increased by 50 per cent in 2017.

5.4 Electric charging network

London has a range of public electric charging networks. These include BP Chargemaster, Polar and Source London, GeniePoint, Pod Point all used in Harrow and further afield. Payment and access methods across networks vary widely. Most charging facilities require an account to be set up before use, but some rapid units with contactless Pay As You Go (PAYG) card readers are being installed.

Although many electric vehicle charge points are free to use, the majority of fast and rapid chargers require payment. Charging tariffs tend to comprise a flat connection fee, a cost per charging time (pence per hour) and/or a cost per energy consumed (pence per kWh).

5.5 Types of electric vehicle charging facilities



There are three main types of electric vehicle charging facilities in use in London. These are rapid, fast, and slow. These represent the power outputs, and therefore charging speeds, available to charge an electric vehicle.

Rapid chargers are one of two types – AC or DC [Alternating or Direct Current]. Current Rapid AC chargers are rated at 43 kW, while most Rapid DC units are at least 50 kW. Both will charge the majority of electric vehicles to 80% in around 30-60 minutes (depending on battery capacity). Tesla Superchargers are also Rapid DC and charge at around 120 kW. Rapid AC devices use a tethered Type 2 connector, and Rapid DC chargers are fitted with a CCS, CHAdeMO or Tesla Type 2.

Fast chargers include those which provide power from 7 kW to 22 kW, which typically fully charge an EV in 3-4 hours. Common fast connectors are a tethered Type 1 or a Type 2 socket (via a connector cable supplied with the vehicle).

Slow units (up to 3 kW) are best used for overnight charging and usually take between 6 and 12 hours for a pure-EV, or 2-4 hours for a PHEV. EVs charge on slow devices using a cable which connects the vehicle to a 3-pin or Type 2 socket.

5.6 Electric vehicles

There are around 12,000 electric vehicles registered in London⁴, that's ten times as many as in 2012. A recent study by WestTrans found that in Harrow electric vehicles were reported to have made up 1 sale in every 351 – 501 vehicles purchased. This same study also forecast that the greatest uptake in electric vehicles in the borough is likely to be in Stanmore in the north eastern part of the borough, just south of the M1 and A41. Other areas that are expected to see a more rapid increase in electric vehicles were estimated to be in South Harrow and in areas to the north and south of Uxbridge Road in the north western part of the borough. The forecast takes into account the different housing stock existing across the borough.

The large increase in electric vehicles across the UK can be clearly seen in Figure 7. This shows the number of registered electric vehicles in the UK by quarter since 2012.



Figure 8 shows the increase in the number of registered electric vehicles in London by quarter since 2012.

Figure 9 shows a comparison in the number of registered electric vehicles within all outer London boroughs.

⁴ London Assembly Environment Committee, May 2018

Due to the growth in electric vehicle ownership, the borough routinely receives requests from residents regarding the provision of additional street charging points. As more charging facilities are installed across the borough, these requests are likely to increase.

Figure 7: Number of registered electric vehicles in the UK by quarter

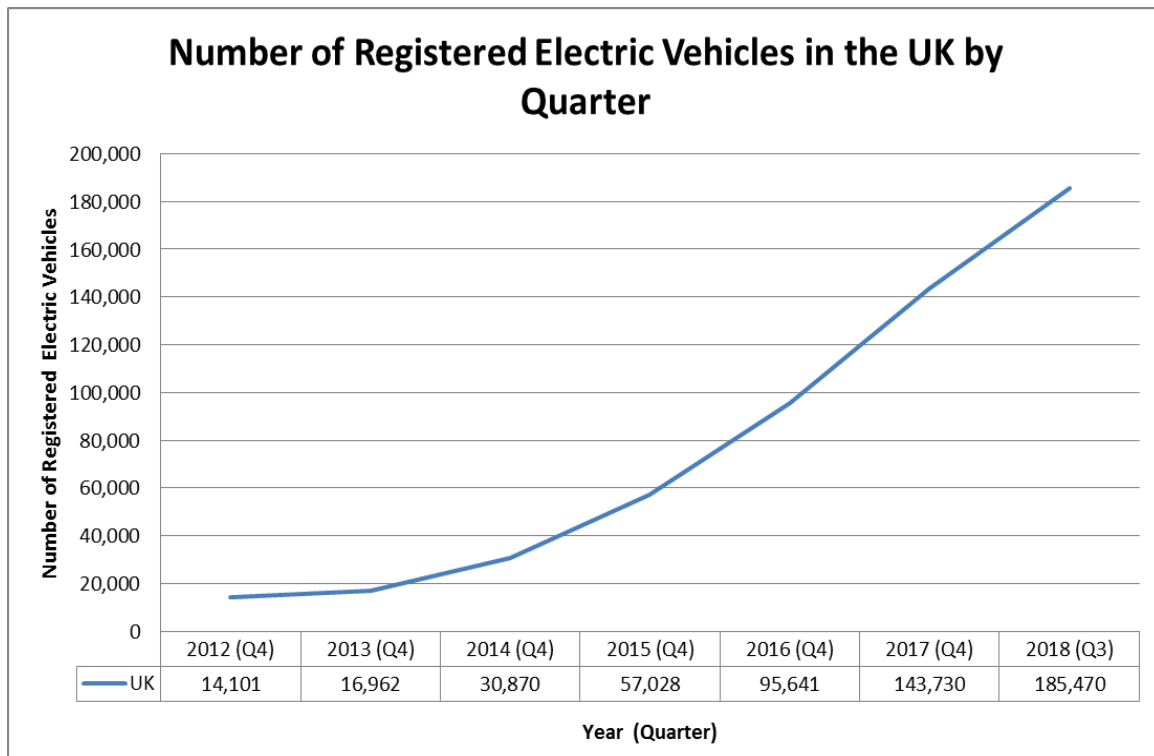


Figure 8: Number of registered electric vehicles in London by quarter

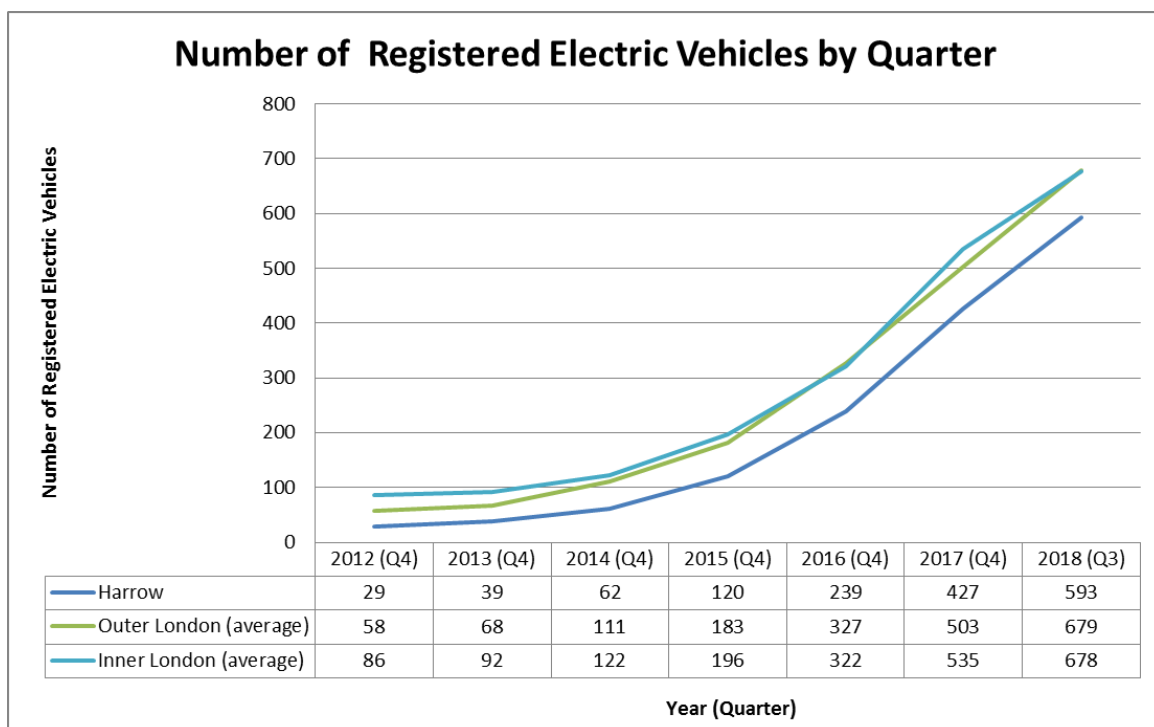
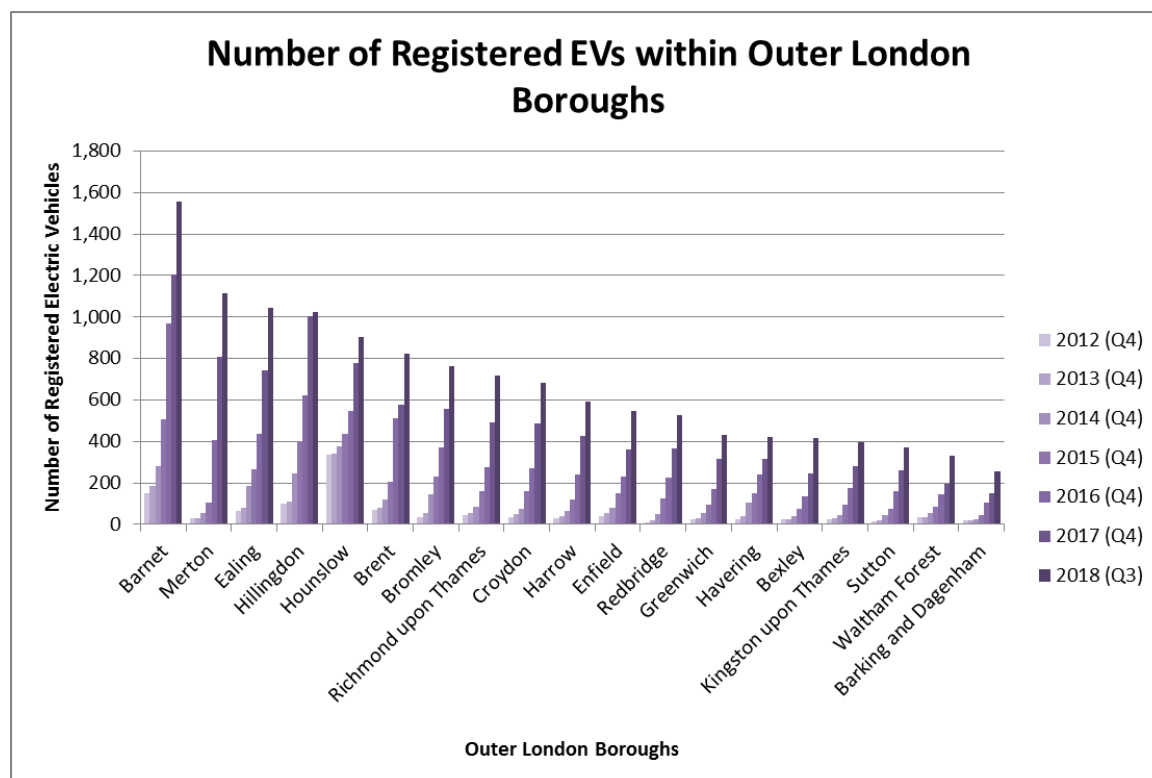


Figure 9: Comparison of number of registered electric vehicles within outer London boroughs



5.7 Current Harrow network for electric charging vehicles

There is currently a total of 42 Electric Vehicle Charging Points located within Harrow. These are all located at just 7 sites. The majority of these are located in off-street (38) car parks. Locations are shown in Figure 10.

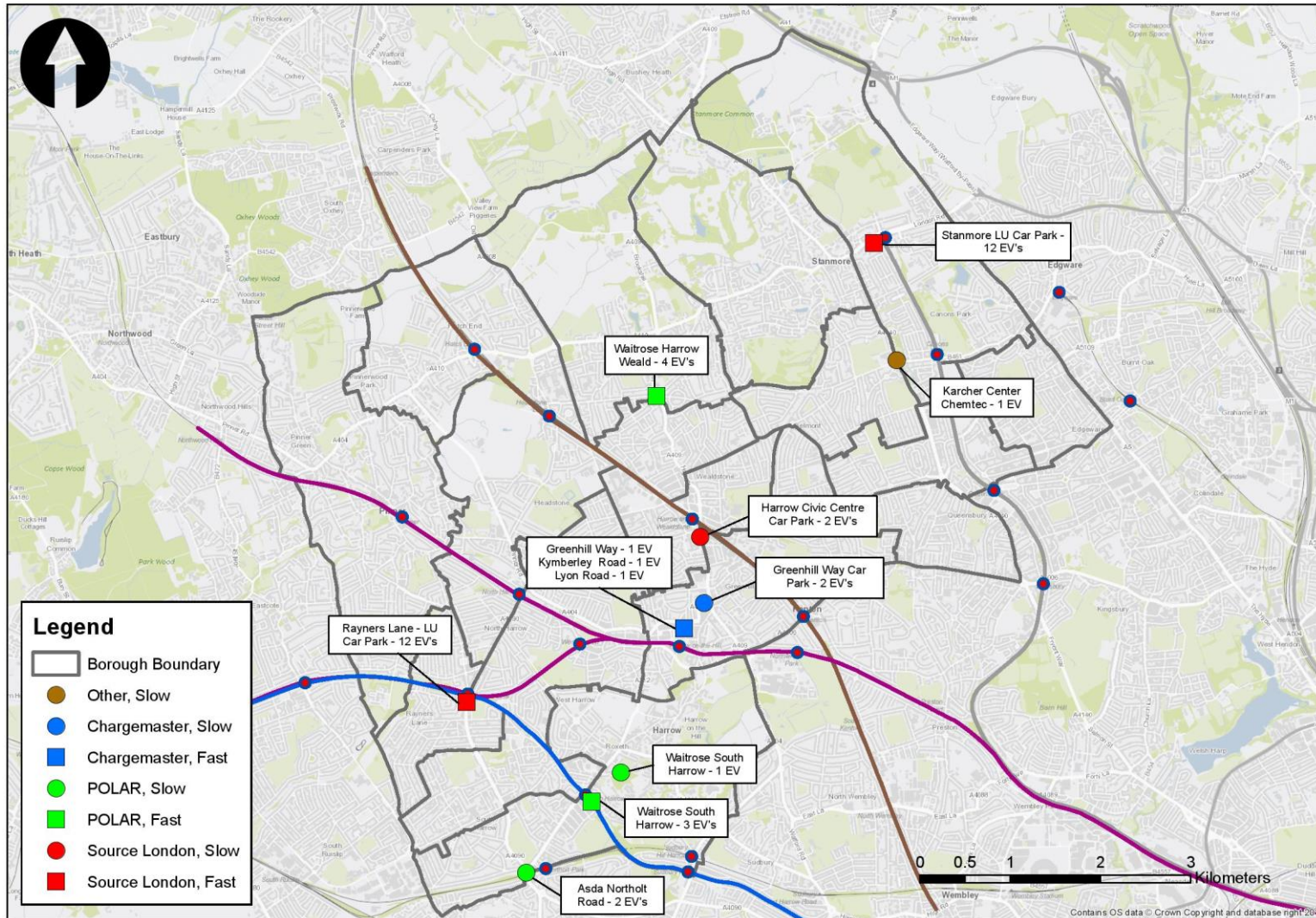
The main locations with EVCPs include:

- Rayners Lane LU Car Park (12)
- Stanmore LU Car Park (12)
- Waitrose – South Harrow (4)
- Waitrose – Harrow Wealdstone (4)
- Harrow Civic Centre Car Park (2)
- Asda – Northolt Road (2)
- Neighbourhoods of the Future Fleet Trial - Greenhill Way Car Park (2)
- Greenhill Way (1)
- Kymberley Road (1)
- Lyon Road (1)
- Karcher Center Chemtec (1)

The existing EVCPs consists of both slow / standard (19%) and fast (81%) charge points.

Figure 10: Electric charging point in Harrow, February 2019

365



5.8 Mayoral ambition

The mayor of London ambition is for the following:

- all taxis and private hire vehicles to be zero emission capable by 2033
- all TfL buses to be zero emission by 2037
- all newly registered road vehicles driven in London to be zero emission by 2030
- London's entire transport system to be zero emission by 2050

5.9 Objectives for low emission vehicles

Based on Harrow LIP3, the following are the objectives for low emissions vehicles in Harrow:

- 1 Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles
- 2 Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate
- 3 Increase in the number of electric vehicles into the Council's fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow's new depot

5.9.1 Low emission vehicle objectives link to healthy streets

The vehicle emissions objectives fit well with the Healthy Streets indicators and this is shown in Table 17.

Table 17: Vehicle emissions objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles					✓					✓

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate					✓					✓
Increase in the number of electric vehicles into the Council's fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow's new depot					✓					✓

5.10 Low emission vehicles objective 1: Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles

Increased understanding as to the harmful nature of polluting vehicles can help people to change their behaviour. Opportunities for people to use low emission vehicles will help to promote their use.

5.10.1 Electric vehicle car clubs

Car clubs represent an opportunity to get more electric vehicles on the road instead of Internal Combustion Engine vehicles. Car clubs have an economic incentive to have the most modern vehicle fleet possible and regularly update the cars they provide. Car club members have already shown an appetite for more electric vehicles, and nine out of ten people who had not yet used an electric vehicle in their car club expressed an interest. Car clubs also play a role in removing vehicles from the road entirely. Carplus estimates that each car club vehicle takes the place of ten private vehicles. The borough will investigate suitable locations for trialling electric vehicle car clubs in the borough.

5.10.2 Discouraging use of diesel vehicles

UK motorists were previously incentivised to buy diesel vehicles due to their perceived environmental impact, due to the fact they typically produce less CO₂ emissions than petrol equivalents. In built-up urban areas, these emissions mean that diesel engines are often the biggest cause of roadside air pollution, particular among older models.

Diesel vehicles are the single biggest source of NOx emissions in London. To discourage diesel vehicle ownership and use in the borough, the borough is considering adding a surcharge for both resident and business parking permits for diesel vehicles in the borough.

5.10.3 Promoting low emission vehicles

The borough promotes the use and benefit of low emission vehicles through providing information at pop-up sessions in the town centre and as part of the Neighbourhood of the Future. These events are done by working with low emission vehicle companies and with the Harrow internal communication team.

5.11 Low emission vehicles objective 2: Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate

The growth in the number of electric vehicles in the capital is outstripping the number of charge points and it is likely that this contributes to restricting the number of people owning an electric vehicles. The borough needs to work to address this issue.

60 per cent of Londoners do not have their own garage or driveway and would therefore need to rely on electric vehicle on-street charging. Access to off-street parking in residential areas, varies across the borough. Areas with low access to private off-street charging facilities will require significant increased availability of on-street charging facilities to encourage change.

5.11.1 On-street vehicle charging

Operational parking restrictions have been developed for on-street electric vehicle charging locations. Only an electric vehicle will be permitted to park in an electric vehicle dedicated bay at all times. Electric vehicles will be permitted a maximum three hour stay, whilst actively recharging with no return permitted within one hour operating between 7am to 7pm, Monday to Sunday. Overnight, any electric vehicle will be able to park without having to recharge or incur a maximum stay. The revised Parking Management and Enforcement Management Strategy will incentivise the uptake of electric vehicles through reduced charges for electric vehicle residential and business parking permits.

5.11.2 Neighbourhoods of the Future

In July 2015 London set out its vision to become an ultra-low emission vehicle (ULEV) capital. TfL, London Councils and eight London Boroughs submitted a joint bid for funding to the Office for Low Emission Vehicles (OLEV) for the Go Ultra Low City Scheme. The Office for Low Emission Vehicles (OLEV) is a team working across central government to support the early market for ultra-low emission vehicles (ULEV) and is part of the Department for Transport and the Department for Business, Energy & Industrial Strategy.

London's bid was successful in securing £13m to implement the proposed package of measures. Transport for London (TfL) dedicated £1.4m of this funding award to funding six Neighbourhoods of the Future (NoF) across London, that combine innovative green technology and other initiatives to tackle London's air quality emergency directly at a local level. Harrow Council was awarded funding

in order to deliver a NoF scheme in Harrow Town Centre to encourage a greater up take of electric vehicles and improve air quality.

In 2017/18 Harrow introduced its first ultra-low emission zone, neighbourhood of the future in Harrow town centre. The Town Centre has been identified as an area of poor air quality and suffered from congestion during peak periods. It was therefore appropriate to focus the introduction of the NoF in the town centre located mainly within the Greenhill ward.

Measures included in the zone are:

- amending parking policies to incentivise ULEV ownership and providing parking discounts
- providing increased charging infrastructure in destination car parks near to the two main shopping areas of St Ann's and St George's shopping centre
- providing free credited training to mechanics in the area to ensure ULEVs can be safely and easily serviced
- up skilling local mechanics to support local businesses, making Harrow a centre of excellence for ULEV servicing and maintenance and boosting the local economy
- enabling businesses based in the borough to trial Low Emission Vehicles (LEVs) for their fleets, implementing a long term behaviour change strategy to raise awareness of the benefits of LEVs and overcome any misconceptions.

Harrow is also considering restricting private cars from accessing Station Road/College Road and allowing only ULEVs access into the zone.

Subject to the availability of further funding, the borough will consider implementing more NoFs across the borough.



5.11.3 Training Mechanics

The growth in electric vehicles on the roads requires mechanics with the appropriate skills to service these vehicles. This is a new specialist skill that will be widely in demand as more electric vehicles enter the market. Part of the NoF funding that Harrow received was allocated to training local mechanics to gain accreditation to work on and service electric vehicles. This training is progressing in partnership with local businesses and is intended to support local businesses, and make Harrow a centre of excellence for ULEV servicing and maintenance and thereby boosting the local economy. It is anticipated that up to fifteen mechanics will be trained in Automotive Technology courses focusing on electric vehicle maintenance and safety. Depending on the success of this training, further funding to train mechanics may be available in the future.

5.11.4 Extending vehicle charging facilities

Increased facilities for electric charging will be rolled out across the borough. However locations need to be carefully identified as to where charging spaces should be provided. There is limited road space available and a loss of parking space for non-electric vehicles will occur where dedicated electric vehicle charging spaces are introduced. There is also a cost associated with a roll out in of charging points and funds to support this need to be pursued from available grants.

Town centre charging facilities

As part of the Harrow NoF, new electric vehicle charging points will be strategically located at four sites in close proximity to Harrow town centre. A total of 10 additional electric vehicle charging bays will be provided in the town centre using five dual socketed electric charge points procured from Chargemaster.

Three of the charge points (6 on street bays) will have a power supply of 22kw per socket, using a three phase supply connection. The remaining two charge points (4 off-street bays) will have a power supply of 7kw per socket and will specifically be installed for the Greenhill Way Car Park site to support the electric vehicle fleet trial.

The charge points will be operated on the Charge Your Car Network (CYC) that has been approved to be Open Charge Point Protocol (OCPP) compliant. A CYC user will be able to pay via the use of the App or a contactless RFID card to use the facility.

Provision of on-street residential charging facilities across the borough

A grant from OLEV will be applied for to enable the provision of increased on-street residential charge points for plug-in electric vehicles. The funding available from the grant is for 75% of the capital costs of procuring and installing the charge point and an associated dedicated parking bay. The rest of the funding will be provided by the TfL LIP funding allocation.

The borough is looking into using existing infrastructure such as lamp columns to support vehicle charging in residential areas. This will provide a way for drivers, without access to off-street parking, to charge their electric vehicles on residential streets, public parking and workplace car parks.

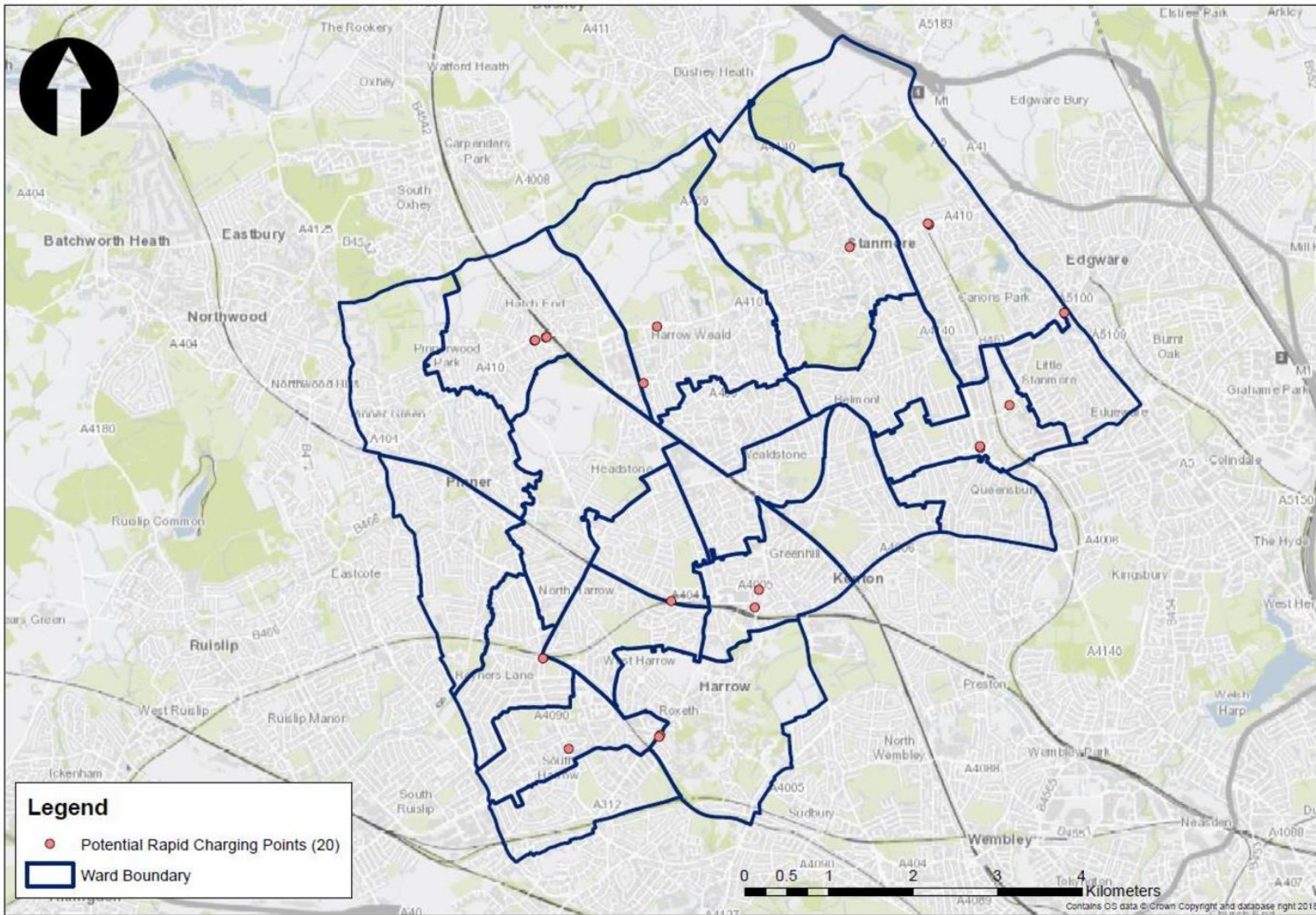
Priority for residential charging facilities will be given to locations where the borough has received sufficient requests, little off-street parking is available to charge off-street and the locations are not too near the town centres and so won't be used as an alternative to parking near shopping facilities.

Locations to install additional charging facilities are continually under review.

5.11.5 Rapid charging facilities

Rapid charge points can charge an electric vehicle battery in 20-30 minutes. This is quicker than regular vehicle charge points that can take 7-8 hours for a full charge. Rapid charging points will be rolled out across the borough primarily on the strategic network and possibly in some town centres. Figure 11 shows the proposed rapid charging locations across the borough. These will be funded by TfL.

Figure 11: Proposed rapid charging facilities



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5.11.6 Rapid charging for taxis

Taxis are a significant contributor to London's toxic air quality and are responsible for 16 per cent of NOx and 31 per cent of Particulate Matter (PM_{2.5}) road transport emissions in central London.

No more diesel taxis are being licensed, and all taxis that are licensed for the first time now need to be zero-emission capable.

As part of the Mayor's bid to improve the capital's air quality, by helping phase out the use of diesel and encouraging the use of zero-emission vehicles, a network of rapid charging facilities primarily for use by taxis is being rolled out across London. TfL has a target to introduce 300 rapid charging points across London by 2020.

5.11.7 Electric Vehicle Fleet Trial

Part of the OLEV grant awarded to Harrow was specifically to enable local businesses based in the town centre to trial ULEVs for their fleets. The Greenhill Way Car Park location was chosen to support the Electric Vehicle Fleet Trial (EVFT). The trial is being run through Enterprise, a national car hire company, on behalf of the Council. As part of the trial, four Nissan Leaf vehicles have been made available to rent. The Council's travel planning team is working together with the Business Improvement District (BID) team to promote the initiative with local businesses.

Businesses will be able to rent an electric vehicle free on a daily basis in order to carry out their normal operational duties. The only cost to them will be a charge for the electricity used. It is hoped by using the electric vehicles businesses will see the benefits of using electric vehicles and consider more permanently using electric cars and fleets in the future. Several businesses in the town centre are participating in the trial.

Parking restrictions for the new electric vehicle charging bays in the Greenhill Way Car Park will restrict access to the electric vehicle fleet trial vehicles only via the use of a business permit at all times.



5.12 Low emission vehicles objective 3: Increase in the number of electric vehicles into the Council's fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow's new depot

The Harrow Council vehicle depot is being redeveloped. Vehicles using the depot are refuse and recycling vehicles, school buses and pool cars. The new depot facilities will ensure that there up to 40% electric vehicle charging points for service vehicles. Harrow Council buses are currently Euro V and Euro VI diesel but the borough intends to have a full fleet of Euro VI diesel vehicles by early 2019. Refuse vehicles are Euro V but the borough intends to have a full fleet of Euro VI vehicles by early 2019. Tipper and pool cars are planned to switch to a combination of diesel and electric vehicles by 2020. The new depot is scheduled to be complete by 2020.

5.12.1 Increasing the number of electric vehicles into the Council's fleet

It is currently only realistic to introduce electric vehicles for cars and vans in the Council's fleet. Electric larger vehicles are not easily supported in the UK due to the rapid charging support network required to make them viable. The Council intends to procure at least 20 electric cars and vans into the Council's fleet for use by pest control, housing, parking enforcement and libraries. These will be procured by 2020/21.

5.12.2 Increasing electric charging facilities for vehicles at the depot

The new depot being built in Harrow will ensure that there are sufficient electric charging facilities for the new electric vehicles being introduced. The new facilities will include 53 active charging spaces and 53 passive electric charging spaces. Active spaces are fully wired and connected with ready to use points at parking spaces. In passive spaces the necessary underlying infrastructure (e.g. capacity in the connection to the local electricity distribution network and electricity distribution board, as well as cabling to parking spaces) has been introduced to enable simple installation and activation of a charge point at a future date. These will be delivered by 2020/21.

5.13 Delivering the low emission vehicle objectives

Table 18 shows the targets that will help to measure delivering the low emission vehicle objectives

Table 18: Low emission vehicle targets to deliver objectives

Low emission vehicle objectives	Targets to monitor progress	Current status	Target and year
Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles	Deliver 3 air quality events per year to be run in schools	3 air quality events per year	Ongoing
Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate	<p>Introduce 50 electric vehicle charging points by 2022</p> <p>Introduce 20 rapid charging points</p> <p>Provide more electric charging places in car parks</p>	<p>5 new rapid charging points have currently been approved</p> <p>Currently 4 spaces in Greenfield car park but for use by fleet trial only</p> <p>1 space in civic centre car park</p>	<p>50 points by 2022</p> <p>20 points by 2020/21</p>
Increase in the number of electric vehicles into the Council's fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow's new depot	Procure at least 20 electric cars and vans into the Council's fleet for use by pest control, housing, parking enforcement and libraries		2020/21
	Depot facilities to include 53 active charging spaces and 53 passive electric charging spaces		2020/21

5.13.1 Funding for the low emission vehicles action plan

Table 19 shows the key funding source used for the low emission vehicles initiatives.

Table 19: Key funding sources for low emission vehicles initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
Low emission vehicles objective 1: Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles					
Electric vehicle car clubs	✓		✓		
Discouraging use of diesel vehicles					
Promoting low emission vehicles	✓				
Low emission vehicles objective 2: Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate					
On-street vehicle charging	✓				
Neighbourhoods of the future		✓			✓
Training mechanics	✓				
Extending vehicle charging facilities	✓	✓			
Rapid charging facilities	✓	✓			
Rapid charging for taxis		✓			
Electric vehicle fleet trial	✓				
Low emission vehicles objective 3: Increase in the number of electric vehicles into the Council's fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow's new depot					
Increasing the number of electric vehicles into the Council's fleet				✓	
Increasing electric charging facilities for vehicles at the depot				✓	

5.14 Low Emission Vehicles Action Plan

Table 20 shows the borough low emission vehicles action plan and how the agreed borough LIP3 policies fit with the new low emission vehicles objectives. The table also shows the outputs to be delivered relating to each policy.

Table 20: Low emission vehicles action plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Low emission vehicles objective 1: Increased awareness of the impact of vehicle emissions and promotion of the benefits of low emission vehicles		
Review the viability of introducing a revised parking permit structure based on vehicle emissions (E2)	Revised parking permit structure based on emissions	2019/20
Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks where practicable e.g. providing specific locations for parking by providing charging points for electric vehicles (E3)	Allocated environmentally friendly parking spaces with charging points allocated in car parks	2020/21
Provide reduced cost residential and other relevant parking permits for appropriate greener vehicles (PE15)	Provision of reduced cost permits for greener vehicles	2019/20
Low emission vehicles objective 2: Proactively develop an electric vehicle charging network across the borough in residential areas, town centres, work places and other key destinations and rapid charging infrastructure where appropriate		
Provide additional public electric charging points at key locations and consider the provision of rapid charging points to assist taxis, freight vehicles and car clubs (E1)	Increased electric charging facilities Increased rapid charging facilities	Ongoing
Support the introduction of rapid electric charging facilities for freight, taxis and car club vehicles to enable the introduction of Zero Emission Capable (ZEC) taxis (E5)	Provision of rapid charging facilities	Ongoing
Low emission vehicles objective 3: Increase in the number of electric vehicles into the Council’s fleet for use by pest control, housing, parking enforcement and libraries and introduction of electric charging facilities in Harrow’s new depot		

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Request all providers or users of Council transport fleets to consider how they can move towards the use of less polluting vehicles (E4)	Increased use of lower emission vehicles in Council's transport fleet At least 20 electric cars and vans into the Council's fleet 53 active charging spaces and 53 passive electric charging spaces at new Harrow depot	2020/21

6. Schools – Sustainable Modes of Travel (SMOT)

This section deals with the general duty on local authorities to promote the use of sustainable travel and transport as required by Section 508A of the Education and Inspections Act 2006.

6.1 Legislation

Section 508A of the Act places a general duty on local authorities to promote the use of sustainable travel and transport. The duty applies to children and young people of compulsory school age who travel to receive education or training in a local authority's area. The duty relates to journeys to and from institutions where education or training is delivered.

There are five main elements to the duty which local authorities must undertake:

- an assessment of the travel and transport needs of children, and young people within the authority's area;
- an audit of the sustainable travel and transport infrastructure within the authority's area that may be used when travelling to and from, or between schools/institutions;
- a strategy to develop the sustainable travel and transport infrastructure within the authority so that the travel and transport needs of children and young people are best catered for;
- the promotion of sustainable travel and transport modes on the journey to, from, and between schools and other institutions; and
- the publication of Sustainable Modes of Travel Strategy.

The Act defines sustainable modes of travel as those that the local authority considers may improve the physical well-being of those who use them, the environmental well-being of all or part of the local authority's area, or a combination of the two.

6.2 School travel

The average journey to school is less than one kilometre, that's around a 10-minute walk. However, many of these journeys are made by car leading to congestion and an unsafe and polluted environment for us all.

6.3 School travel plans

A school travel plan (STP) is a document produced by a school that promotes sustainable ways for the whole school community to travel to and from school. It includes a package of practical initiatives to encourage active, healthy, safe and sustainable travel as an alternative to car use on the school journey. All schools in Harrow are encouraged to develop travel plans to promote and encourage safe, active and sustainable travel on the school journey.

A STP is developed, maintained and monitored by the whole school community. It is based on consultation with pupils, staff, parents and governors, and is developed in partnership with the wider community. The STP process takes into account personal safety, road safety, environmental and healthy lifestyle issues.

The elements that every STP should contain are as follows:

- Survey results showing how pupils and staff currently travel to school, and how they would like to travel to school
- Objectives and specific, measurable, achievable, relevant and time specific (SMART) targets
- An action plan of activities and measures that will help make journeys to the school safer, healthier and more environmentally friendly
- A programme of monitoring and review
- Support and signatures from the head teacher, chair of the governors and other relevant stakeholders



STPs are living documents that evolve as initiatives and activities are implemented at the school and as pupils' travel needs change.

By implementing a travel plan, schools can demonstrate how they are working to keep children safe, improve health and wellbeing, and reduce the environmental impact of school journeys.

6.4 School expansion programme

As the population in the borough increases, schools are admitting more students. In cases where schools apply for planning permission to increase their size, they must submit a Travel Plan as part of the planning process. Planning conditions are then applied, which normally require a Travel Plan/ accreditation to be updated annually.

6.5 Support for schools

Schools in Harrow can access free support and advice from a dedicated Travel Planner in Harrow Council. The Travel Planners can help schools develop and maintain their travel plan, and provide advice on developing campaigns and activities to reduce car use, improve road safety and tackle issues such as inconsiderate parking.

6.6 Types of schools in Harrow

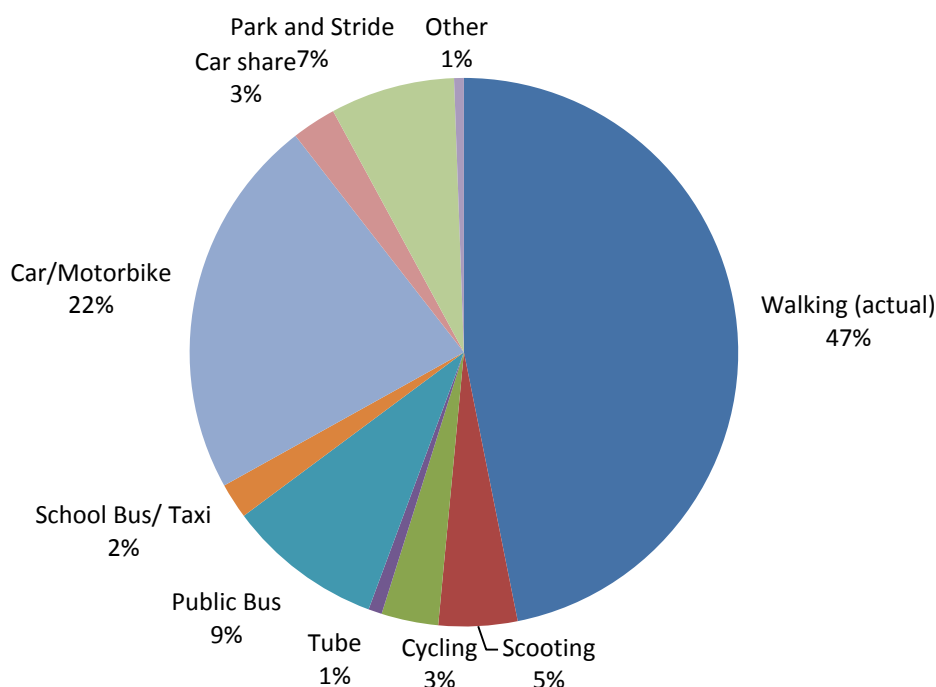
There are over 80 different schools in Harrow providing education for over 40,000 pupils in various age groups. Schools in Harrow include 42 primary schools and 12 secondary schools. 44 of these

schools are actively involved in the school travel planning process. Schools actively involved in the travel planning process represent approximately 58% of all school pupils.

6.7 How are pupils in Harrow currently travelling to school

Hands up surveys are carried out in schools across the borough to determine the modes of transport pupils are taking to school. Not all schools do this, but they are encouraged to do so as part of developing and reviewing their school travel plan. Figure 12 shows the modes of travel to school across the borough based on 47 schools in 2017/18.

Figure 12: Harrow mode of travel to schools 2017/18



6.8 STARS - Sustainable Travel: Active, Responsible, Safe

STARS is TfL's accreditation scheme for London schools and nurseries. STARS has been developed to inspire young Londoners to travel to school sustainably, actively, responsibly and safely by championing walking, scooting and cycling.

Gold accreditation

Around 10% of schools in London achieve gold accreditation status. To achieve gold accreditation, schools need to do the following:

- Within three academic years complete 25 different travel activities, 15 supporting activities and 8 consultation activities
- Provide evidence for each activity completed
- Demonstrate at least a 6% modal shift away from the car or at least 90% of pupils travelling actively

Silver accreditation

Silver accredited schools have engaged with the wider community to influence travel behaviours; have started to see a shift for the entire school community away from car use. To achieve silver accreditation, schools need to do the following:

- Within two academic years complete 20 travel activities, 10 supporting activities and 5 consultation activities

- Provide evidence for each completed activity
- Demonstrate a shift away from car use
- See pupils actively involved in the planning and running of travel activities

Bronze accreditation

Bronze accredited schools have started their journey towards a safer, healthier school environment. To achieve bronze accreditation, schools need to do the following:

- Within one academic year complete 10 different travel activities and 6 supporting activities
- Set at least two active travel targets to see a movement away from car use

6.8.1 What is the latest Harrow STARS status?

The latest STARS school accreditation status is shown in Appendix A: Latest STARS school accreditation status. A summary of this is shown in Table 21.

Table 21: Summary of STARS school accreditation status

STARS accreditation level	Number of schools	Total number of pupils
Gold	25	13,282
Silver	4	2,517
Bronze	11	5,636
Other schools engaged in the process	4	2,372
Schools not engaged	38	17,342
TOTAL	82	41,149

6.9 Healthy Schools London

Healthy Schools London is a programme sponsored by the Mayor of London, and is supported by a small team in the Greater London Authority. The programme has been shown to deliver the following benefits:

- Increased amount of opportunities that children and young people have to be physically active in and out of schools
- Increased participation of children and young people in physical activity in and out of school
- Improved links between schools and communities that promote physical activity
- Increased school meal uptake including free school meals
- Improved children and young people's access to healthy packed lunches and snacks throughout the school day

Participating in Healthy Schools London (HSL) supports sustainable travel objectives.

Awards are for schools to recognise their achievements in supporting the health and wellbeing of their pupils. There are three levels of award:

- Bronze: awarded to schools that complete either a Local Healthy Schools Review or the Healthy Schools London Review Tool (Bronze Award) and achieve the requirements
- Silver: in addition to holding a Bronze Award, the school needs to undertake an analysis of pupils' needs, and identify new actions that will help pupils achieve and maintain good health and wellbeing

- Gold: in addition to holding the Silver Award, the school needs to show the impact of the changes they have made and that these are sustainable. The school also needs to show how it has engaged the wider community, and supported others to help children maintain a healthy weight, healthy lifestyle and wellbeing.

6.9.1 What is the latest Healthy Schools award level for schools in Harrow?

There are 53 schools in Harrow registered to participate in Healthy Schools London. The following award levels have been achieved by schools in the borough:

- Bronze 32
- Silver 20
- Gold 11

6.10 SMOT Objectives

Harrow transport objectives were developed as part of the development of the Transport Local Implementation Plan 2019/20 - 2021/22. The objectives that are key to the SMOT are as follows:

1. Improve the public realm through the introduction of healthy streets and liveable neighbourhoods to better enable active and safer travel particularly for pedestrians and cyclists thereby reducing congestion and improving public health and local air quality
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies and prioritising road space to walking and cycling to improve the environment.

To support these transport objectives, the objectives for this SMOT are as follows:

1. Increase the proportion of trips made to and from school by sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment
2. Achieve and improve school's TfL accreditation status, through encouraging individual schools to prepare, produce and review school travel plans
3. Raise awareness of air quality around schools by working with schools to identify local air quality issues
4. Reduce the number of schools trips made by car and improve pupils' independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport



The SMOT objectives fit with the Healthy Streets indicators as shown in Table 22.

Table 22: Walking objectives link to healthy streets

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Increase the proportion of trips made to and from school by sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment	✓	✓		✓	✓	✓	✓			
Achieve and improve school's TfL accreditation status, through encouraging individual schools to prepare, produce or review school travel plans	✓	✓				✓	✓			

Objectives	How each objective contributes to the Healthy Streets Indicators' scores									
	Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean air
Raise awareness of air quality around schools by working with schools to identify local air quality issues	✓				✓				✓	✓
Reduce the number of schools trips made by car and improve pupils' independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport						✓	✓			✓

6.11 SMOT objective 1: Increase the proportion of trips made to and from school by sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment

There are several regular campaigns that take place throughout the year to encourage increased participation in sustainable travel. Most of the schools in Harrow participate in these schemes. The key campaigns and events are described below.

6.11.1 School active travel maps

Active travel maps are available for all schools in the borough to help pupils and parents choose sustainable, safe and healthy ways to travel to school. The maps show the sustainable travel options available to each school and are tailored to include:



- local public transport facilities (e.g. tube and train stations, and bus route information) – showing which bus routes travel on roads close to the school.
- 5 and 10 minute walking zones – showing approximate 5 and 10 minute walking distances from the school site.
- cycling route information – roads are colour-coded to Bikeability training and confidence levels to enable cyclists to plan routes according to individual abilities.

The maps can be used by anyone travelling to the school including pupils, parents, staff and visitors.

6.11.2 Bike week

Bike Week is an annual opportunity to promote cycling at school. Various kinds of activities are run during this week that encourage cycling. Most Bike Week events take place within the official event week in June.

6.11.3 Bikers breakfast club

This is where a school offers cyclists a free breakfast on arrival at school to reward them and encourage others to get cycling by highlighting the benefits of active travel. Bikers' breakfasts also offers an opportunity to promote the school's other cycling initiatives and facilities such as cycling clubs, pool bikes and scooters scheme and Dr Bike sessions.

6.11.4 Dr Bike

Dr Bike sessions give the school a chance to have bikes checked over by a mechanic to ensure they are roadworthy. Checks include the bicycle wheels, brakes, gears and tyre pressure, lights, racks, pedals, saddles and more.

Minor issues such as flat tyres or loose brake and gear cables are common reasons for bikes to be left unused. The sessions usually involve 10-minute check-ups on each bike including pumping tyres, adjusting saddles, and tuning up brakes and gears. More serious repairs or broken bikes should be referred to a bike shop.

The amount of Dr Bike sessions delivered is dependent on the amount of schools scheduled for Bikeability training.

6.11.5 Children's Traffic Club (CTC)

The Children's Traffic Club (CTC) London is a free road safety education programme for pre-school children. The club promotes the use and benefits of sustainable modes of transport such as walking, scooting and cycling.

CTC London is delivered through a mixture of digital and printed resources including an app. The app introduces key characters such as Barry Bus, Walter Walk and Scottie Scooter to reinforce key road safety and active travel messages through repetitive play. Fun activities which support the Early Years Foundation Stage curriculum using the Nursery Leaders' Guide are provided.

6.11.6 Tour de Salah

Tour de Salah is the largest Muslim cycling event in the UK and introduces cycling to novices within traditionally harder to reach groups. Participating cyclists cover up to 100km across the capitals iconic landmarks and mosques over one day. Since 2018 the Harrow Mosque has been part of the route and the event is promoted across the borough.

6.11.7 RideLondon

RideLondon is an annual cycling festival held in the Capital with a weekend-long family-friendly programme of bike rides, races and related events. This event is used to inspire both cyclists and non-cyclists to get on their bikes more often. School pupils are encouraged to take part or go along to spectate either with their families and friends or as part of an organised school group.

6.11.8 Junior Travel Ambassador (JTA) Scheme

The Junior Travel Ambassador (JTA) scheme encourages safer, active and independent travel within the school community, with a focus on year 6 pupils as they prepare for the transition to secondary school.

The scheme involves recruiting a team of JTAs; year 5 and 6 pupils who work to promote active travel and road safety to their peers through a range of activities.

TfL provides all the resources and guidance needed for the school to set up and run the school's JTA team.

6.11.9 Youth Travel Ambassadors

The Youth Travel Ambassadors (YTA) programme provides young people aged 11 to 19 with the skills and confidence to address transport issues affecting the school community.

YTA teams research and develop campaigns to change people's behaviour. They focus on walking and cycling, road safety and improving passengers' experiences. They are supported by TfL, the borough and school staff.

Schools usually recruit between 6 and 12 YTA students who deliver behaviour change campaigns to their peers over the course of the academic year. Campaign initiatives can include themed assemblies, walking and cycling competitions, creative workshops, films and community events.

6.11.10 Free School Travel Party Scheme

Free off-peak travel for visits to educational, sporting and cultural venues in London for school groups is available from TfL. The scheme gives free travel on:

- Bus
- Tube
- Tram
- DLR
- London Overground
- TfL Rail
- Most National Rail services within London Zones 1-6
- National Rail services outside London between Amersham and Moor Park

Schools in all London boroughs can register for this. The scheme is open to all state, independent and academy schools.

Nursery schools can also register but can't use National Rail services.

Schools need to register on the TfL website to participate in this.

Schools can apply online for free travel to educational, cultural or sporting venues that support the National Curriculum. These include:

- Animal parks and zoos
- Areas of cultural interest (for example Chinatown)
- Artists' studios, arts centres and design studios
- Buildings of architectural or environmental interest
- Cinemas, concert halls and theatres
- City Farms, commons, heaths and parks
- Film studios, galleries, museums and print works
- Sites of archaeological, environmental or religious interest
- Sporting venues, swimming pools, playing fields and indoor leisure centres. You can also be spectating or participating in sport
- Occasional venues which support an area of study but take place for a limited time

Any recreational trips, such as trips to theme or amusement parks, are excluded.

6.11.11 20mph zones

20mph zones create a safer environment for all road users. They not only improve the safety of an area, but also improve the perception of safety.

Harrow has introduced 20mph zones around most of the schools in the borough. A few of the schools in the borough are located in areas where it is not possible to introduce a 20mph zone such as being located by a main road.

Figure 13 shows schools in the borough as well as the existing 20mph zones in the borough. Around 50% of the road network in the borough is covered by 20mph speed restrictions and the borough will work to increase this.



Harrow 20mph zones are designed to be "self-enforcing" due to traffic calming measures which are introduced along with the change in the speed limit. Speed humps, chicanes, road narrowing, and other measures are typically used to both physically and visually reinforce the slower speed limits.

The main aims of the introduction of a 20mph speed limit in an area are to:

1. improve road safety
2. discourage passing through traffic
3. encourage walking and cycling
4. improve the local environment

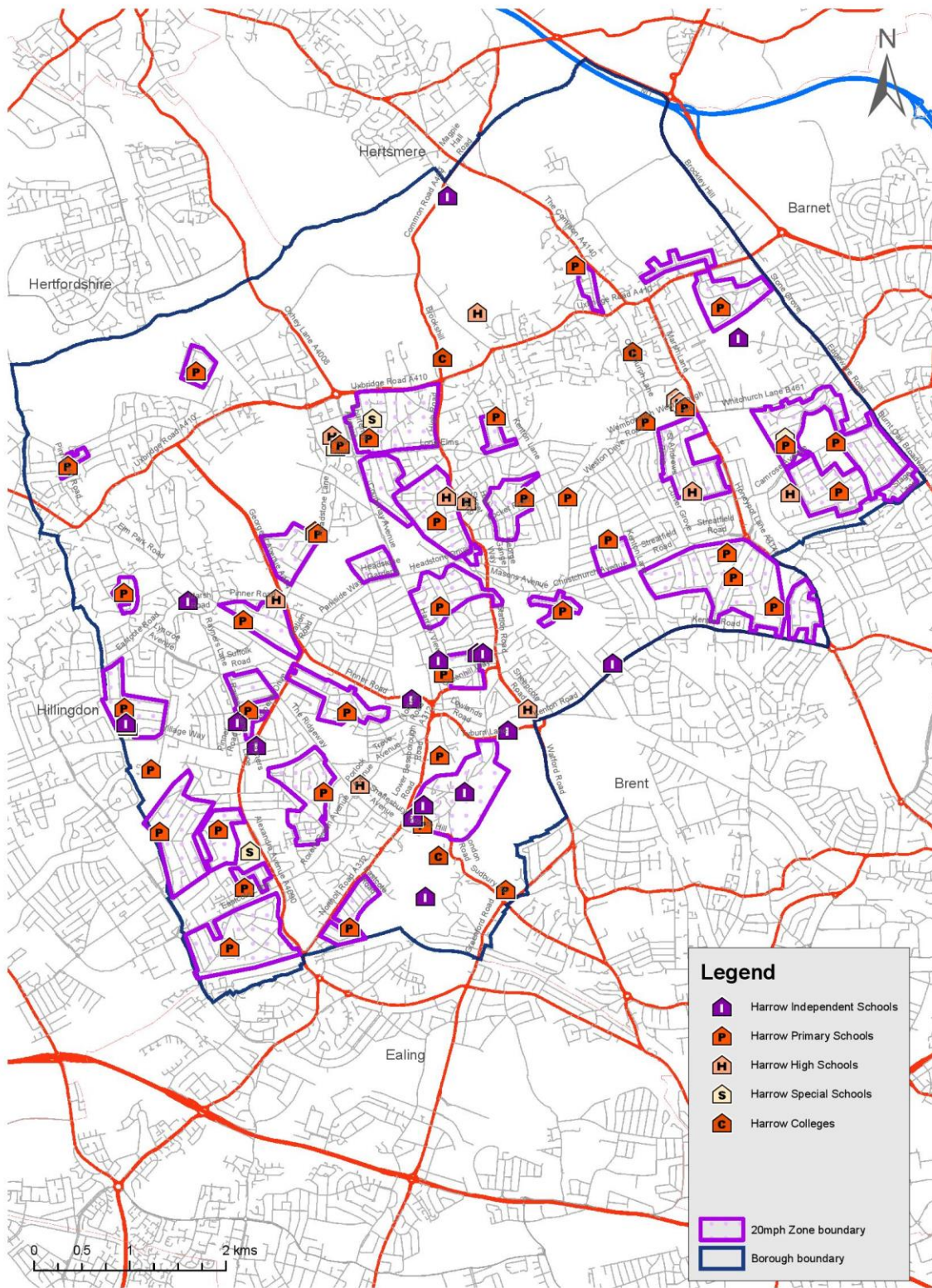
Before and after site surveys such as speed surveys are undertaken to monitor the impact of the measures introduced. The borough shares recorded speed survey data with the police at quarterly traffic liaison meetings so they can decide whether they should target their resources to the area.

6.11.12 School travel plan engineering measures

All schools in Harrow are encouraged to develop travel plans to promote and encourage safe, active and sustainable travel on the school journey. When STPs identify engineering measures that would help make journeys to the school safer, healthier and more environmentally friendly, the measures are given a high priority for implementation.



Figure 13: Schools and 20mph zones in Harrow



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6.12 SMOT objective 2: Achieve and improve school's TfL accreditation status, through encouraging individual schools to prepare, produce or review school travel plans

Schools in Harrow are encouraged to develop school travel plans using Transport for London's STARS scheme process. STARS supports pupils' wellbeing, helps to reduce congestion at the school gates and improves road safety and air quality.

Benefits of STARS accreditation

Across London, STARS schools see an average 6% reduction in the number of trips made by car to school; gold and silver accredited schools can see up to 12% reduction.

Key benefits to pupils, the school and the wider community are as follows:

Benefit to pupils

- Improve pupils' emotional health and wellbeing
- Contributes to pupils' 60 minutes a day of physical activity
- Increases attendance and attainment
- Builds young people's influencing skills
- Encourages healthier travel behaviours and habits such as walking, scooting and cycling to school

Benefits to the school

- Develops School Travel Plan providing solutions to school's travel issues
- Creates positive travel behaviour change and provides access to funding
- Enables bespoke professional guidance and support from your local borough
- Raises the profile of the school, helps gain external recognition and contributes to Healthy Schools London Awards Programme

Benefits to the wider school community

- Helps to reduce congestion around the school site and improve air quality
- Encourages positive travel behaviour change in parents/carers and local residents
- Helps develop relationships with community stakeholder groups

Participating schools have demonstrated an average of a six per cent decrease in car use, resulting in 22 million vehicle kilometres saved. The average walk to school mode share for Gold accredited primary schools is 57 per cent (two per cent above the national target and four per cent above the London average). The STARS scheme aims to double the number of Gold-accredited schools across London by 2024.

6.13 SMOT objective 3: Raise awareness of air quality around schools by working with schools to identify local air quality issues

Poor air quality is bad for everyone's health, but even more so for children. Children living or attending schools nearer high-traffic density roads can be exposed to higher levels of motor vehicle exhaust gases and this is resulting in higher incidence and prevalence of childhood asthma and wheeze. Research has shown that a higher incidence of childhood asthma is positively associated with exposure to nitrogen dioxide. Exposure to particulate matter is associated with a higher incidence of wheeze in children.

Measures that can be introduced to address this are:

- Moving school entrances and play areas away from busy roads
- Anti-idling campaigns to reduce emissions from the school run
- Local road changes including improved road layouts and pedestrianisation by school entrances
- Adding green infrastructure to help filter the fumes
- Encouraging students to walk and cycle to school along less polluted routes

6.13.1 Identifying air quality around schools

The borough has committed to monitoring air quality sites near schools with a main road within a 5 minute walk of the school. Diffusion tubes have been put in place at the schools which will measure nitrogen oxide emissions at each location. At the time of writing this report, the results from these diffusion tubes are not yet available.

6.13.2 Anti-idling campaigns (air quality events)

Anti-idling action days have been funded by the Mayor's Air Quality Fund. A typical campaign involves an assembly at the school, where children are taught about the dangers to the environment of vehicles idling. Following this, volunteers and environmental professionals talk to parents outside the school gates about the dangers of idling, specifically targeting idling cars. Parents are asked to put their names forward and pledge not to idle in future.

The air quality work being carried out with schools has resulted in increased direct engagement with schools, an increase in awareness and understanding of air quality issues, increased face to face engagement with local businesses and increased advice to drivers through anti-idling action days at schools.

6.13.3 Congestion Busting

Congestion Busting is an initiative designed to make school communities aware of the impacts of idling in cars. Students are given the opportunity to learn about the effects of idling in cars and other factors that contribute to damaging the environment. A typical congestion busting event at a school consists of a playground event where pupils take part in events such as pedalling a smoothie bike (a bike with a blender attached) and playing education games with an environmental theme. Council officers speak to parents at the school gates about the dangers of idling in cars and polluting the environment.

6.14 SMOT objective 4: Reduce the number of schools trips made by car and improve pupils' independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport

Children need to develop independent mobility to improve both their mental health and physical wellbeing. The benefits of children's everyday mobility range from learning to navigate local streets, interacting with people in public places, gaining social responsibility, to independence and increased freedom. Although children may be nervous about travelling unaccompanied, many studies show that they quickly come to enjoy the feeling of freedom and actively seek greater opportunities for mobility. This particularly occurs in the late stage of primary school.

6.14.1 Cycle training

Cycle training is offered to all schools in the borough as well as offered outside the school environment. It is an effective way of increasing confidence among adults, children and families, and encouraging more people to cycle. Cycle training is delivered to achieve various levels of bikeability proficiency.

Cycle training is also facilitated for Special Educational Needs and Disability (SEND) schools providing an extended duration of training and adapted bikes for pupils to participate in training. The SEND

training is tailored to each school's requirements. Due to the variation of capabilities, not every child is able to participate.

All cycle training courses are promoted via the council website and with schools and businesses in the borough.



Bikeability training and courses

Bikeability is a cycle training programme designed to give pupils the skills and confidence to ride their bikes on the road. There are three levels of Bikeability training:

1. Bikeability Level 1: Control and master your bike in an off-road environment

New riders learn to control and master their bikes in a space away from traffic such as a playground or closed car park. Trainees will usually be trained in a group of 2-12, though some individual training may also be available.

2. Bikeability Level 2: Cycle on-road and deal with traffic on short journeys

This takes place on local streets, giving trainees a real cycling experience. Trainees learn how to deal with traffic on short journeys such as cycling to school or the local shops. Trainees are usually trained in small groups – up to 6 trainees per instructor – though individual training may also be available.

3. Bikeability Level 3: Tackle a wider variety of more challenging road and traffic conditions (suitable for competent cyclists of secondary-school age)

This equips trainees with skills for more challenging roads and traffic situations – busier streets, queuing traffic, complex junctions and roundabouts. It also includes planning routes for safe cycling. Level 3 training is delivered one-to-one or in groups of up to 3 so can be tailored to a trainee's individual needs, such as a route to work or school.

Bikeability trained cyclists receive a badge and a certificate in recognition of the level they've achieved. The certificate also includes areas for further practice noted by the instructor.

Approximately 1100 - 1200 children across the borough are trained to bikeability levels 1 or 2 per annum. Bikeability courses are delivered during term time at primary schools for children in year 4 - 6 and in selected secondary schools for year 7 - 8.

6.14.2 Balance and ride courses for children

In schools across Harrow, the borough offers Learn to Balance and ride cycle training for those aged 3-11. During these sessions, free bicycles are provided to children to help them to learn the core fundamentals of cycling.

6.14.3 Walk to school

Walk to School Week is a yearly event held in May to raise awareness of walking and other active ways to travel. The scheme is run by the charity Living Streets who create themed resources to support schools to run fun walking challenges or activities throughout the week, such as the Walking Roots challenge.

6.14.4 Walk Once a Week (WOW)

WOW is a year-round walking challenge run by the charity Living Streets. It encourages pupils and parents to walk, scoot or cycle to school one day each week, rewarding pupils with a badge if they do so four times over a month.

WOW is adaptable to the needs of the school and is supported by a range of classroom resources including the interactive WOW Travel Tracker which uses whiteboard technology to record how pupils travel to school each day.

6.14.5 Walking bus

Walking buses are most suitable for primary age children. They are a sociable and active way to travel to school. They allow pupils to learn about their local environment while reducing congestion and pollution at the school gates. Pupils and volunteers meet at an agreed time and location and walk a set route to school in a group, picking up 'passengers' along the way. The same is done in reverse for the walk home.

6.14.6 Travel Training

Travel training supports those with learning difficulties to develop the skills and confidence to travel independently. By promoting independence from an early age and reducing people's dependence on specialist transport, participants can develop independence through accessing learning and employment opportunities and maintain an improved quality of living. In particular, participants gain skills to travel independently on sustainable transport and in using public transport.

Harrow promotes travel training to eligible children and young adults at all schools in the borough.

6.15 Delivering the SMOT objectives

Table 23 shows the targets that will help to measure delivery of the SMOT objectives.

Table 23: SMOT targets to deliver objectives

SMOT objectives	Targets to monitor progress	Current status	Target and year
SMOT objective 1 Increase the proportion of trips made to and from school by	75% of school pupils travelling by sustainable modes to school by 2020/21	65%	75% by 2020/21

SMOT objectives	Targets to monitor progress	Current status	Target and year
sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment	Increase proportion of network covered by 20mph speed restriction to 60% by 2021/22	50% of road network covered by 20mph restrictions in 2019	60% by 2021/22
SMOT objective 2 Achieve and improve school's TfL accreditation status, through encouraging individual schools to prepare, produce or review school travel plans	32 schools reaching gold STARS accreditation status	25 schools with gold accreditation	32 schools by 2021/22
	50 schools to be engaged in the STARS accreditation process by 2021/22	44 schools engaged	50 schools engaged by 2021/22
SMOT objective 3 Raise awareness of air quality around schools by working with schools to identify local air quality issues	3 air quality events to be held at schools each year	3 per year	Annual
SMOT objective 4 Reduce the number of schools trips made by car and improve pupils' independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport	75% of school pupils travelling by sustainable modes to school by 2020/21	65%	75% by 2020/21
	Provide cycle training for over 1500 children per annum	1026 children trained in 2018/19	1500 per year

6.16 Funding the SMOT action plan

Table 24 shows the key funding sources used for Harrow SMOT initiatives.

Table 24: Key funding source for SMOT initiatives

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
SMOT objective 1: Increase the proportion of trips made to and from school by sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment					
School active travel maps	✓				
Bike week	✓				
Bikers breakfast club	✓				
Dr Bike	✓				
Children’s Traffic Club	✓				
Tour de Salah	✓				
Ride London	✓				
Junior Travel Ambassador Scheme	✓				
Youth Travel Ambassadors	✓				
School Party Travel					✓
20mph zones	✓				
School travel plan engineering measures	✓				
SMOT objective 2: Achieve and improve school’s TfL accreditation status, through encouraging individual schools to prepare, produce or review school travel plans					
STARS accreditation	✓				
SMOT objective 3: Raise awareness of air quality around schools by working with schools to identify local air quality issues					
Identifying air quality around schools					✓
Anti-idling campaigns (air quality events)	✓				
Congestion busting	✓				

Actions	TfL LIP programme funding	TfL strategic funding	Section 106 or CIL	Harrow funded	Other
SMOT objective 4: Reduce the number of schools trips made by car and improve pupils' independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport					
Cycle training	✓				
Balance and ride courses for children	✓				
Walk to school	✓				
Walk Once a Week	✓				
Walking bus					
Travel Training	✓				

6.17 SMOT Action Plan

Table 25 shows the borough SMOT action plan and how the agreed borough LIP3 policies fit with the new SMOT objectives. The table also shows the outputs to be delivered relating to each policy.

Table 25: SMOT action plan

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
SMOT Objective 1 Increase the proportion of trips made to and from school by sustainable modes, through the promotion of sustainable and healthy travel and an improved walking and cycling environment		
Promote sustainable and healthy travel choices and healthy walking routes to school through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking and cycling environment (S1)	Increased active transport for school journeys	Ongoing
Work with schools to set up additional school walking buses (S5)	More school walking buses	Ongoing
Work with TfL to ensure take-up of Children's Traffic Club, a London road danger reduction education resource for pre-schoolers (S6)	Reduced child road casualties	Ongoing
Work with TfL to ensure take-up of the Safety and Citizenship pre-transition safe and responsible behaviour sessions for Year 6 pupils (S7)	Reduced child road casualties	Ongoing
Work with TfL to ensure take-up of the Junior Travel Ambassador and Youth Travel Ambassador schemes, addressing transport and road safety issues in schools (S8)	Reduced child road casualties	Ongoing
Provide road safety education events at schools and colleges throughout the borough (S9)	Delivery of Theatre in Education and Community Roadwatch Reduced casualties for pupils on school journeys	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Increase the extent of 20mph roads in the borough and expand the existing 20mph zones to cover more areas where people live, work and shop and where children travel to school (RS6)	20mph zones at the following locations: Clitheroe Avenue, Rayners Lane, Kingshill Avenue – all to be introduced by 2019/20. Further locations will be selected based on agreed criteria.	Ongoing
SMOT Objective 2 Achieve and improve school’s TfL accreditation status, through encouraging individual schools to prepare, produce or review school travel plans		
Encourage and support schools, higher and further education establishments to review their own travel plans and to achieve and improve TfL accredited status where appropriate (S2)	Increased number of schools with higher STARS accreditation	Ongoing
SMOT Objective 3 Raise awareness of air quality around schools by working with schools to identify local air quality issues		
Work with schools to identify local air quality issues surrounding schools and where appropriate access the Mayor’s Air Quality Fund to provide appropriate solutions and raise awareness of the issue (S10)	Increased awareness of air quality issues Increased initiatives to address air quality around schools	Ongoing
SMOT Objective 4 Reduce the number of schools trips made by car and improve pupils’ independent mobility by increasing opportunities for all children (including those with special education needs) to travel to and from school using environmentally sustainable modes of transport		
Provide and promote cycle training for children and adults who work, study or live in the borough (S4)	Increased cycling in the borough	Ongoing
Encourage cycling generally and in particular for journeys to school (S3)	Increased mode share of school cycle journeys	Ongoing

LIP3 policies (LIP3 policy reference number)	Outputs	Timescale
Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality (S11)	Improved air quality around schools Reduced car mode share of school journeys	Ongoing
Work with schools to promote travel training for children and young people with learning difficulties (S12)	Increased independence by pupils with special needs and reduced reliance on car journeys	Ongoing
Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities (S13)	More after school activities Reduced school trip crowding	Ongoing

Appendix A: Latest STARS school accreditation status

Educational establishment	Phase of education	No. of pupils	STARS accreditation level
Alexandra School	Not applicable	79	Bronze
Alpha Preparatory School	Not applicable	159	Bronze
Avanti House Primary School	Primary	0	Not Engaged
Avanti House School	Secondary	964	Gold
Aylward Primary School	Primary	493	Bronze
Belmont School	Primary	591	Gold
Bentley Wood High School	Secondary	1127	Not Engaged
Brightkidz	Nursery	20	Not Engaged
Buckingham Preparatory School	Not applicable	125	Not Engaged
Camrose Primary With Nursery	Primary	415	Not Engaged
Cannon Lane Primary School	Primary	746	Gold
Canons High School	Secondary	1197	Not Engaged
Cedars Manor School	Primary	596	Gold
Earlsmead Primary School	Primary	0	Gold
Elmgrove Primary School & Nursery	Primary	792	Engaged
Glebe Primary School	Primary	682	Gold
Grange Primary School	Primary	600	Gold
Grimdyke School	Primary	541	Gold
Harrow Collegiate	Not applicable	0	Not Engaged
Harrow High School	Secondary	827	Silver
Harrow Primary School	Not applicable	45	Not Engaged
Harrow School	Not applicable	827	Not Engaged
Hatch End High School	Secondary	1365	Not Engaged
Heathland School	Primary	679	Engaged
Hillview Nursery School	Nursery	37	Not Engaged
Kenmore Park Infant and Nursery School	Primary	390	Gold
Kenmore Park Junior School	Primary	422	Not Engaged
Khalsa College London	Not applicable	0	Not Engaged
Kingsley High School	Not applicable	78	Gold
Krishna Avanti Primary School	Primary	357	Not Engaged
Longfield Primary School	Primary	770	Silver
Marlborough Primary School	Primary	703	Gold
Mountville High	Other	1500	Not Engaged
Newton Farm Nursery, Infant and Junior School	Primary	354	Gold
Nisai Virtual Academy Ltd	Not applicable	0	Not Engaged
Norbury School	Primary	636	Gold
North London Collegiate School	Not applicable	1090	Not Engaged
Nower Hill High School	Secondary	1884	Gold
Oak Lee Montessori School	Nursery	132	Not Engaged

Educational establishment	Phase of education	No. of pupils	STARS accreditation level
Orley Farm School	Not applicable	490	Not Engaged
Park High School	Secondary	1502	Bronze
Pinner High School	Secondary	153	Silver
Pinner Park Infant and Nursery School	Primary	409	Bronze
Pinner Park Junior School	Primary	451	Bronze
Pinner Wood School	Primary	610	Gold
Priestmead Primary School and Nursery	Primary	772	Gold
Quinton Hall School	Not applicable	189	Gold
Red Balloon Learner Centre - Northwest London	Not applicable	20	Not Engaged
Reddiford School	Not applicable	313	Not Engaged
Regent College	Not applicable	90	Not Engaged
Rooks Heath College	Secondary	1061	Not Engaged
Roxbourne Primary School	Primary	552	Bronze
Roxeth Mead School	Not applicable	45	Not Engaged
Roxeth Primary School	Primary	473	Engaged
Saint Jerome Church of England Bilingual School	Primary	60	Bronze
Salvatorian Roman Catholic College	Secondary	526	Not Engaged
Shaftesbury High School	Not applicable	163	Gold
St Anselm's Catholic Primary School	Primary	420	Gold
St Bernadette's Catholic Primary School	Primary	466	Not Engaged
St Dominic's Sixth Form College	16 Plus	0	Not Engaged
St George's Primary School	Primary	428	Engaged
St John Fisher Catholic Primary School	Primary	513	Gold
St John's CofE School Stanmore	Primary	408	Not Engaged
St Joseph's Catholic Primary School	Primary	418	Not Engaged
St Teresa's Catholic Primary School and Nursery	Primary	468	Gold
Stag Lane Infant and Nursery School	Primary	404	Not Engaged
Stag Lane Junior School	Primary	362	Not Engaged
Stanburn Primary School	Primary	798	Not Engaged
Stanmore College	16 Plus	0	Not Engaged
The Helix Education Centre	Not applicable	74	Not Engaged
The John Lyon School	Not applicable	584	Not Engaged
The Jubilee Academy	Not applicable	2	Gold
The Moriah Jewish Day School	Primary	218	Not Engaged
The Sacred Heart Language College	Secondary	730	Not Engaged
Vaughan Primary School	Primary	619	Gold
Weald Rise Primary School	Primary	675	Bronze
Welldon Park Primary School	Primary	536	Bronze
West Lodge Primary School	Primary	640	Gold
Whitchurch Primary School & Nursery	Primary	767	Silver
Whitefriars School	All Through	720	Bronze

Educational establishment	Phase of education	No. of pupils	STARS accreditation level
Whitmore High School	Secondary	1676	Not Engaged
Woodlands School	Not applicable	121	Gold

GLOSSARY

ALGG	All London Green Grid
BAME	Black, Asian and Minority Ethnic
BID	Business Improvement District
CEO	Civil Enforcement Officers
CTC	Children's Traffic Club
CYC	Charge Your Car Network
DfT	Department for Transport
EV	Electric Vehicle
EVFT	Electric Vehicle Fleet Trial
HPTUA	Harrow Public Transport Users Association
HSL	Healthy Schools London
JTA	Junior Travel Ambassador
LEV	Low Emission Vehicle
LEZ	Low Emission Zone
LIP	Local Implementation Plan
LIP3	3 rd Local Implementation Plan
MTS	Mayor's Transport Strategy
NoF	Neighbourhood of the Future
OCPP	Open Charge Point Protocol
OLEV	The Office for Low Emission Vehicles
PAYG	Pay As You Go
SEN	Special Educational Needs
SEND	Special Educational Needs and Disability
SMART	Specific, Measurable, Achievable, Relevant and Time specific
SMOT	Sustainable Modes of Travel
STP	School Travel Plan
STARS	Sustainable Travel: Active, Responsible, Safe
TfL	Transport for London
ULEV	Ultra Low Emission Vehicle
ULEZ	Ultra Low Emission Zone
WOW	Walk Once a Week
YTA	Youth Travel Ambassadors
ZEC	Zero Emission Capable

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**REPORT FOR: TRAFFIC & ROAD
 SAFETY ADVISORY
 PANEL**

Date of Meeting:	25 June 2019
Subject:	INFORMATION REPORT Traffic and Parking Schemes Programme Update - 2019 /20
Key Decision:	No
Responsible Officer:	Paul Walker – Corporate Director, Community
Portfolio Holder:	Councillor Varsha Parmar - Portfolio Holder for Environment
Exempt:	No
Decision subject to Call-in:	No, report is for information
Wards affected:	All
Enclosures:	Appendix A - Parking management programme 2019/20 Appendix B - Transport for London programme 2019/20 Appendix C - Clitheroe Avenue - 20 mph zone Appendix D - Kingshill Avenue - 20 mph zone

- Appendix E** - Pinner Road BP scheme
- Appendix F** - Harrow Weald High Road – Bus Priority scheme
- Appendix G** - Marsh Road - New zebra crossing
- Appendix H** - Greenford Road – New Zebra crossing
- Appendix J** - Abercorn Road – New zebra crossing
- Appendix K** - Cycleway scheme
- Appendix L** - Cavendish Avenue – 20 mph zone
- Appendix M** - High Worple 20 mph zone
- Appendix N** - Waxwell Lane -20 mph zone
- Appendix P** - Common Road – 30 mph
- Appendix Q** - Goodwill to All junction

Section 1 – Summary and Recommendations

This information report is presented to members to provide an update on progress with the 2019 /20 traffic and parking management programme of works.

Recommendations:

None, the report is for information only.

Reason: (For recommendations)

None, the report is for information only.

Section 2 – Report

Introductory paragraph

- 2.1 This information report provides members with an update on the current programme of transport schemes and initiatives funded in the 2019/20 programme. This includes schemes funded by Transport for London grant and the Harrow capital programme. **Appendix A and B** provides a summary of progress with all the schemes within the current programme.

- 2.2 More detail on specific schemes is provided below in the body of the report where they have reached the public consultation, statutory consultation or implementation stages and any other specific issues of interest to members.

Options considered

- 2.3 This work programme fits within the scope of the Council’s Transport Local Implementation Plan. The plan sets out the case for taking forward a wide ranging programme of investment.

Background

Harrow Capital 2019 / 20

Parking management programme

- 2.4 The Parking Management Schemes Programme for 2019 /20 was agreed and approved by TARSAP in February 2019. The current status of each scheme in the programme can be seen in **Appendix A**.

The programme update summary is as follows:

Scheme	Status
Harrow on the Hill - CPZ (carry over 2018-19)	PH report being drafted following the outcome of statutory consultation
The Broadway, Hatch End P & D (carry over 2018-19)	Implementation in July/August
Whitchurch Gardens Area – CPZ (carry over 2018-19)	Implementation in July
Zone (TB) (carry over 2018-19)	Implementation in July
Clitheroe Avenue – Rayners Lane	In design
Gordon Road - Wealdstone	In design
Eaton and Hall Farm Close - Stanmore	In design out to consultation shortly
Vaughan Road – West Harrow	In design out to consultation shortly
Grimsdyke Road – Hatch End	In design out to consultation shortly
Buckingham Road – Edgware	In design out to consultation shortly
The Chase - Pinner	In design out to consultation shortly
Walton Drive - Marlborough	In design out to consultation shortly

Localised Safety Parking Schemes Programme (LSPP)

- 2.5 This an ongoing programme concerned with localised sites where minor parking problems occur. Typically remedial measures consist of proposals for single or double yellow lines at junctions, bends and narrow sections of road in order to improve vehicular access or improve road safety.

- 2.6 These measures also reinforce the well-established principles set out in The Highway Code. This is an on-going rolling programme of works and

members and the Portfolio Holder will be advised of the locations included in the programme during the course of the year.

- 2.7 Local councillors and the PH are informed of the measures prior to public consultation and an ad hoc basis.

Transport for London – Local Implementation Plan (LIP) Programme 2019/20

The current status of each scheme in the programme can be seen in **Appendix B**.

LIP – Vision Zero programme

- 2.8 This programme of work is focussed on reducing Killed and Seriously Injured (KSI) accidents throughout the borough in line with the Mayor for London's vision zero transport strategy for deaths and serious injuries from all road collisions to be eliminated from London streets by 2041.

- 2.9 The following locations have been identified by our transport consultants as having a high number of personal injury accidents and therefore we are looking at causations factors with a view to designing out personal injury accidents along at these junctions / corridors.

- Streatfield Road / Portland Crescent
- Pinner Road / Pinner View / Surrey Road
- The Broadway, Stanmore
- Station Road / Pinner Road

- 2.10 These schemes have been passed to our consultants for initial design and investigation for delivery this financial year. Associated surveys have been undertaken.

- 2.11 The council's 20 mph zone program forms a part of our Vision Zero programme with combined budget of £240,000 this financial year. This will allow us to introduce two new 20 mph zones and four local safety schemes. Progress with these schemes is as follows:

Clitheroe Avenue area (20mph zone) – new zone

- 2.12 This scheme has been passed to our consultants for initial design and investigation for delivery this financial year. Associated surveys have been undertaken. The extent of the scheme can be seen in **Appendix C**

Kingshill Avenue area (20mph zone) – new zone

- 2.13 This scheme has been passed to our consultants for initial design and investigation for delivery this financial year. Associated surveys have been undertaken. The extent of the scheme can be seen in **Appendix D**

- 2.14 All 20 mph zones are designed to be self-enforcing without relying on police enforcement and so most schemes include some form of traffic calming measures, such as speed cushions or kerb build outs, in order to ensure a majority of motorists comply with the 20 mph speed limit.

LIP- Bus Priority schemes

- 2.15 Harrow Council works closely with Transport for London (TfL) and their consultants to make bus services a more attractive and reliable mode of transport by promoting the use of public transport and improving the highway infrastructure to facilitate bus routes and bus movements. The following areas have been highlighted in this year's programme for improvements:
- Pinner Road, North Harrow – kerb line realignment to provide wider traffic lanes. Design has been completed as a result we will need to relocate some statutory undertaker's plant which is currently underway. Details of the scheme can be seen in **Appendix E**
 - College Road - bus / cycle only trial between the Headstone Road and the section between Pinner Road and Bessborough Road roundabouts is on-going.
 - High Road, Harrow Weald – extension of southbound bus lane up to the entrance of Homebase on High Road, Harrow Weald. Design has been completed as a result we will need to relocate some statutory undertaker's plant which is currently underway. Details of the scheme can be seen in **Appendix F**

LIP - Freight Management Schemes

- 2.16 A review of the existing operational freight management strategy has been undertaken and completed in line with our revised LIP programme. The strategy will need to be updated in due course.
- 2.17 There was a request to implement a loading bay in Pinner Road o/s North Harrow Methodist Church which has now been abandoned following representations from the public.
- 2.18 A review of the loading facilities across the borough will be undertaken and new requests for loading bays considered on an assessment basis.

LIP – Walking and Cycling schemes

- 2.19 The Council allocation for walking and cycling in the TfL LIP programme is £300k. This funding will assist in implementing walking improvement measures at suitable sites and allow the development of cycle routes to be implemented in line with the Council's adopted cycle strategy.
- 2.20 The following walking schemes will be taken forward in this year's programme for improvements:

- Marsh Road Zebra crossing – Following the outcome of the public consultation on Eastcote Road / Marsh Road pedestrian improvement scheme last year, the council will investigate to provide a new zebra crossing on Marsh Road near its junction with Eastcote Road in Pinner. We anticipate public consultation to be carried out in Sept. 2019. Details of the draft scheme can be seen in **Appendix G**
- Love Lane Zebra crossing – The council is proposing to provide a new zebra crossing on Love Lane near its junction with Bridge Street. Initial investigation are currently been carried out. We anticipate public consultation to be carried out in Aug-Sept. 2019.
- Greenford Road Zebra crossing – The public consultation on proposals to provide a new zebra crossing on Greenford Road will commence from 3rd June 2019. Details of the scheme can be seen in **Appendix H**
- Old Church Lane/Abercorn Road Zebra crossing – The council is proposing to provide a new zebra crossing on Abercorn Road near its junction with Old Church Lane. Initial investigation are currently been carried out. We anticipate public consultation to be carried out in Aug-Sept. 2019. Details of the draft scheme can be seen in **Appendix J**

LIP – Eastcote Road / Marsh Road - Walking scheme

- 2.21 The public consultation on proposals to improve pedestrian crossing facility at Eastcote Road / Marsh Road junction was carried out in October 2018 and the results along with recommendations were reported to the Portfolio Holder who approved the proposals for implementation. As part of the recommendation, a review to provide controlled crossing along Marsh Road will be carried out this financial year.

Northern Cycle Route (Edgware to Pinner)

- 2.22 The councils transport consultant has been commissioned to design cycle measures along a route which links Edgware Road and Marsh Road in Pinner, primarily in residential streets.
- 2.23 The measures will consist of low to medium interventions such as junction improvements/ entry treatments, off road shared /segregated footways, potential pathway improvements through green spaces and reallocation of road space where permissible.

TfL Cycleway route Harrow Weald to Kenton Road (via Harrow town centre and Wealdstone town centre)

- 2.24 TfL have been working with the boroughs and Sustrans, a charitable cycling organisation, to assist the Mayor for London to identify a “Cycle way” network across London. Cycleways routes are intended to form a network of radial

and orbital cycle routes designed to overcome barriers to cycling and target cyclists who want to use quieter, low-traffic routes that provide an environment for those cyclists who want to travel at a gentler pace.

2.25 Sustrans have been commissioned recently to undertake detailed design in accordance with TfL's criteria. The route starts at the Kenton Road (near Northwick Park Station) and runs between Harrow and Wealdstone town centres up to High Road, Harrow Weald. This programme of work is funded separately from LIP funding. Details of the scheme can be seen in **Appendix K**

2.26 The scheme will be delivered in phases over a three year period. Phase one will commence at the Gayton Road / Kenton Road junction and will terminate at the bridge under the railway line in Elmgrove Road. Community engagement will start in the summer.

2.27 Transport Initiatives - E Bike Trial

The trial is part of an ongoing initiative between Harrow and West Trans to promote electric cycles. The council received six electric bikes last year as part of the trial. The current status is as follows:

- 5 E Bikes have been set aside for Harrow Council employees;
- The remaining 1 E Bike will be loaned to the Parking Operations department for the full 6 months.
- The trial has been extended and is due to finish on the 27th August;

2.28 Transport Initiatives – Lime Bike

Lime Bike, an electric dockless cycle hire operator has approached the council to engage in 12 month trial to encourage modal shift towards sustainable transport and increase the uptake of cycling. A report will be presented to cabinet in June seeking authority to start a trial with an electric dockless cycle provider

Local Transport Fund Schemes (LTF) 2019/20

2.29 The TfL award for funding in 2019/20 included a local transport funding allocation of £100,000. This budget is allocated to boroughs through the Local Implementation Plan (LIP) funding process. The funds must be used for transport purposes broadly consistent with the Mayor's Transport Strategy and the borough's LIP. Members agreed a programme of LTF schemes at the February 2019 TARSAP meeting.

2.30 The programme consists of three 20mph zones, investigation of the feasibility of Harrow cyclists Low Traffic Neighbourhood project and minor measures to address local concerns. Details of the schemes are detailed below.

- 2.31 LTF – Cavendish Avenue area 20mph zone. Surveys and initial design have been completed. Public consultation will commence in June 2019. Details of the scheme can be seen in **Appendix L**
- 2.32 LTF – High Worple area 20mph zone extension. Surveys and initial design have been completed. Public consultation will commence in June 2019. Details of the scheme can be seen in **Appendix M**
- 2.33 LTF – Waxwell Lane area 20mph zone. Surveys and initial design have been completed. Public consultation will commence in June 2019. Details of the scheme can be seen in **Appendix N**
- 2.34 LTF – Low Traffic Neighbourhoods – The Council received a petition containing 390 signatures in February 2019 to close minor roads to motor vehicles at key points in the area surrounded by Headstone Gardens, Harrow View, Pinner Road, Station Road (North Harrow) and Parkside Way in Headstone South. We will be commissioning a feasibility study to consultants shortly.
- 2.35 LTF - Minor safety measures, road markings / traffic signs. The council receives many requests each year from local residents and other stakeholders for localised measures to improve road safety. Not all requests meet our criteria for traffic calming measures such as road humps, chicanes etc. and so this programme of work will be used throughout the year to address minor local safety concerns that are not prioritised for more major interventions but could benefit from minor works. This is an on-going programme mainly involving new road markings and road signs
- 2.36 There is one remaining LTF scheme from 2018/19 which includes a proposal to improve safety around Krishna Avanti School by reducing the existing speed limit from 40mph to 30mph on Common Road. This is following speed surveys that have been undertaken in the area. **Appendix P** shows details of the revised proposals which has been approved by Portfolio Holder for implementation. Scheme has been passed on to contractor for implementation

LIP – Network Performance (Congestion Relief)

- 2.37 Traffic congestion occurs when the demand to make journeys gets close to or exceeds the network capacity and is characterised by slower speeds, longer journey times, and vehicle queues. This programme of work seeks to identify areas of the network where improvements can maximise network capacity by removing blockages and ensuring that traffic management is efficient and effective.
- 2.38 Pedestrian Countdown Timers - Consultants have been commissioned to investigate the provision of pedestrian countdown timers on all of the pelican crossings within the borough. The commission includes the prioritisation of the crossings and the associated costs which can then be included with future programmes.

- 2.39 London Road (Stanmore) Study – Consultants have been commissioned to undertake a study to investigate the cause of the congestion on London Road between The Broadway and Brockley Hill. The report is expected to be complete in summer.
- 2.40 Alexandra Avenue – Following concerns regarding congestion on the southern section (northbound) on Alexandra Avenue, officers commissioned video surveys to ascertain the cause. The surveys confirmed that drivers that are unable to turn right out of Somervell Road are using the entrance of the service road to turn around which is leading to congestion. Officers are currently investigation options to improve the situation.

Electric Vehicles (EV) infrastructure

- 2.41 A review of initiatives that can support electric vehicle use in the borough is underway, including potential locations for on-street charging points. The final locations for these charge points will take into account the views of and requests from residents. Locations will be assessed for suitability and factor in a number of considerations for other road users and pedestrians, for example, ensuring that footpaths continue to be wide enough to accommodate wheelchairs.

Neighbourhood of the Future – Harrow Town Centre

- 2.42 The council has commissioned our transport consultants to investigate the feasibility of introducing an all-electric vehicle only street which will operate 8:00am -6:30pm Monday – Saturday in Station Road, Harrow Town Centre to improve air quality.
- 2.43 Initial discussions with business are planned shortly to gauge servicing requirements.
- 2.44 The Business Fleet trail is continuing and we are planning further promotional events in the next few months.

Accessibility Improvements

- 2.45 This is an on-going programme of work and is concentrated mainly on the provision of disabled parking bays, dropped kerbs for pedestrians and other physical changes to the highway to support mobility impaired people's needs.

Pedestrian Safety

- 2.46 Station Road / Hindes Road – Following the receipt of a petition by St Jerome's Bilingual School in January 2019, the Council commissioned TfL's subcontractor Telent to investigate options to improve the capacity/safety of the east/west crossing for pedestrians. They are currently liaising with TfL on a number of options and we hope to receive the technical report shortly.

- 2.47 George V Avenue/Pinner Road – Following ongoing concerns by Nower Hill School about the lack of controlled pedestrian facilities (north/south), the Council commissioned Telent to investigate the feasibility to introduce a pedestrian phase across the Pinner Road arm of the junction. Surveys have been undertaken to facilitate the required modelling and they are currently liaising with TfL on this matter.

External funding sources

Headstone Drive / Harrow View / Headstone Gardens – Traffic Signals (Goodwill to All junction)

- 2.48 This scheme will be funded from section 106 developer contributions from the Kodak development.
- 2.49 Public consultation is currently underway and finishes on 21st June. Details of the scheme can be seen in **Appendix Q**
- 2.50 If the scheme is approved, the implementation is likely to commence with utilities diversion works in autumn 2019.

Sandringham Crescent area parking review (The Matrix Pub)

- 2.51 Parking beat surveys have been completed around the site to determine existing parking patterns utilising the £10,000 available for a parking review.
- 2.52 The beat surveys will be repeated following full occupation of the site and if the parking situation has worsened around the development the council will look to introduce additional parking controls in the area.

Ward Councillors' comments

- 2.53 No ward councillor's comments have been sought for this report as it is for information only.

Staffing/workforce

- 2.54 The delivery of schemes in the programme of investment will be undertaken by existing staff resources within the Traffic, Highways & Asset Management team supported by technical consultants as needed.

Performance Issues

- 2.55 The implementation of schemes in the programme of investment will support the wider aims, objectives and targets in the LIP and help to deliver Harrow's corporate priorities and in particular building a better Harrow.

Environmental Implications

- 2.56 The LIP underwent a Strategic Environmental Assessment (SEA). This indicated that there are environmental benefits from delivering the programme of investment. The main benefits are in improving air quality and public health. No negative environmental issues were identified as part of the SEA.
- 2.57 Key air quality benefits identified were from reducing car travel, encouraging greener vehicles and reducing congestion.
- 2.58 Key population and human health benefits identified were from reducing casualties, encouraging active travel, health walks and as a result of improving air quality. The benefits associated with increased active travel and health walks are reduced diabetes and obesity levels.

Risk Management Implications

- 2.59 Risk included on Directorate risk register? No
- 2.60 The delivery of each scheme in the programme of investment will be subject to separate risk assessments.
- 2.61 There is a requirement to undertake a design risk assessment during scheme development under the Construction (Design & Management) Regulations in order to manage any potential health and safety risks.

Legal implications

- 2.62 There are no legal implications.

Financial Implications

- 2.63 Any schemes and works programmes mentioned in this report are being taken forward using identified resources within the 2019/20 capital programme and confirmed funding allocations from TfL, and S106 developer contributions.

Equalities Implications / Public Sector Equality Duty

- 2.64 A programme of investment was included in the LIP.
- 2.65 LIP3 has been subject to a full Equalities Impact Assessment and have been identified as having no negative impact on any protected equality groups and with positive impacts on the disability and age equality groups.

Council Priorities

2.66 The LIP3 and associated programme of investment detailed in the report support the Harrow ambition plan and will contribute to achieving the administration's priorities:

- Building a Better Harrow
- Supporting those most in need
- Protecting vital Public Services
- Delivering a Strong Local Economy for All
- Modernising Harrow Council.

Section 3 - Statutory Officer Clearance

Name: Jessie Man	<input checked="" type="checkbox"/>	on behalf of the Chief Financial Officer
Date: 13/6/19		
Name: Patrick Kelly	<input checked="" type="checkbox"/>	on behalf of the Monitoring Officer
Date: 14/06/19		
Name: Paul Walker	<input checked="" type="checkbox"/>	Corporate Director
Date: 13/06/19		
Ward Councillors notified:	NO, as it impacts on all Wards	
EqIA carried out:	YES, as a part of LIP3	
EqIA cleared by:	Dave Corby, Community - Equality Task Group (DETG) Chair	

Section 4 - Contact Details and Background Papers

Contact:

Barry Philips – Transportation Manager
Tel: 020 8424 1649, Fax: 020 8424 7662,
E-mail: Barry.Philips@harrow.gov.uk

Johann Alles – Deputy Team Leader
Tel: 020, Fax: 020 8424 7662,
E- mail: Johann.Alles@Harrow.gov.uk

Background Papers:

Transport Local Implementation Plan
Previous TARSAP reports

**Call-In Waived by the
Chair of Overview and
Scrutiny Committee**

NOT APPLICABLE

*[Call-in does not apply as the
decision is for noting only]*

Appendix A – Harrow Capital, parking management schemes update – 2019/20

This is Harrow's own programme of parking management scheme initiatives which support the delivery of the Local implementation Plan. In 2019/20 this comprises of allocations of £240K for controlled parking schemes and £60K for the local safety parking schemes programme.

Scheme	Details	£k	Status	Contact officer	Planned finish
Harrow on the Hill – new CPZ	Scheme continuing form 2018/19 Statutory consultation completed meeting requested with members and PH to discuss/agree measures to be taken forward.	40	Meeting arranged for May to agree proposals to be taken forward to implementation. (works order to be issued following PH decision).	Barry Philips / Sajjad Farid	August 2019
The Broadway, Hatch End service roads – new P&D	Scheme continuing form 2018/19 Proposals to introduce pay and display in The Broadway service road outside the shops and Wellington Road.	8	The PH has agreed for the scheme to proceed to implementation as consulted upon with the exception of 2hr max stay increased to 3hrs. (works order issued)	Barry Philips / Sajjad Farid	July 2019
Zone (TB), Canons - parking review of existing CPZ	Scheme continuing form 2018/19 Review of the hours of operation of zone TB following request from Cavendish Drive and Dorset Drive to extend the existing hours of control and possible inclusion of all of Lake View in Zone (TB)	7	The PH has agreed for the scheme to proceed to implementation which will entail: 1. Extension of zone (TB) to include all of Lake View 2. Double yellow lines throughout consultation area on bends, turning heads, junctions and narrow sections of road. Cavendish and Dorset Drive to remain in existing zone (TB).	Barry Philips / Sajjad Farid	July 2019
Whitchurch Gardens area,	Scheme continuing form	5	The PH has agreed for the	Barry Philips /	July 2019

Scheme	Details	£k	Status	Contact officer	Planned finish
Canons – new CPZ	2018/19 Localised parking review – possible new zone		scheme to proceed to implementation which entails: 1. Two new zone's to be introduced in St Lawrence Close and Winton Gardens 2. Extended hours of control along Whitchurch Lane between Montgomery Rd and 193, Whitchurch Lane. 3. Double yellow lines throughout consultation area on bends, turning heads, junctions and narrow sections of road.	Sajjad Farid	
Clitheroe Avenue, Rayners Lane -	Localised parking review – possible new zone operational Mon-Fri 10am to 3pm	15	Initial design/surveys underway – Legal notification (statutory consultation) to be undertaken and discussed with local councillors	Barry Philips / Sajjad Farid/	Feb/Mar 2020
Gordon Road, Wealdstone	Review of the existing hours of operation of zone (CA) – possible new zone	35	Initial design/surveys underway – public consultation and legal notification (statutory consultation) to be undertaken	Barry Philips / Sajjad Farid	Feb/Mar 2020
Eaton and Hall Farm Close, Stanmore	Localised parking review – possible new zone	10	Initial design/surveys underway – to be discussed with local councillors & lead petitioner and possibly proceed to legal notification	Barry Philips / Sajjad Farid/	Feb/Mar 2020
Vaughan Road, West Harrow	Localised parking review – possible new zone	40	Initial design/surveys underway – to be discussed with local councillors	Barry Philips / Sajjad Farid	March 2020
Grimsdyke Road, Hatch End	Localised parking review – possible new zone	40	Initial design/surveys underway – public consultation and legal notification (statutory consultation) to be undertaken	Barry Philips / Sajjad Farid	March 2020

Scheme	Details	£k	Status	Contact officer	Planned finish
Buckingham Road, Edgware	Localised parking review – possible new zone	40	Initial design/surveys underway – to be discussed with local councillors, public consultation and legal notification (statutory consultation) to be undertaken	Barry Philips / Sajjad Farid/	Feb/Mar 2020
The Chase, Pinner	Localised parking review – possible new zone	10	Initial design/surveys underway – public consultation and legal notification (statutory consultation) to be undertaken and discussed with the local councillors	Barry Philips / Sajjad Farid.	Oct/Nov 2019
Walton Drive, Marlborough	Localised parking review – to include all of Walton Drive in existing zone (C)	10	Legal notification (statutory consultation) to be undertaken and discussed with the local councillors.	Barry Philips / Sajjad Farid/	October 2019
Local Safety Parking Schemes Programme	<p>The introduction of minor localised waiting restrictions (yellow lines) schemes to deal with access problems and road safety issues.</p> <p>Review of waiting restrictions in Whitefriars Avenue / Gordon Road, Wealdstone to deal with localised congestion.</p>	60	<p>On-going prioritisation / implementation of requests for yellow lines. (See main body of report)</p> <p>Legal notification (Statutory consultation) undertaken in February. Meeting to be arranged with members and PH to agree proposals to be taken forward to implementation</p>	Barry Philips / Sajjad Farid	<p>Mar 2020</p> <p>Mar 2020</p>

Transport for London, Local Implementation Plan (LIP) programme update – 2019 /20

This is the main traffic and transportation programme funded by Transport for London to deliver the programme of investment in the Transport Local Implementation Plan (LIP). The overall allocation for traffic and transportation works and initiatives related to the LIP in 2019/20 is £1,420k. This is allocated as either capital or revenue within Harrow's financial system depending on the nature of the work undertaken.

TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Corridors	Road Safety Schemes Vision Zero	<p>Mass action - killed and seriously injured (KSI) casualties' reduction. Sites include:</p> <ul style="list-style-type: none"> • Streatfield Rd – Queensbury • Pinner Rd / Pinner View / Surrey Road • The Broadway – Stanmore • Station Rd / Pinner Rd <p>Implementation of 20mph zones around schools in the borough.</p> <ul style="list-style-type: none"> • Clitheroe Ave area – new zone • Kingshill Avenue – new zone 	240	In design - See main report	Barry Philips	Mar 2020

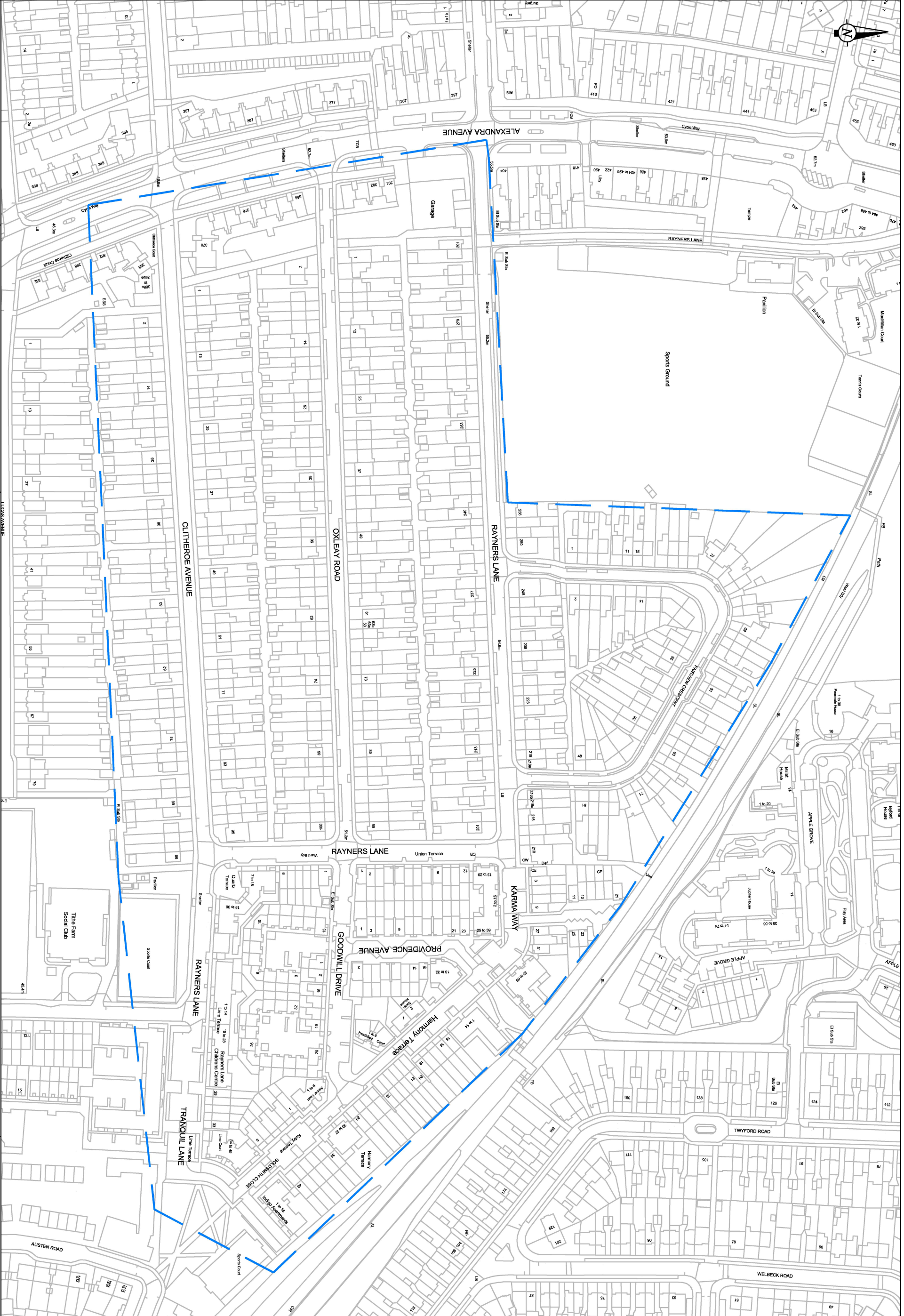
TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Corridors	Walking & Cycling Schemes	Infrastructure schemes designed to improve walking facilities <ul style="list-style-type: none"> • Marsh Road – new zebra crossing • Love – Lane – new zebra crossing • Greenford Road – new zebra crossing • Old Church Lane – new zebra crossing Programme of schemes to improve cycle routes on the highway network <ul style="list-style-type: none"> • Northern Route 	300	See main body report	Barry Philips	Mar 2020
Corridors	Bus priority schemes	Schemes to improve congestion and improve delays to buses on <ul style="list-style-type: none"> • Pinner Road, North Harrow • College Road – Bus lane trial • Shaftesbury Avenue / Roxeth Hill signalised junction 	250	See main body of report	Barry Philips	Mar 2020

TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Corridors	Freight management schemes	<ul style="list-style-type: none"> Review of existing freight strategy implement a loading bay in Pinner Road o/s North Harrow Methodist Church A review of the loading facilities across the borough 	40	Complete – discuss findings with PH	Barry Philips	Mar 2020
Corridors	Network performance schemes	<p>Network Performance</p> <ul style="list-style-type: none"> London Road Alexandra Avenue Pelican upgrades 	40	In design	Barry Philips	Mar 2020
Corridors	Accessibility Improvements	Provision of Disabled parking bays, and dropped kerbs for pedestrians and other physical changes to highway to support mobility impaired people	35	On-going programme of delivery throughout the year. Delivered in batches.	Barry Philips	Mar 2020
Corridors	ULEV infrastructure and Air Quality schemes	Promote electric charging points and car clubs	60	Investigating suitable sites for electric charging points to support electric vehicles use - ongoing.	Barry Philips	Mar 2020

TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Corridors	Active and Sustainable Travel	Support air quality and anti-idle initiatives Support active travel through sustainable transport initiatives	40	Various measures proposed including: <ul style="list-style-type: none"> • Monitoring tubes installed around schools • Promotion of electric vehicle technology and charging points and Car Clubs • Promotions / Campaigns including - Bike Week, cycling promotions, walking works promotions, integration with smarter travel • Promotion of Active Travel and links with Health and Air Quality • Anti-Idling campaign • Electric vehicles promotion • Electric bikes trial 	Barry Philips	Mar 2020
Corridors	Road safety education	Various road safety education initiatives for schools and vulnerable road user groups undertaken by Road Safety Officer.	40	Interactive road safety education programs to continue in all schools in Harrow.	David Corby	Mar 2020
Corridors	Shopmobility	Funding support for increased opening hours of service particularly at weekends and in Christmas sales	5	Funds being used to support Shopmobility	Barry Philips	Mar 2020
Corridors	Travel training	Targeted travel training for people with learning difficulties to support public transport use	20	Council SEN services to provide travel training to students at Harrow College and Shaftesbury High School	Barry Philips	Mar 2020

TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Corridors	Cycle Training	TfL funded cycle training is offered free to children and adults, who live, work or are educated in the borough. All courses are promoted via the council website and throughout schools and businesses in the borough.	65	On-going delivery of free cycle training for children and adults	David Corby	Mar 2020
Corridors	Travel Plans	<p>Various initiatives undertaken by travel planning staff:</p> <ul style="list-style-type: none"> • Small grant funding to support travel plans • Walk to School promotions • Schools quarterly newsletter • Theatre in education • School Travel Maps • Cycle repair workshops 	105	<p>Support for school travel plans including requests for grant funding to implement measures to support school travel plans to promote sustainable travel and discourage use of private car to travel to school.</p> <p>Promotional work to support sustainable transport message including Theatre in Education shows and Dr Bike sessions</p>	Barry Philips	Mar 2020
Corridors	Forward programme development	Identify future work through assessments and studies.	50.7	<p>On-going scheme investigation and development work for 2019/20 schemes</p> <p>Development of LIP3 and other strategic policy documents</p>	Barry Philips	Mar 2020
Staff support	UDL training	Access for technical staff to transportation courses and training to support delivery of the LIP	4	On-going	Barry Philips	Mar 2020

TFL programme	Scheme	Details	£k	Status	Contact officer	Planned finish
Local Transport fund	Local Transport Fund schemes	<p>Local Transport Fund schemes identified by the borough which support the Mayors Transport Strategy</p> <ul style="list-style-type: none"> • Cavendish Ave – 20 mph • High Worple – 20 mph • Waxwell Lane – 20 mph • Low Traffic Neighbourhoods • Minor signs and lines 	100	(See main body of report)	Barry Philips	Mar 2020
Quietways	Northwick Park to Harrow Weald Cycle Way	Design and development of TfL Cycleway route from Kenton Road – Harrow Weald	75	Consultant commissioned and design work on-going	Barry Philips	Mar 2020
GULCS	Neighbourhood of the future	<p>Implement a neighbourhood of the future (NOF) in Harrow Town centre</p> <p>Station Road - Electric street Mon – Sat 8:00am – 6:30 pm</p>	25	Station Road study – commissioned	Barry Philips	Mar 2020



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TRAFFIC, HIGHWAYS & ASSET
MANAGEMENT
P. O. Box 39, Civic Centre,
Harrow, Middlesex, HA1 2XA
Tel: (020) 8983 5811
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GENERAL KEY

— PROPOSED EXTENT OF
20mph ZONE

CLITHEROE AVE PROPOSED 20mph AREA (NOT TO SCALE)

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APPENDIX C

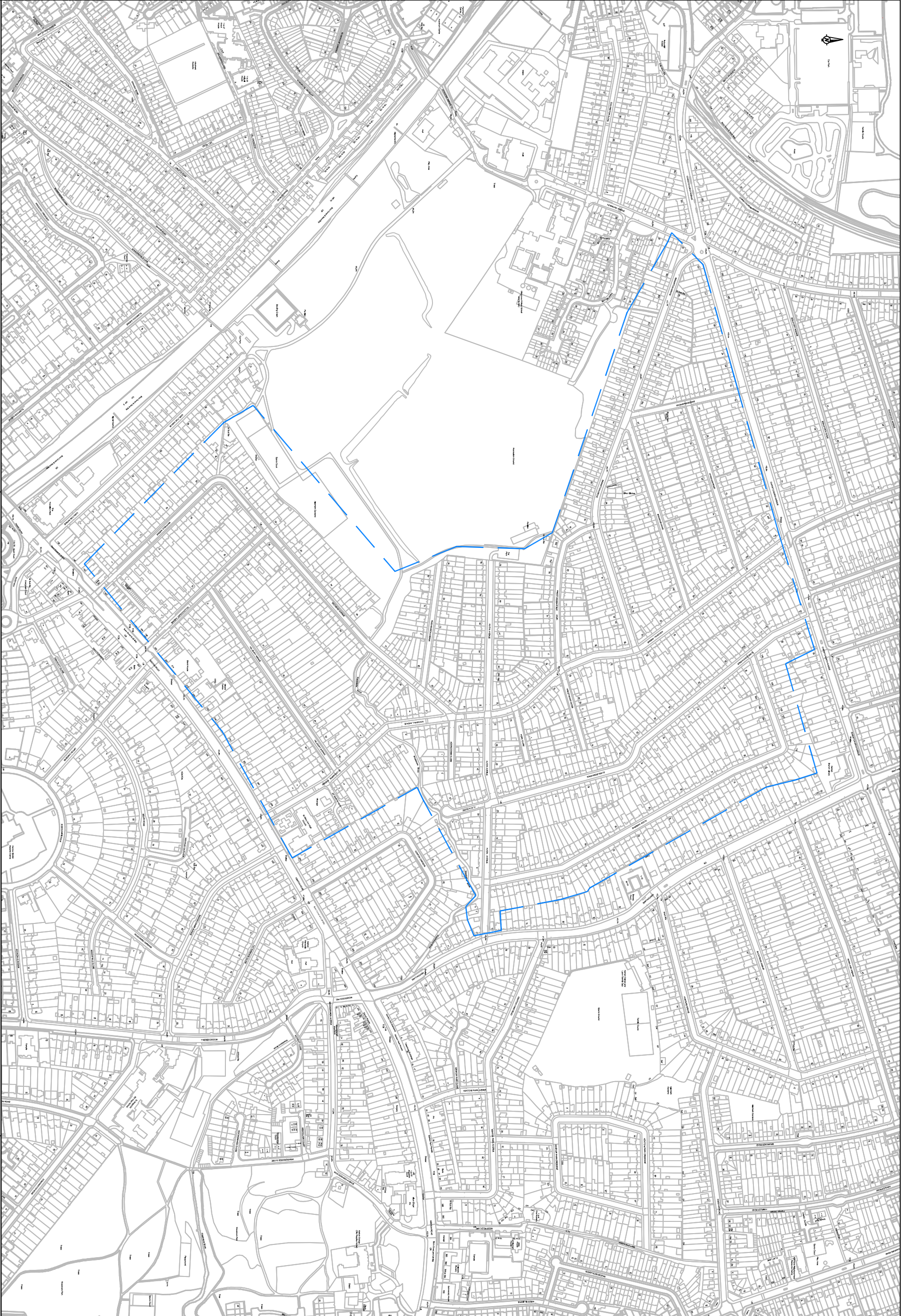
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GENERAL KEY

PROPOSED EXTENT OF
20mph ZONE

KINGSHILL AVE PROPOSED 20mph AREA (NOT TO SCALE)

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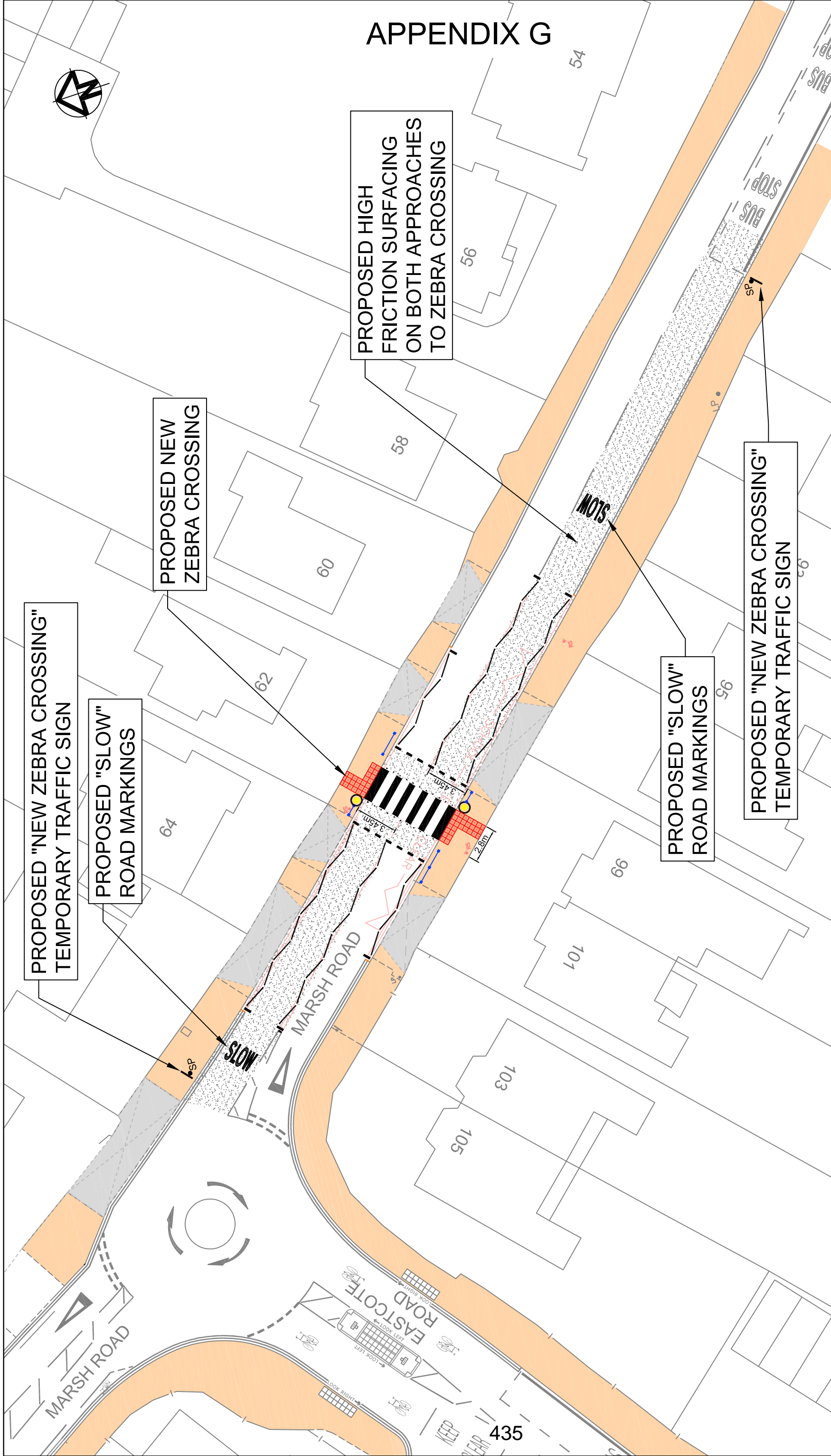
APPENDIX D

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APPENDIX G



PROPOSED "NEW ZEBRA CROSSING"
TEMPORARY TRAFFIC SIGN




PROPOSED "SLOW"
ROAD MARKINGS

PROPOSED NEW
ZEBRA CROSSING


PROPOSED HIGH
FRICTION SURFACING
ON BOTH APPROACHES
TO ZEBRA CROSSING

PROPOSED "SLOW"
ROAD MARKINGS

PROPOSED "NEW ZEBRA CROSSING"
TEMPORARY TRAFFIC SIGN

-  Driveway - to remain unaffected by proposals
-  Existing footway
-  New high friction carriageway surface

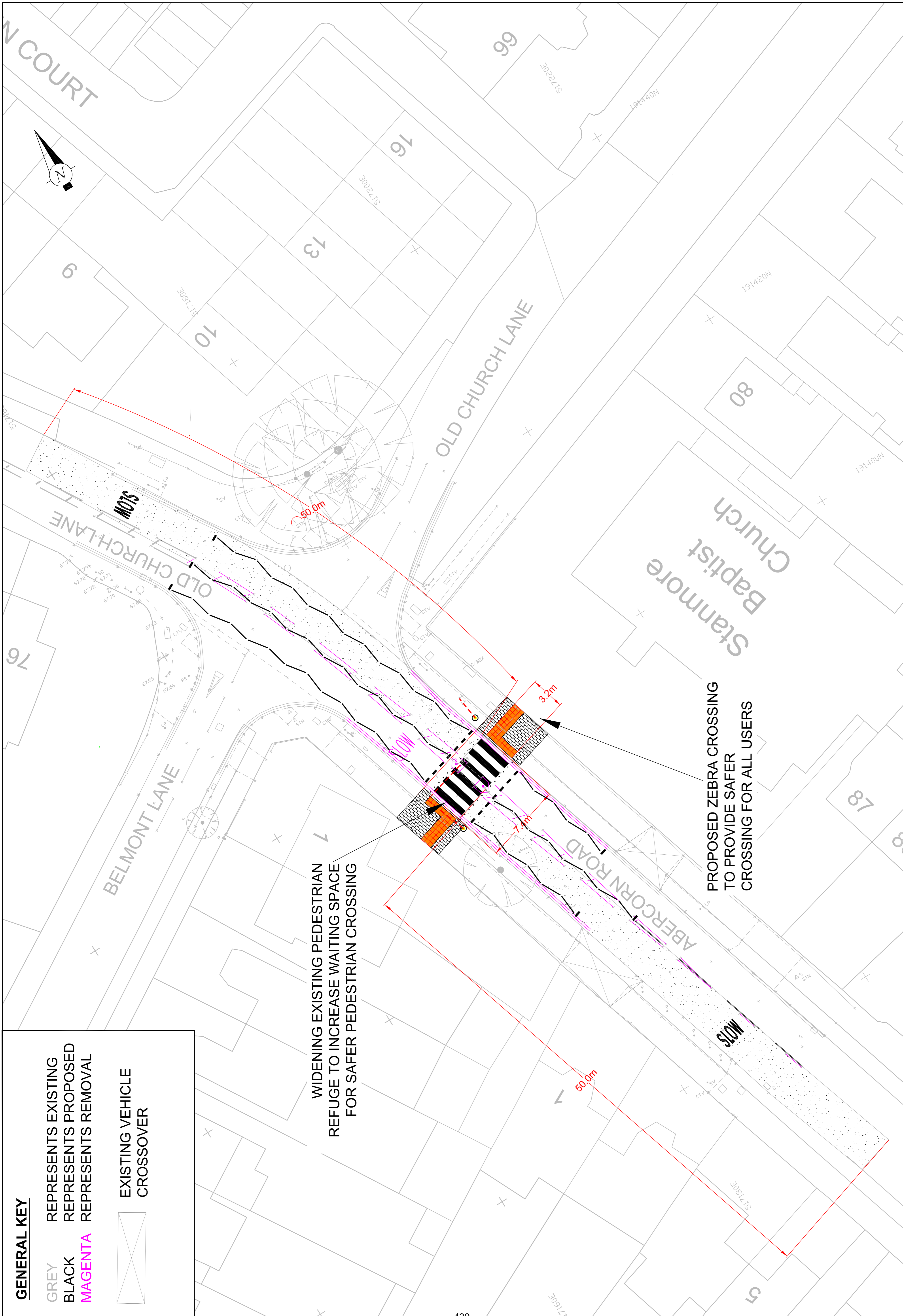
REVISION	INITIAL ISSUE	AMENDMENT	DRAWN BY AND DATE	DESIGNED BY AND DATE	CHECKED BY AND DATE	APPROVED BY AND DATE
-	-	-	-	-	-	-

		DEPARTMENT	TRAFFIC AND HIGHWAY NETWORK MANAGEMENT TEAM
		PROJECT	TPR0226 : TFL WALKING AND CYCLE PROPOSALS
		DRAWING TITLE	MARSH ROAD - NEW ZEBRA CROSSING PUBLIC CONSULTATION PLAN
DRAFT	SCALE (AT A3 SIZE)	ISSUING OFFICE	TRAFFIC TEAM
ISSUE	NOT TO SCALE	TELEPHONE	020 8424 7534
		DRAWING NUMBER	TPR0226-MARSH RD
		REVISION	A

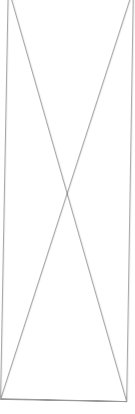
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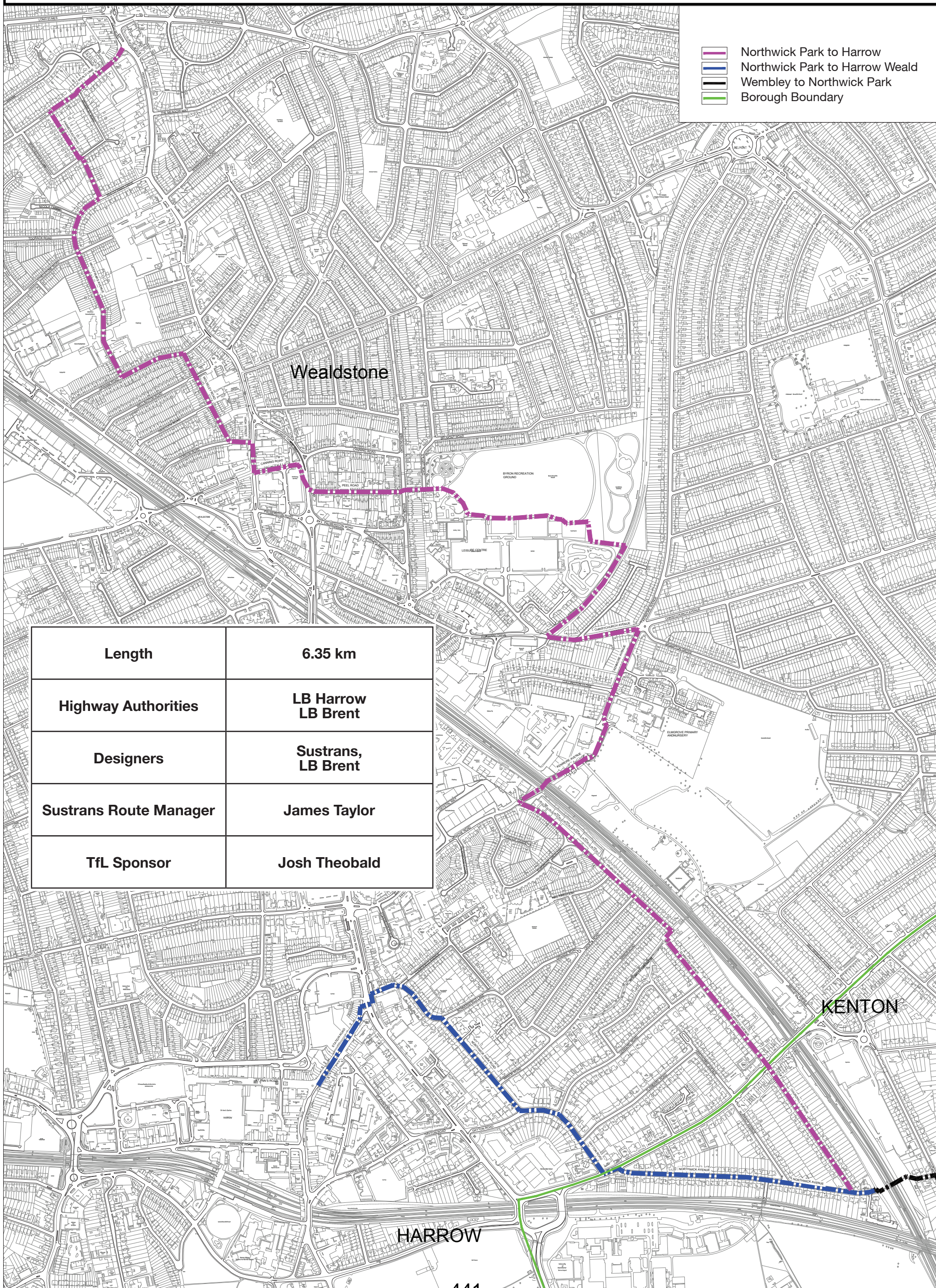
GENERAL KEY

- GREY REPRESENTS EXISTING
- BLACK REPRESENTS PROPOSED
- MAGENTA REPRESENTS REMOVAL
-  EXISTING VEHICLE CROSSOVER

WIDENING EXISTING PEDESTRIAN REFUGE TO INCREASE WAITING SPACE FOR SAFER PEDESTRIAN CROSSING

PROPOSED ZEBRA CROSSING TO PROVIDE SAFER CROSSING FOR ALL USERS

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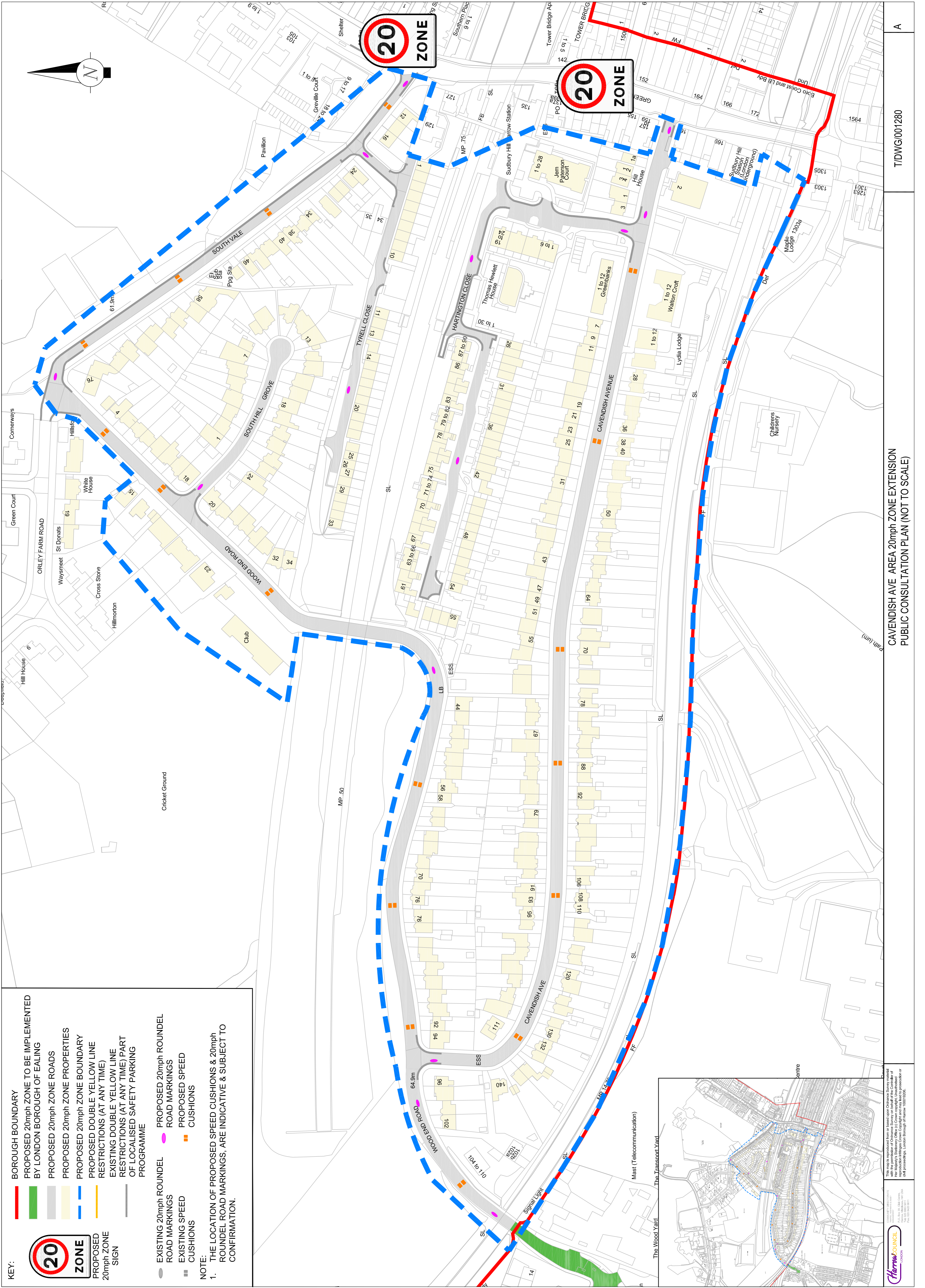


- Northwick Park to Harrow
- Northwick Park to Harrow Weald
- Wembley to Northwick Park
- Borough Boundary

Length	6.35 km
Highway Authorities	LB Harrow LB Brent
Designers	Sustrans, LB Brent
Sustrans Route Manager	James Taylor
TfL Sponsor	Josh Theobald

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APPENDIX L



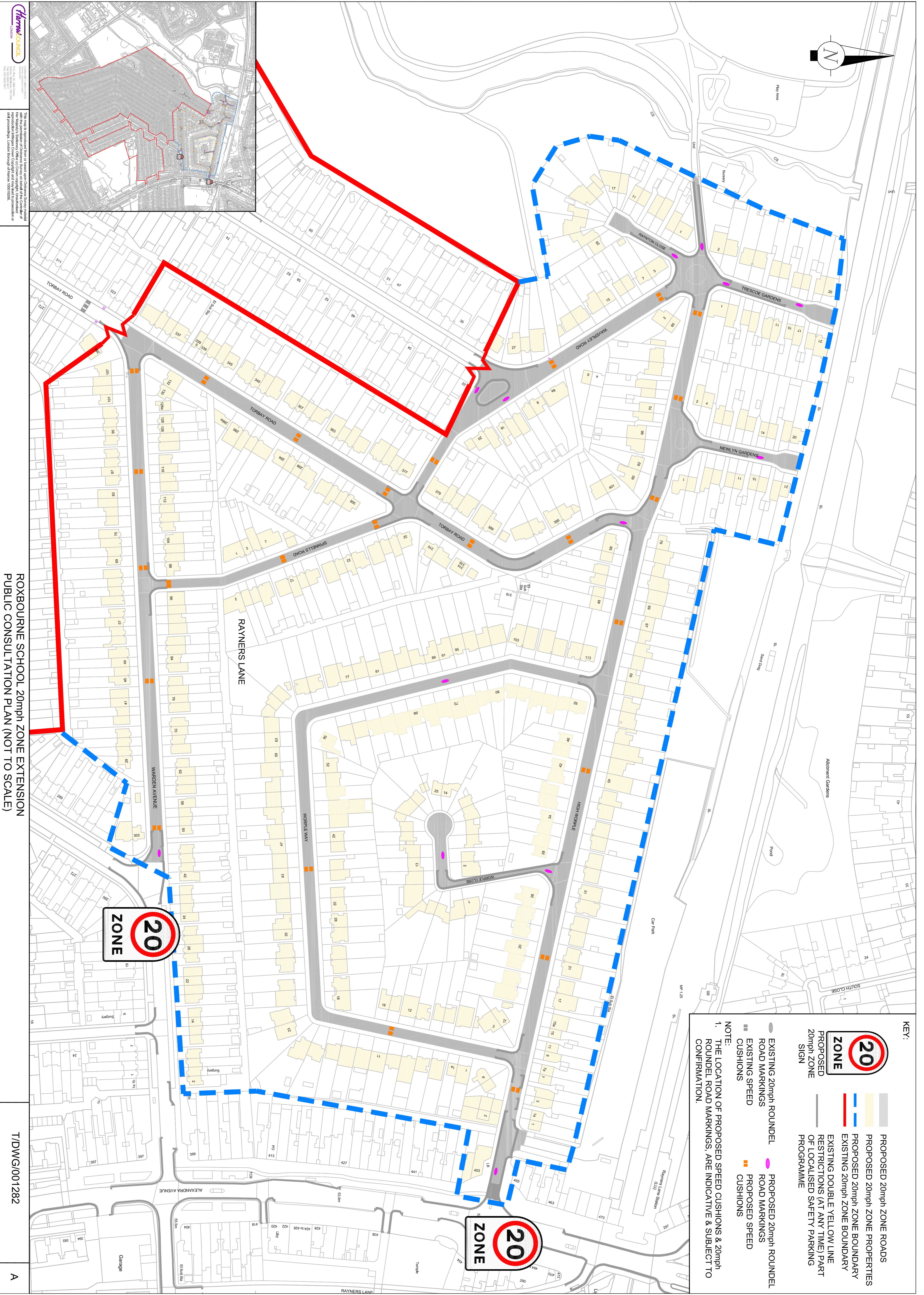
KEY:

- BOROUGH BOUNDARY
- PROPOSED 20mph ZONE TO BE IMPLEMENTED BY LONDON BOROUGH OF EALING
- PROPOSED 20mph ZONE ROADS
- PROPOSED 20mph ZONE PROPERTIES
- PROPOSED 20mph ZONE BOUNDARY
- PROPOSED DOUBLE YELLOW LINE RESTRICTIONS (AT ANY TIME)
- EXISTING DOUBLE YELLOW LINE RESTRICTIONS (AT ANY TIME) PART OF LOCALISED SAFETY PARKING PROGRAMME
- PROPOSED 20mph ROUNDNEL
- ROAD MARKINGS
- EXISTING SPEED CUSHIONS
- PROPOSED SPEED CUSHIONS

NOTE:
1. THE LOCATION OF PROPOSED SPEED CUSHIONS & 20mph ROUNDNEL ROAD MARKINGS, ARE INDICATIVE & SUBJECT TO CONFIRMATION.

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APPENDIX M



ROXBOURNE SCHOOL 20mph ZONE EXTENSION
PUBLIC CONSULTATION PLAN (NOT TO SCALE)

T/DWG/001282

A

KEY:

- PROPOSED 20mph ZONE ROADS
- PROPOSED 20mph ZONE PROPERTIES
- PROPOSED 20mph ZONE BOUNDARY
- EXISTING 20mph ZONE BOUNDARY
- EXISTING DOUBLE YELLOW LINE RESTRICTIONS (AT ANY TIME) PART OF LOCALISED SAFETY PARKING PROGRAMME
- PROPOSED 20mph ROUNDLE ROAD MARKINGS
- EXISTING SPEED MARKINGS
- PROPOSED SPEED CUSHIONS
- PROPOSED 20mph ZONE SIGN

NOTE:

- THE LOCATION OF PROPOSED SPEED CUSHIONS & 20mph ROUNDLE ROAD MARKINGS, ARE INDICATIVE & SUBJECT TO CONFIRMATION.

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APPENDIX N

KEY:



PROPOSED 20mph ZONE SIGN

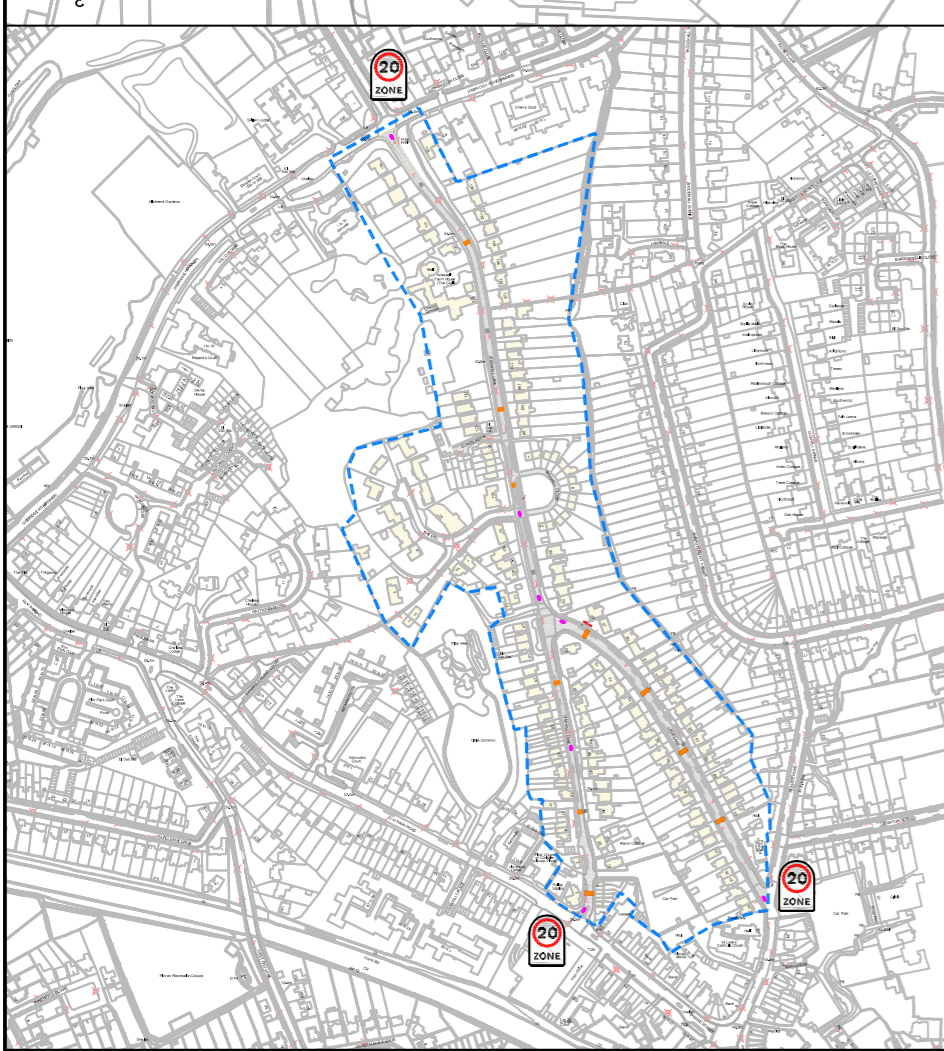
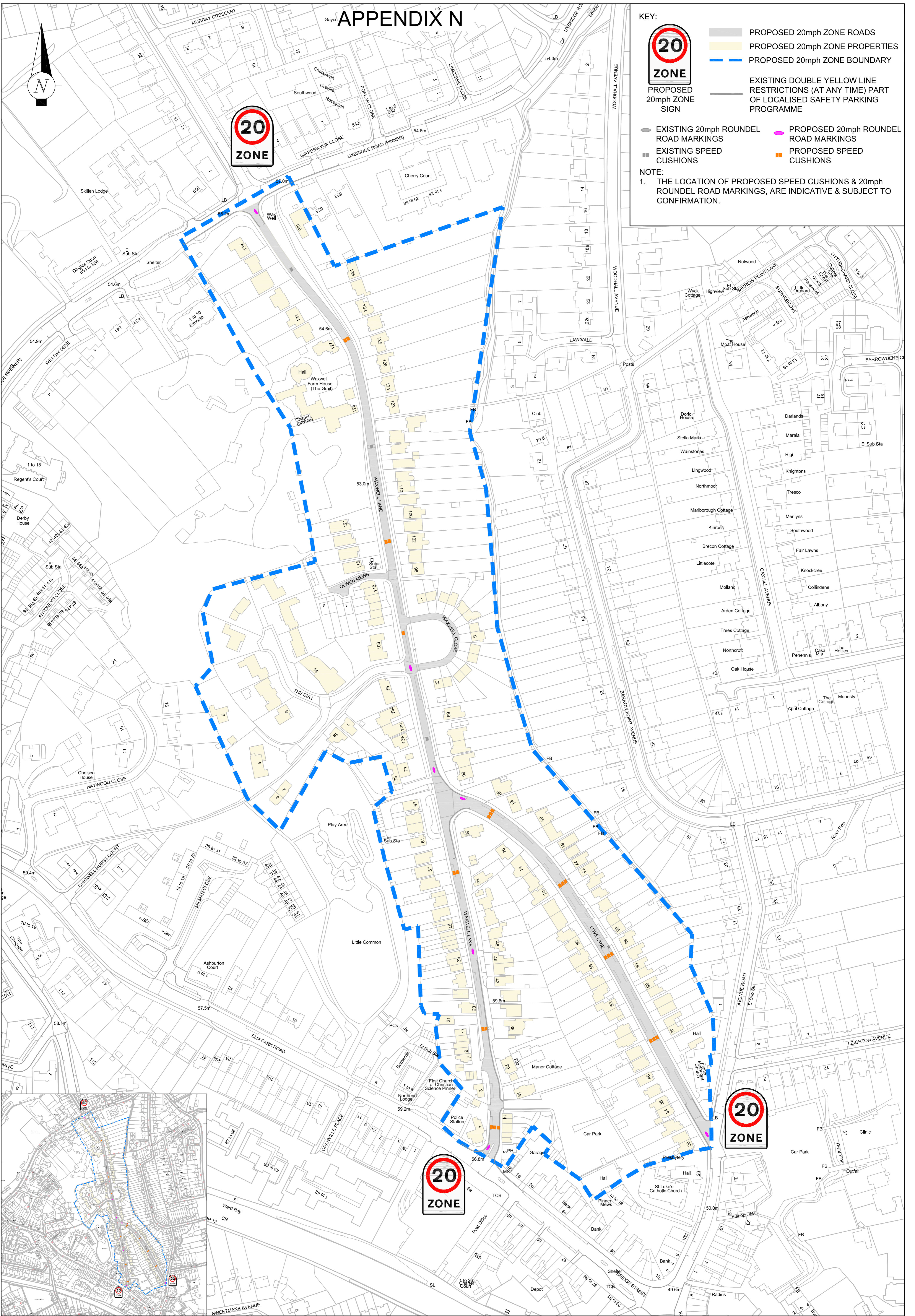
- PROPOSED 20mph ZONE ROADS
- PROPOSED 20mph ZONE PROPERTIES
- PROPOSED 20mph ZONE BOUNDARY

EXISTING DOUBLE YELLOW LINE RESTRICTIONS (AT ANY TIME) PART OF LOCALISED SAFETY PARKING PROGRAMME

- EXISTING 20mph ROUNDLE ROAD MARKINGS
- PROPOSED 20mph ROUNDLE ROAD MARKINGS
- EXISTING SPEED CUSHIONS
- PROPOSED SPEED CUSHIONS

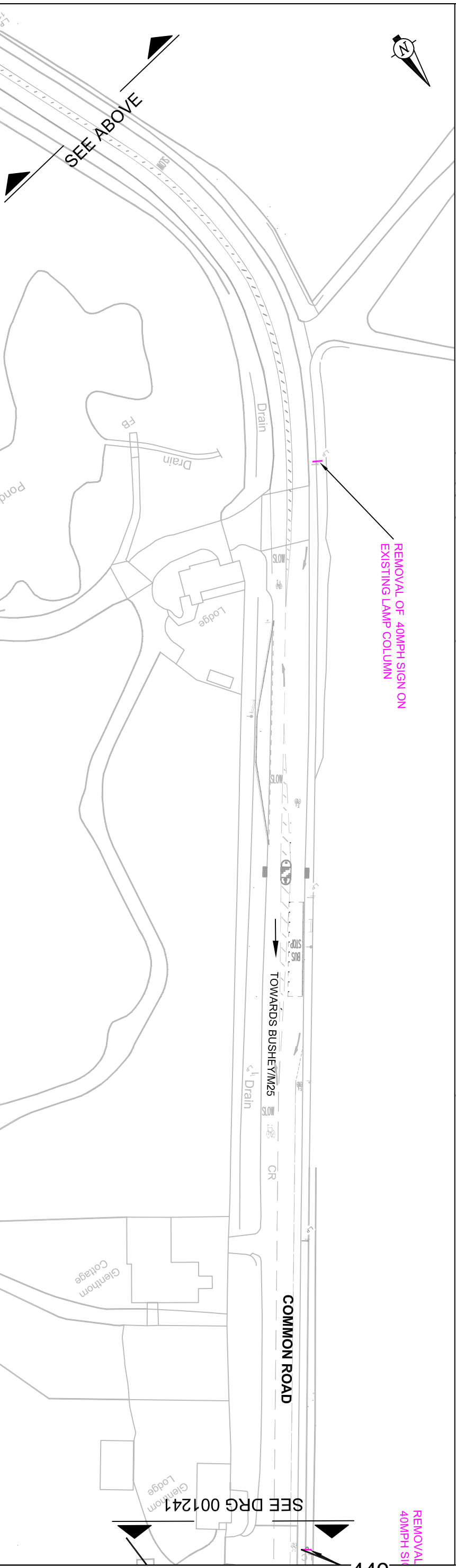
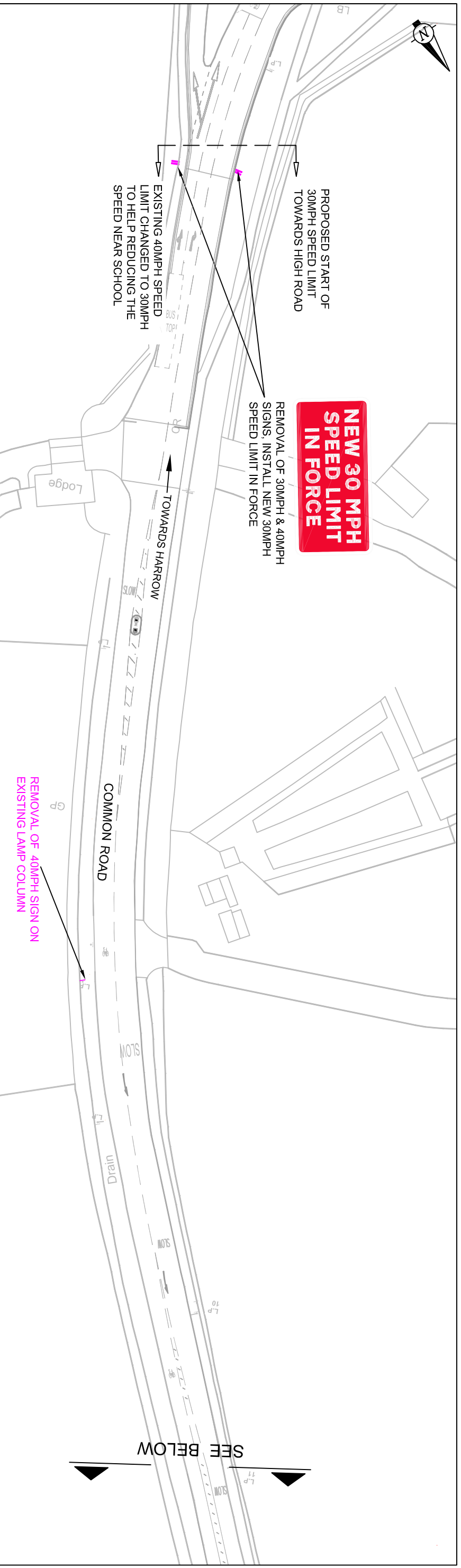
NOTE:

1. THE LOCATION OF PROPOSED SPEED CUSHIONS & 20mph ROUNDLE ROAD MARKINGS, ARE INDICATIVE & SUBJECT TO CONFIRMATION.



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APPENDIX P



449

GENERAL KEY

- GREY REPRESENTS EXISTING
- BLACK REPRESENTS PROPOSED
- MAGENTA REPRESENTS REMOVAL
- Sign Arrangement
- BOROUGH BOUNDARY

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Harrow
COUNCIL
LONDON

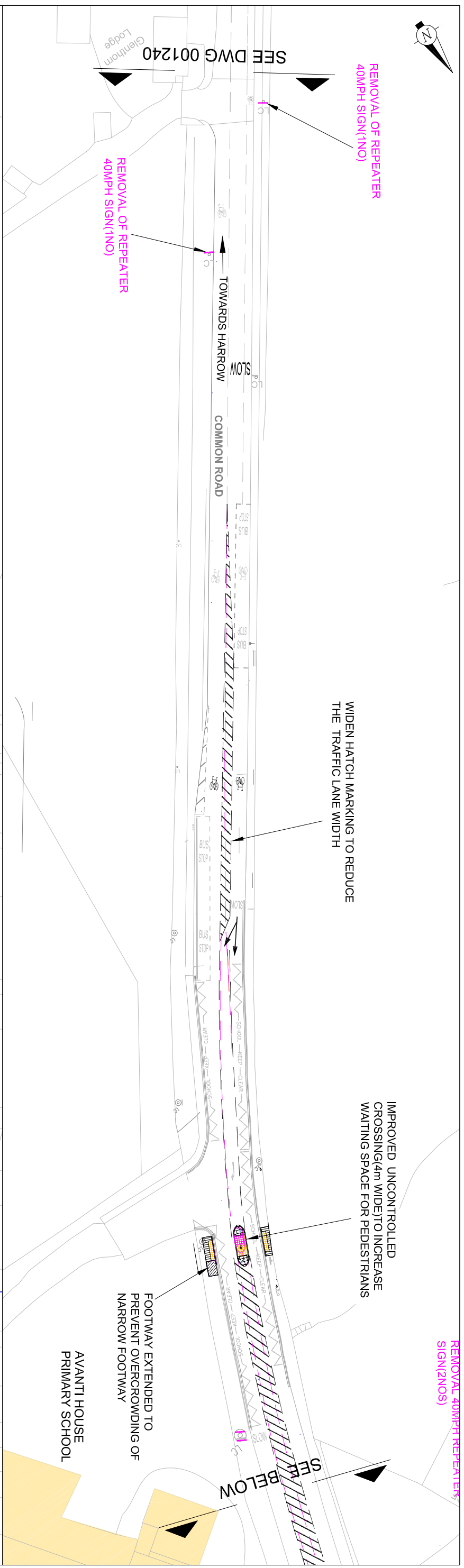
COMMUNITY DIRECTORATE
TRAFFIC, HIGHWAYS & ASSET MANAGEMENT

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Harrow, Middlesex, HA1 2XA
Tel: 020 8863 5611
Fax: 020 8420 9611

A	FOR STATUTORY CONSULTATION	16/10/18	VK	<p>Project</p> <p>LOCAL TRANSPORT FUND COMMON ROAD - SCHOOL SAFETY SCHEME</p> <p>Title</p> <p>COMMON ROAD 30MPH PROPOSED LAYOUT SHEET 1 OF 2</p>
Designation	Details of Revision	Date	Sign	Scale
				NTS @ A3
		16/10/18	VK	Drawing no T/DWG/001240
			Checked TP	Autocad file

SEE DRG 001241

APPENDIX P



GENERAL KEY

GREY REPRESENTS EXISTING
 BLACK REPRESENTS PROPOSED
 MAGENTA REPRESENTS REMOVAL
 SIGN ARRANGEMENT

BOROUGH BOUNDARY

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 or full proceedings: London Borough of Harrow
 1000192906.

Harrow COUNCIL LONDON

COMMUNITY DIRECTORATE
 TRAFFIC, HIGHWAYS & ASSET MANAGEMENT

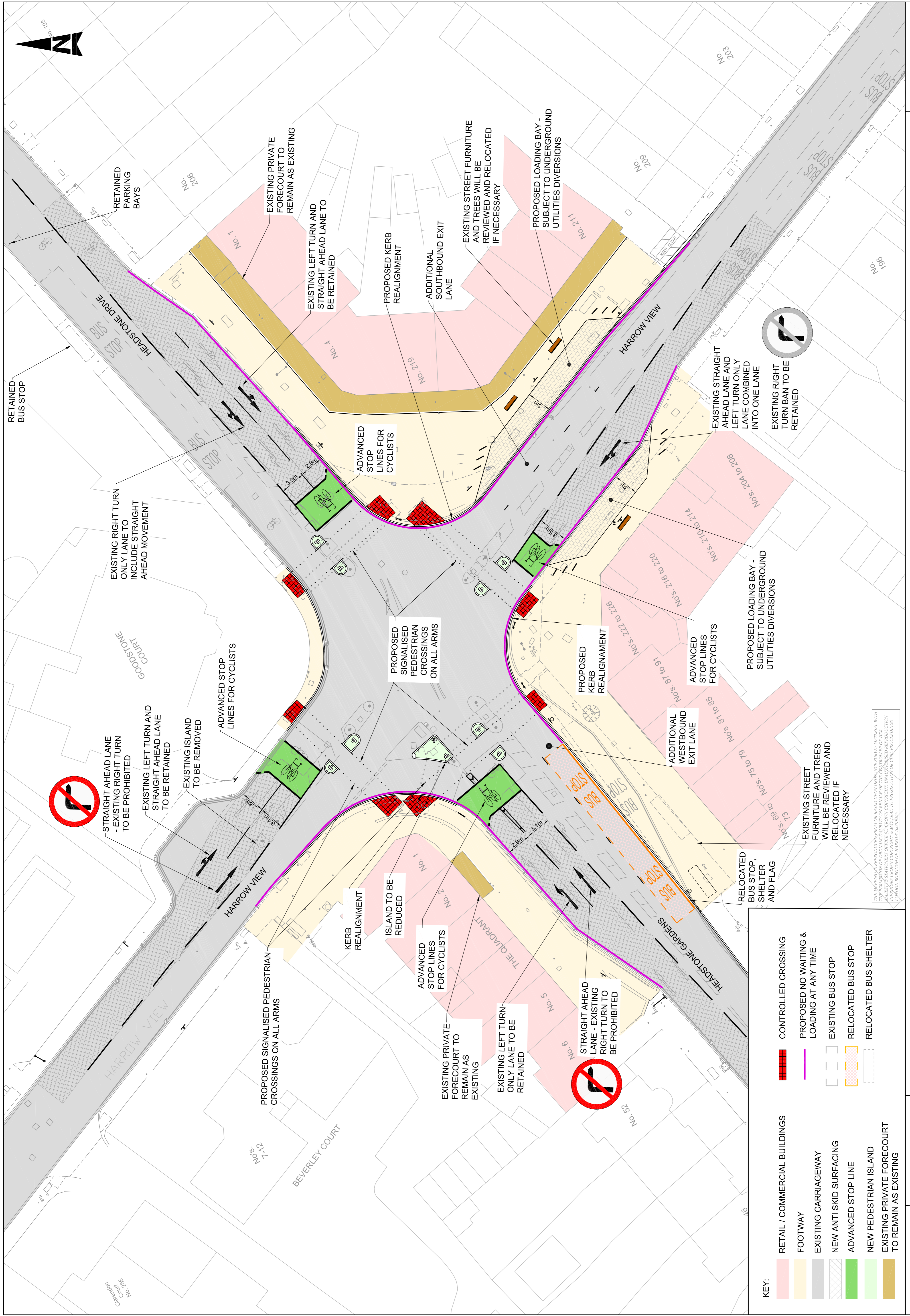
P.O. Box 39, Civic Centre,
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 Tel: 020 8863 5611
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Designation	A
Details of Revision	FOR STATUTORY CONSULTATION
Date	16/10/18
Sign	VK

Project	LOCAL TRANSPORT FUND COMMON ROAD - SCHOOL SAFETY SCHEME
Title	COMMON ROAD 30MPH PROPOSED LAYOUT SHEET 2 OF 2

Scale	NTS @ A3	Drawn	VK	Checked	TP
Drawing no	T/DWG/001241	Date	16/10/18		
Autocad file					

APPENDIX Q



KEY:

	RETAIL / COMMERCIAL BUILDINGS		CONTROLLED CROSSING
	FOOTWAY		PROPOSED NO WAITING & LOADING AT ANY TIME
	EXISTING CARRIAGEWAY		EXISTING BUS STOP
	NEW ANTI SKID SURFACING		RELOCATED BUS STOP
	ADVANCED STOP LINE		RELOCATED BUS SHELTER
	NEW PEDESTRIAN ISLAND		
	EXISTING PRIVATE FORECOURT TO REMAIN AS EXISTING		

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