

APPENDIX

Council

Thursday 18 July 2019

CONFIRMATION OF CABINET AND COMMITTEE RECOMMENDATIONS AND RELEVANT ORIGINATING BACKGROUND PAPERS

ITEM ON SUMMONS	CABINET / COMMITTEE RECOMMENDATION	ORIGINATING REPORT
	Recommendation I: Cabinet (11 July 2019)	
10. 2 YEAR BUDGET STRATEGY 2020/21 TO 2021/22		Report of the Chief Executive and Director of Finance (Pages 3 - 18)
	Recommendation I: Cabinet (30 May 2019)	
10a. LOCAL IMPLEMENTATION PLAN 3		Report of Corporate Director, Community (Pages 19 - 184)

This page is intentionally left blank



REPORT FOR: CABINET

Date of Meeting:	11 July 2019
Subject:	2 Year Budget Strategy – 2020/21 to 2021/22
Key Decision:	Yes
Responsible Officer:	Sean Harriss, Chief Executive Dawn Calvert, Director of Finance
Portfolio Holder:	Councillor Graham Henson, Leader of the Council Councillor Adam Swersky, Portfolio Holder for Finance and Resources
Exempt:	No
Decision subject to Call-in:	Yes
Wards affected:	All
Enclosures:	None

Section 1 – Summary and Recommendations

This report sets out the Council's Budget Strategy over the 2 year period, 2020/21 to 2021/22.

Recommendation

Cabinet is asked to:

- (a) Note the actions and options in Stage 1 and Stage 2 to reduce the 2020/21 to 2021/22 budget gap (paragraph 1.3.3)

- (b) Note the key themes being explored to support the 2 year Budget Strategy 2020/21 to 2021/22 (paragraph 1.3.3)
- (c) Recommend the addition of £100m to the Capital Programme, for long term commercial investment, to Council for approval (paragraph 5.5)
- (d) Note the action to refresh the Investment Property Strategy and engage external professional advice to support the commercial investment (paragraph 5.6)

Reasons

- (a) To ensure the Council manages within the challenging financial environment it faces and achieves financial sustainability over the medium term.

Section 2 – Report

1.1 Background

1.1.1 The Government continues to reduce its funding to Local Government as part of its nationwide austerity programme. In their publication 'Local Government Funding – Moving the conversation' (June 2018) the Local Government Association shared a number of their key statistics including:

- New analysis indicates that local services face a funding gap of £7.8 billion by 2025 of which £6.6 billion relates to Adult Social Care and Children's Services.
- By 2020, local authorities will have faced a reduction to core funding from Central Government of nearly £16 billion over the preceding decade.

1.1.2 This nationwide picture has translated itself into a budget gap of circa £128m for Harrow Council to manage over the 7 years, 2013/14 to 2019/20, as detailed in table 1 below:

Table 1: Summary of Key Financial Changes 2013/14 to 2019/20

	Reduction in RSG	Demand Led Growth	Technical Savings	Savings	Additional Revenue from Council Tax	Business Rates
	£'m	£'m	£'m	£'m	£'m	£'m
2013/14	52.1	10	10	-22	-1.8	14.7
2014/15	42.6	5.5	-2.1	-10	-1.9	14.5
2015/16	32	7.7	5.9	-20.6	-3.4	14
2016/17	21.9	4.7	9.5	-16.6	-6.8	13.2
2017/18	13	10.7	-0.6	-10.2	-7.3	14.4
2018/19	7.3	9.8	1.7	-7.4	-5.3	14.4
2019/20	1.6	7.4	-4	-5.2	-8.5	14.4
Total	50.5	55.8	20.4	-92	-35	

The table shows:

- The Council has seen the Revenue Support Grant, its main source of funding from central government, reduce by 97% over the 7 years, reducing the grant to £1.566m (£1.6m).
- Over and above the RSG, the Council receives no additional funding to meet demographic and inflationary pressures. Therefore growth of £55.8m has had to be provided to fund the continued pressures on front line services, mainly adults and children's social care and homelessness. Technical growth of £20m has had to be provided to fund inflationary pressures (pay and non pay) and the cost of capital investment in initiatives including highways maintenance and the acquisition of properties to alleviate homelessness.
- These three factors have taken the total budget shortfall to find over the seven years to £128m to achieve a balanced budget.
- Savings and efficiencies of £92m have been achieved but the profiling of these savings, and how the quantum has reduced in recent years, demonstrates the challenges of finding sustainable savings year on year.
- Council Tax has been increased largely in line with referendum limits (2.99% in 18/19 and 19/20). In addition, Council Tax has been increased by an additional 5.5% over the three years 2017/18 to 2019/20 in respect of the Adult Social Care precept.
- Business Rates have remained largely static, the Borough has been adversely affected by permitted development allowing office space to be converted to residential and not benefitting from large areas of land available for business development.

The Council has received, and continues to receive one off funding, including:

- Transitional Grant (£712k in 2016/17 and £699k in 2017/18)
- Winter Pressures funding for Adults Social Care (£968k in 2018/19)
- Adult Social Care support grant (£606k in 2018/19)
- Adult and Children's Social Care (£2.627m in 2019/20)
- Improved Better Care Fund (£4.643m in 2018/19, £5.467m in 2019/20)
- London Business Rates Pilot Pool (£3.5m in 2019/20, £1.8m in 20/21)

Whilst this funding is well received the short term temporary nature of the income means that it can only be treat as a one off. The fact that it cannot be considered over the medium and long term does not assist the challenges of budget planning and achieving financial sustainability. (To note: The Improved Better Care Fund is built into the Medium Term Financial Strategy (MTFS) permanently. Due to the high value of the fund, assuming no funding in 2020/21 would create significant volatility to budget planning.)

1.1.3 Despite all reasonable actions, including council tax increases, significant savings, and efficiencies and generating income, it still remains a considerable challenge for the Council to balance its budget going forward in light of continued demand pressures facing the Council. In February 2019 full Council approved the Medium Term Financial Strategy (MTFS) 2019/20 to 2021/22. Despite achieving a balanced budget for 2019/20, there remains a budget gap of £26.140m for 2020/21 and 2021/22.

1.1.4 Harrow Council does not have large cash reserves. Its General Fund balances stand at £10m and remain within the lower quartile when benchmarked with other local authorities and the Council has consistently taken the view that spending them is not a responsible way to offset lost revenue. The Council does exercise robust financial management and has not overspent its revenue budget for the last 7 years. The Council has not shied away from implementing in year spending controls if early indications suggest a balanced budget position is not on track. Such actions have helped to prevent a draw down on the Council's limited cash balances.

1.2 Future Uncertainty

1.2.1 The Council's drive for financial sustainability is not assisted by considerable uncertainty around funding and service direction:

- A Comprehensive Spending Review (CSR) and Fair Funding Review are planned for 2019/20. The CSR will set the overall quantum of central government funding to local government and the Fair Funding Review will reset the needs base line which will determine how the overall quantum is distributed. There is much speculation that the ongoing negotiations on Brexit will adversely impact upon the timings of the CSR and Fair Funding and the

most likely scenario is that the Council's 2020/21 funding settlement will be a roll forward from 2019/20. This situation does nothing to address the low funding baseline for the Council. In 2019/20 the Council's core spending power per head was estimated to be £170 lower than the London average and £75 lower than the rest of England average.

- The Adult Social Care Green paper has been subject to many delays. As people are living longer and the population ages Central Government recognises the need to reach a long term sustainable solution to providing the care older people need. A confirmed date for the release of the green paper remains unknown and the Council remains subject to temporary injections of funding, which whilst appreciated, cannot be used to underpin longer term planning and decision making.
- Business Rates are currently subject to reform with central government intending to allow local government, as a whole, to retain all or a significant proportion of its rates collected. Prior to 2018/19 Councils retained 30% of their business rates collected. From 2018/19 Harrow has been part of the London Business Rates Pool allowing the council to receive a proportion of the collective growth in London. Initially the pool was for 1 year only but has been extended for a second. The Council has benefitted financially from the pool (£5.4m in 2018/19 and an estimated £1.8m in 2019/20). However once again the funding is temporary and not confirmed until after the end of the financial year to which it relates making it difficult to build into longer term planning.
- Schools are funded by the ring fenced Dedicated Schools Grant (DSG) which sits outside of the General Fund. Within the DSG is the High Needs Block (HNB) which funds provision for pupils with high needs placed in special schools and special provision in mainstream schools in Harrow and out of Borough. A recent survey showed that London Borough's had a total shortfall of £78m in 2017/18 compared with high needs allocations with many now estimating having to apply reserves to meet the pressures. In December 2018 central government announced additional funding for local authorities with Harrow receiving £606k for both 2018/19 and 2019/20. Despite this support for the first time Harrow has had to set a £3.3m deficit budget for its HNB in 2019/20 and future central government support is unknown at this point.

1.3 2 Year Budget Strategy 2020/21 to 2021/22

The Strategy

1.3.1 To meet its statutory requirements, the Council must set a balanced revenue budget for the forthcoming financial year. It is essential to look to the medium term and the council also produce's a 3 year MTFS which is refreshed annually. Funding uncertainties make it increasingly difficult to set a balanced budget over the medium term when what is going to happen from one year to the next remains largely unknown. The Council's current 3 years MTFS identifies a budget gap of £26.140m for year 2 and 3. Looking forward this budget gap will not be addressed on an annual basis (£16.795m in 2020/21 and £9.3m in 2021/22) but as a two year strategy to ensure:

- Those plans / initiatives that require less lead in time can be realised as early as possible in the process
- This will provide space for those plans / initiatives requiring a longer lead in time to be fully worked through, including consultation and equality impact assessment, before final inclusion in the MTFS
- A robust plan for the use of reserves specifically ear marked to support the 2 year strategy

1.3.2 The over arching principle underlining the approach is to develop stages which exhaust all opportunities to reduce expenditure and or generate income to protect frontline services from impact, a reduction of which is considered a last resort. If the strategy does not achieve sustainability, the last resort savings could potentially include further library closures, higher caseloads for spcial workers, lower frequencies of street cleaning and reductions in early intervention and preventative services.

1.3.3 Clearing the budget gap solely through increasing Council Tax would require an increase of circa 20%. Since setting the final budget and MTFS in February of this year there has been focused attention on managing the budget gap and associated risks. These will be explained in three stages:

Stage 1 – Reducing the quantum of the budget gap

Stage 2 – Options on future Council Tax increases

Stage 3 - A 2 year budget strategy based on 4 key themes

Stage 1 – Reducing the quantum of the budget gap

The identified budget gap of £26.140m can be reduced to £21.1m by:

- Evidence based assumptions on future increases in the Council Tax base (increase in the number of band D equivalent properties) not currently built into the MTFS
- Maintaining high collection rates for Council Tax and Business Rates
- Income realisation from the letting of the 53 units at Gayton Road for market rent
- Assuming Council Tax will be increased at the referendum level of 1.99% in 2021/22 which is not built into the current MTFS

The uncertainties described in this report could potentially impact on the quantum of the budget gap, either in a positive or negative way. The quantum of the budget gap remains under constant review.

Stage 2 – Options on future Council Tax Increases

Following stage 1, the MTFS assumes a Council Tax increase up to the referendum level of 1.99% in 2020/21 and 2021/22. A 1% increase in Council Tax generates approximately £1.250m. In recent years central government has allowed councils flexibility in terms of increasing annual rates without requiring a referendum:

- Adult Social Care Precept – over the three years up to 2019/20 the flexibility to increase Council Tax by a maximum of 6%. Harrow levied 5.5%.
- Additional 1% Council Tax (over and above the core increase of 1.99%) in 2018/19 and 2019/20 which Harrow applied in full.

The understanding is that the fiscal calculations of central government assume an increase in Council Tax of 5% per annum for the next two years. For Harrow this would generate approximately £7.5m in on going revenue to support core services hence reducing the budget gap to £13.6m. The Administration can make a choice on what it does in respect of Council Tax increases moving forward. Central Government announcements on Council Tax are normally received in November or December around the time of the provisional local government financial settlement.

Stage 3 – A 2 Year Budget Strategy based on 4 key themes

Following stage 2, the budget gap has the potential to be reduced to £13.6m. In terms of the 2 year budget strategy this has been rounded up to £15m to provide for an element of choice.

The over arching principle underlining the strategy is to develop themes which exhaust all opportunities to reduce expenditure and or generate income to protect frontline services from impact. The strategy is centered on 4 key themes:

- Corporate and Technical (£2m to £4m)
- Commercial Investment and Income (£2m to £3m)
- Service Efficiency and Savings (£2m to £3m)
- Transformation Programme (£3m to £5m)

Corporate and Technical (£2m to £4m)

This theme will review all corporate budgets (for example inflation, specific provisions and pan organisation expenditure) with a view to achieving efficiencies. The Councils treasury management function will be reviewed to ensure activities are done at the most optimum cost / return for the Council. Due to its nature, this theme is likely to realise the majority of early savings and all opportunities, when worked through, will be reported and implemented immediately.

Long Term Commercial Investment and Income (£2m to £3m)

The Council has undertaken a limited number of Commercial investment opportunities to generate a net return to the general fund. In December 2015, the Council approved its Investment Property Strategy. Since 2015 the Council has purchased 4 investment opportunities costing £17m and generating an annual return in the budget. The Strategy will be reviewed and the opportunities for further commercial investments will be identified paying due regard to the statutory requirements of the Prudential Code, the Council's current exposure to debt and risk and mitigations.

The Council has achieved success at selling services to generate a return. Further opportunities will be explored paying attention to targets already built into the MTFS and the risk that income streams can be subject to volatility.

Service Efficiency and Savings (£2m to £3m) Transformation Programme (£3m to £5m)

There is likely to be a considerable overlap between these two themes therefore they are considered together. The Transformation Plan is being put together on the basis of how to modernise the Council, introduce new technology and re-design how services and functions operate. Areas currently being explored included technology, digital access, how the Council works, people development and management and centralisation of services. These themes are in their infancy and will more than likely be the plans and initiatives that will require the longest lead in time.

Resourcing Implications

- 1.3.4 The delivery of the strategy is dependent upon:
- The delivery of the 2019/20 budget to ensure no adverse impact on future years.
 - Holding sufficient financial resilience to mitigate the risks inherent in stages 1 and 2.
 - Funding to support the 2 year Budget Strategy, especially the transformation elements to delivery future efficiencies
 - Funding to support the budget if the 2 year strategy slips or there is an adverse impact outside of the Council's control.
- 1.3.5 The 2018/19 outturn report, that was presented to Cabinet in June, detailed a number of reserves (one off) that are ear marked to provide financial capacity to support the delivery of the budget strategy and to mitigate risk that is inherent in some of the assumptions being made to reduce the budget , especially assumptions around Council Tax:
- **Business Risk (GF Transformation Reserve) - £7.526m.** This reserve is ear marked to fund the risk around the assumption of being able to increase Council Tax by 5% per annum for the next two years (stage 2). If central government do not allow an increase over and above 1.99% or the Administration does not wish to increase to 5%, the reserve will provide temporary

support to the budget whilst alternative proposals are being worked on. If the Council Tax is increased by 5% in either one or both years of the strategy, this ear marked reserve will not be required and can be applied elsewhere.

- **Budget Planning Reserve - £2.629m.** The reserve balance is £6.829m of which £4.2m is committed to the 2019/20 budget. The remaining balance of £2.629m is ear marked for 'budget smoothing'. For example if sufficient plans and initiatives are not identified to balance the 2020/21 budget, this reserve can be drawn down to achieve a balanced position. It is recognised that this is only a temporary solution and potentially pushes the gap into future years and this will be monitored very carefully. It also provides space for those initiatives requiring a longer lead in time to be developed.
- **Capacity Building Reserve - £4.261m.** A small balance of £261k is ear marked for previously agreed plans leaving £4m to support the transformation theme to deliver £3m to £5m per annum. Use of this funding will include growing capacity to deliver the strategy and transformation and investment in IT.
- **Commercialisation Reserve - £1.265m.** This has been boosted to support commercial risk.

1.3.6 The actions required to manage the budget gap need to be permanent reductions or income generation.

1.3 Options considered

1.3.1. This report has detailed a number of options to reduce the reported 2 year budget gap of £26.140m. The report introduces the key themes supporting the 2 Year Budget Strategy. As the work progresses on this strategy all suitable options will be explored with the results being reported to Cabinet as appropriate.

2. IMPLICATIONS OF THE RECOMMENDATIONS

2.1 Cabinet are being asked to note the actions and options to reduce the budget gap and the key themes supporting the 2 year Budget Strategy. Cabinet are being asked to recommend to Council the addition of £100m to the Capital Programme for long term commercial investments to generate a financial return. The details of which are detailed in the financial implications section.

3. PROCUREMENT IMPLICATIONS

3.1. There are no procurement implications arising from this report.

4. LEGAL IMPLICATIONS

- 4.1 Local authorities have broadly drawn powers allowing them to invest and to borrow, in each case either for purposes relevant to the performance of any of their functions or generally for the prudent management of their financial affairs (s1 and s12 of the Local Government Act 2003). They may also acquire property by agreement located either inside or outside of their borough for the purposes of any of their functions, including their investment functions, or otherwise for the benefit, improvement or development of their area (s120 of the Local Government Act 1972). Lastly, they may also take any action (whether or not involving the expenditure, borrowing or lending of money or the acquisition or disposal of any property or rights) which is calculated to facilitate, or is conducive or incidental to, the discharge of any of their functions, which would again include their investment functions (s111 of the Local Government Act 1972).
35. The council will need to ensure that in exercising its investment and borrowing functions to expand its property portfolio, that any actions are reasonable and proportionate and for proper purposes consistent with the Council's prudential regime and its investment strategy. Investment decisions also need to be taken mindful at all times the council's fiduciary duties to ensure the sound management of the public finances.
- 4.2 Legal due diligence will be required on all property acquisitions, to include a review of title and ownership, and searches and enquiries of the vendor, in order to ascertain relevant liabilities and restrictions connected with the subject property. The results of the legal enquiries, and any associated risks, should be considered prior to any decision to enter into contract.
- 4.3 On any sale of an investment property the Council will be required to obtain best consideration in accordance with s123 of the Local Government Act 1972. Usually this will be achieved by placing the property onto the open market or otherwise, in respect of a sale agreed off market, demonstrating by way of professional valuation that it is achieving no less than market value for the property.
- .

5. FINANCIAL IMPLICATIONS

- 5.1 The strategy to undertake long term commercial investments to generate a return to support core services will require capital funding from the Public Works Loans Board. In line with the Investment Property Strategy (December 2015 Cabinet) a gross yield of 7.5% must be achieved. After accounting for capital financing costs and other associated revenue costs a minimum net return of 1.75% will be generated.
- 5.2 Council borrowing falls within the Prudential Code. The framework established by the Code is to support local strategic planning, local

asset management planning and proper option appraisal. The objectives of the Code are to ensure, within the framework, that the capital investment plans of Local Authorities are affordable, prudent and sustainable.

- 5.3 The Ministry of Housing, Communities and Local Government (MHCLG) issued statutory guidance on Local Government Investments issued under section 15(1) (a) of the Local Government Act 2003 effective from 1 April 2018. Within the guidance investments made by local authorities are classified into one of two main categories:
- Investments held for treasury management purposes
 - Other investments

In respect of other investments, the guidance makes reference to proportionality and the extent to which funding service expenditure is dependent upon achieving the expected net profit. The returns from a long term commercial investment fund are being considered as one strand of a strategy to achieve financial sustainability, they are not being considered as the only strand. The council is required to disclose in its Capital Strategy (a new requirement from 01 April 2019) its exposure to commercial investment. The Council's Capital Strategy, approved by Council in February 2019, set out the Council's previous 4 commercial investments and updates to the Capital Strategy will include new investments.

- 5.4 Paying due regard to the Code and current debt levels (£446m as at June 2019) a long term commercial investment allocation of £100m is considered prudent and proportionate and will not over expose the Council to commercial risk. Based on a net return of 1.75% this will deliver an income stream of £1.75m per annum to support core services. By increasing long term commercial investments by £100m, the net revenue contribution from such activities increases to just under 2% of the Council's revenue budget which is still considered proportionate.
- 5.5 In accordance with Financial Regulations, this report requests that Cabinet recommend to Council for approval to add £100m to the Capital Programme. The additional £100m will be added to the Capital Programme on a cost neutral basis, ie. The cost of capital financing is equal to the revenue return generated hence cost neutral on the revenue budget. The estimated income stream of £1.75m will be added to the revenue budget during the annual refresh process prior to the draft budget being brought to Cabinet in December.
- 5.6 To support the long term commercial investment fund the current Investment Property Strategy will be refreshed and external professional investment advice will be engaged to support the refresh, the identification and subsequent management of commercial investments entered into. The cost of this external support will be procured in line with Contract Procedure Rules and initial costs will be funded from the Commercialisation Reserve.

- 5.7 If further actions identified to support the budget gap require a separate Cabinet decision, such decisions will be brought as timely as possible. Otherwise all actions will be built into the draft budget and MTFS brought to Cabinet in December.

6. PERFORMANCE ISSUES

- 6.1 The first reporting of financial performance against the 2019/20 budget is a separate report elsewhere on this agenda. A savings target of £5.946m is included in the 19/20 budget. As at the end of P2 (May) 46% of savings are rated green, 46% amber and only 8% as red. The majority of the amber savings relate to social care savings. Plans are in place but it is very early on in the financial year to assess if plans are delivering as expected. Performance will be tracked monthly. Due to a history of delivering a balanced budget and not shying away from implementing in-year spending controls if performance is not on track, no unmanageable adverse impacts from 2019/20 are expected into 2020/21 at this stage.

7. ENVIRONMENTAL IMPACT

- 7.1 There are no direct environmental impacts.

8. RISK MANAGEMENT IMPLICATIONS

- 8.1 The 2 Year Budget Strategy is based on 4 key themes to help mitigate the risk if one theme does not deliver as currently estimated.
- 8.2 Budget management is included on the Corporate Risk Register incorporated into the risk 'inability to deliver the Council's MTFS leading to a dereliction of duties resulting in government intervention / an inability to pay Council debts.' As at Qtr 1 2019/20 the risk was rated as C2 – medium likelihood / critical impact. The Corporate Risk Register is updated quarterly.

9. EQUALITIES IMPLICATIONS/PUBLIC SECTOR EQUALITY DUTY

- 9.1 Decision makers should have due regard to the public sector equality duty in making their decisions. The equalities duties are continuing duties they are not duties to secure a particular outcome. The equalities impact will be revisited on each of the proposals as they are developed. Consideration of the duties should precede the decision. It is important that Cabinet has regard to the statutory grounds in the light of all available material such as consultation responses. The statutory

grounds of the public sector equality duty are found at section 149 of the Equality Act 2010 and are as follows:

A public authority must, in the exercise of its functions, have due regard to the need to:

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- (a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;
- (b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;
- (c) Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- (a) Tackle prejudice, and
- (b) Promote understanding.

Compliance with the duties in this section may involve treating some persons more favourably than others; but that is not to be taken as permitting conduct that would otherwise be prohibited by or under this Act. The relevant protected characteristics are:

- Age
- Disability
- Gender reassignment
- Pregnancy and maternity
- Race,
- Religion or belief
- Sex
- Sexual orientation
- Marriage and Civil partnership

9.2 There is no direct equalities impact.

10. CORPORATE PRIORITIES

The Council's vision 'Working Together to Make a Difference for Harrow' is supported by five priorities:

- Building A Better Harrow
- Supporting Those In Need
- Protecting Vital Public Services
- Delivering A Strong Local Economy For All
- Modernising Harrow Council

Section 3 - Statutory Officer Clearance

Name: Dawn Calvert	<input checked="" type="checkbox"/>	Chief Financial Officer
Date: 01 July 2019		
Name: Jessica Farmer	<input checked="" type="checkbox"/>	on behalf of the * Monitoring Officer
Date: 01 July 2019		

Name: Nimesh Mehta	<input checked="" type="checkbox"/>	Head of Procurement
Date: 28 May 2019		

Name: Charlie Stewart	<input checked="" type="checkbox"/>	Corporate Director - Resources
Date: 01 July 2019		
Ward Councillors notified:	No	
EqIA carried out:	No	
EqIA cleared by:	N/A	

Section 4 - Contact Details and Background Papers

Contact: Dawn Calvert - Director of Finance,
dawn.calvert@harrow.gov.uk, tel: 0208 420 9269

Background Papers: none

Call-In Waived by the Chair of Overview and Scrutiny Committee	NO
---	-----------



REPORT FOR: CABINET

Date of Meeting:	30 th May 2019
Subject:	Transport Local Implementation Plan (LIP3)
Key Decision:	Yes
Responsible Officer:	Paul Walker, Corporate Director - Community
Portfolio Holder:	Councillor Varsha Parmar, Portfolio Holder for Environment
Exempt:	No
Decision subject to Call-in:	Yes
Wards affected:	All
Enclosures:	Appendix A – Final LIP3 Appendix B – Strategic Environmental Statement

Section 1 – Summary and Recommendations

This report sets out the background to the third Transport Local Implementation Plan (LIP3) and the associated Strategic Environmental Statement for LIP3.

Recommendations:

Cabinet is requested to:

1. Recommend to full Council to adopt the revised Transport Local Implementation Plan (LIP3) set out at Appendix A.

2. Recommend that full Council delegate authority to the Corporate Director – Community to make minor changes and updates to the planned programme of investment subject to additional information on funding being provided post approval of the LIP3 by the full Council.

Reason: (For recommendations)

LIP3 is a statutory document and will make a significant improvement to the borough. The objectives and policies included in LIP3 will enable the borough to deliver improved air quality, safer neighbourhoods, improved accessibility, and improve borough health through providing increased opportunities for active travel.

The Strategic Environmental Statement is a statutory document that needs to be published following adoption of the Council of LIP3.

Section 2 – Report

Introductory paragraph

- 2.1 LIP3 is a statutory document required by the Mayor of London that must show how the borough will implement the Mayor's Transport Strategy (MTS) locally in Harrow. It contains all of Harrow's transport objectives, policies, delivery proposals and outcomes that the borough is seeking to achieve. Funding for schemes included in LIP3 is predominantly from Transport for London (TfL), although Borough capital funding and Section 106 funding are also included in the plan. The LIP3 delivery plan covers the three year period from 2019/20 to 2021/22.
- 2.2 The cabinet meeting on 13 September 2018 approved the draft LIP3 for the purposes of consultation. The consultation took place between 17th September and 26th October 2018.
- 2.3 Following this consultation, changes were made and reviewed by the Overview and Scrutiny Committee on 13th November 2018. No substantive changes were required.
- 2.4 TfL responded to the full consultation after the Overview and Scrutiny meeting and their input and further changes were considered by the Portfolio Holder in accordance with the delegated authority granted by Cabinet and were agreed by the Portfolio Holder - Environment on 14th February 2019.
- 2.5 TfL comments were positive overall and their response included the following statements:

The draft LIP3 gives a very good overview of the challenges and opportunities for transport in Harrow and demonstrates a clear desire to deliver against the MTS aims and outcomes.

The 13 objectives that the borough has set are welcomed and are well informed by, and linked to, the local challenges and opportunities.

- 2.6 The revised draft LIP3 was submitted to TfL in February 2019 for their consideration. The Deputy Mayor of London approved Harrow's LIP3 on 12th April 2019.
- 2.7 The final LIP3 document is provided in **Appendix A**.
- 2.8 Upon adoption of LIP3, the regulations require the borough to produce a Strategic Environmental Assessment statement summarising:
- i. how environmental considerations have been integrated into the LIP;
 - ii. how consultation with both the environmental authorities and the public have been taken into account;
 - iii. the reasons for choosing the measures and strategies adopted rather than other alternatives considered; and
 - iv. proposals for monitoring.
- 2.9 The Strategic Environmental Statement is provided in **Appendix B**.

Options considered

- 2.10 None, producing these documents is a legal requirement.

Background

- 2.11 The Mayor of London published his transport strategy in 2018. There are three key themes to the MTS as follows

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

Subsequently the borough was required to produce a revised Transport Local Implementation Plan (LIP3).

- 2.12 The overarching aim of the MTS is for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041.
- 2.13 LIP3 includes borough transport objectives for the next 20 years and explains how meeting these will contribute to achieving the Mayor's overarching mode share aim and each of the nine Mayoral strategic

outcomes. LIP3 also includes a three year programme of investment starting in 2019/20 and includes delivery proposals for the period 2019/20 - 2021/22 and the targets and outcomes the borough are seeking to achieve.

- 2.14 The LIP3 transport objectives included in the plan were developed in order to do the following:
- Assist in delivering the borough corporate priorities
 - Address Harrow's key transport concerns
 - Help to address local environmental issues relevant to LIP3
 - Assist in delivering the Mayor of London's nine strategic transport outcomes identified in the MTS
 - Assist in delivering the Mayoral overarching aim for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041
- 2.15 The draft LIP3 has also considered the Harrow Core Strategy, the Harrow Health and Wellbeing Strategy 2016-2020, the needs of the Harrow and Wealdstone Opportunity area, the legal requirements of the Disability Discrimination Act and the environmental implications.
- 2.16 Following LIP3 adoption, the previous LIP2 will be superseded and no longer be Council policy.
- 2.17 There are several other documents associated with LIP3 that expand on different areas of policy delivery in the LIP and have been reviewed in light of the changes introduced through LIP3. These revised strategic documents include the Harrow Road Safety Strategy, Parking Management and Enforcement Strategy and Walking, Cycling & Sustainable Transport Strategy. These documents are also being presented to Cabinet and are on the agenda to this meeting.

Staffing/workforce

- 2.18 The works identified for delivery in the draft LIP3 will be fully resourced by the TfL LIP funding. Some supporting funds from Harrow Capital and section106 developer contributions may be available. The delivery of the programme will be undertaken by existing staff resources within the Traffic, Highways & Asset Management team supported by technical consultants as needed.

Performance Issues

- 2.19 Implementing LIP3 will help to deliver Harrow's corporate priorities and in particular building a better Harrow and protecting the most vulnerable.
- 2.20 It is a requirement for LIP3 to include targets against the Mayor of London's overarching mode share aim, the Mayor of London's nine

strategic transport outcomes and their respective outcome indicators. TfL needs to approve the targets set. The targets set are realistic but challenging and meeting them will be dependent on the availability of funds to implement appropriate schemes and the ability to deliver behavioural changes. These caveats are included in LIP3.

2.21 The targets set in LIP3 are shown in the following table.

	Target	Target year	Latest data
Overarching mode share aim			
Londoners' trips to be on foot, by cycle or by public transport	50%	2021	Between 2014/15 and 2016/17, 48% of daily trips were made by foot, cycle or public transport
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	34%	2021	Between 2014/15 and 2016/17, 25% of residents were recorded as doing at least 20 mins active travel a day
Londoners have access to a safe and pleasant cycle network	10%	2021	In 2016, none of her residents lived within 400m of the London-wide strategic cycle network
Outcome 2: London's streets will be safe and secure			
Deaths and serious injuries from all road collisions to be eliminated from our streets (2005/09 baseline)	20KSIs	2022	The 2005/09 baseline in Harrow is 58 KSIs
Deaths and serious injuries from all road collisions to be eliminated from our streets (2010/14 baseline)	13KSIs	2030	The 2010/14 baseline in Harrow is 42 KSIs
Outcome 3: London's streets will be used more efficiently and have less traffic on them			
Reduce the volume of traffic in London.	568 million annual vehicle km miles	2021	In 2015, traffic levels recorded by the DfT were 568 million annual vehicle kms. Target is a 0% increase by 2021
Reduce car ownership in London	100,600	2021	In 2016, the number of licensed cars owned in Harrow was 104,675
Outcome 4: London's streets will be clean and green			
Reduced CO ₂ emissions	124,800 tonnes	2021	In 2013, 141,600 tonnes of CO ₂ were emitted from road transport in Harrow
Reduced NO _x emissions	210 tonnes	2021	In 2013, 460 tonnes of NO _x were emitted from road transport in Harrow

	Target	Target year	Latest data
Reduced particulate emissions	43 tonnes PM ₁₀ 21 tonnes PM _{2.5}	2021	In 2013, 51 tonnes of PM ₁₀ and 28 tonnes of PM _{2.5} were emitted from road transport in Harrow
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	125,000 trips	2021	117,000 trips per day were made by public transport between 2013/14 and 2015/16
Outcome 6: Public transport will be safe, affordable and accessible to all			
Everyone will be able to travel spontaneously and independently.	5 mins	2041	Difference between total public transport network journey time and total step free public transport journey time in 2015 was 12 minutes
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	11.5mph	2021	In 2015, bus speeds were 11.1mph
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	100%	2021	Implementation of all planning conditions
CIL agreements used for strategic transport initiatives	100%	2021	Use of funding to support the delivery of strategic transport interventions

Environmental Implications

- 2.22 The draft LIP3 underwent a Strategic Environmental Assessment (SEA). This indicated that there are environmental benefits from delivering the works included. The main benefits are in improving air quality and also improving the population and human health. No negative environmental issues were identified as part of the SEA.
- 2.23 Key air quality benefits identified were from reducing car travel, encouraging greener vehicles and reducing congestion.
- 2.24 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.

- 2.25 In line with the SEA regulations, the Environmental Statement associated with LIP3 will be made available on Harrow's website.

Risk Management Implications

- 2.26 Risk included on Directorate risk register? No
- 2.27 Separate risk register in place? Yes. The delivery of interventions and schemes resulting from LIP3 policy will be subject to separate risk assessments.
- 2.28 The major risk to delivery of all schemes is lack of funding. None of the funding shown in the draft LIP3 is guaranteed.
- 2.29 TfL are not able to confirm funding availability over the lifetime of the LIP and therefore not all schemes will be implemented. As this will be a public document, this may raise public expectations and not be realised.
- 2.30 Funds for work outlined in the plan are from Transport for London through the LIPs needs based funding and other TfL / GLA bidding funding streams. Some funding is also from the Council capital budget and Section 106 funds. These funds are also not guaranteed.
- 2.31 Any larger scheme that is progressed will include a separate scheme risk register.
- 2.32 If funding is not available for future works programmed in LIP3 then future TfL funding requests will reflect the changes and timetables will be reprofiled.
- 2.33 If the Mayor of London does not approve the Plan he has the powers to prepare a Plan on behalf of the Council and recover his costs.
- 2.34 If the Council fails to implement any proposal in the Plan, the Mayor of London may do it on the Council's behalf and charge reasonable expenses.

Procurement Implications

- 2.35 Consultants and contractors will need to be procured to deliver LIP3 proposals. This is business as usual. The level of annual funding available is relatively stable and therefore work will be procured in line with the Public Contract Regulations 2015 and our internal Contract Procedure Rules .

Legal Implications

- 2.36 Section 145 of the Greater London Authority Act 1999 ("the GLA Act") requires all London authorities as soon as reasonably practicable after the Mayor has published a transport 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.

- 2.37 As the LIP3 has been approved by the Mayor, the Council is required under section 151 of the GLA Act to implement the proposals contained in the LIP3 following its adoption by full Council.
- 2.38 The Mayor can exercise his powers under section 152 of the GLA Act to implement the proposals in the LIP3 on behalf of the Council if he considers that the Council has failed or is likely to fail satisfactorily to implement any proposal contained in the LIP3. Should the Mayor exercise his power to implement the proposals on behalf of the Council, he is entitled by virtue of section 152 (7) of the GLA Act to recover the reasonable costs of doing so. However, it is considered that the Mayor is only likely to exercise this power in cases where a local authority has deviated significantly from its LIP and the Mayor's Transport Strategy, rather than where there have been minor programme variations.
- 2.39 By virtue of Article 4 and Part 3A of the Council's Constitution, the decision to approve the LIP3 is reserved for full Council.

Financial Implications

- 2.40 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.
- 2.41 The programme contained in LIP3 relies on funding from a variety of sources including, TfL grant, the Council's capital budgets and relevant Section 106 developer or other external contributions. The projects will only be implemented based on funding availability. TfL normally confirms the financial settlement on an annual basis. If funding is provided by TfL, it is a financial requirement that the borough spends the allocation on the schemes identified.

Equalities implications / Public Sector Equality Duty

- 2.42 LIP3 underwent an Equalities Impact Assessment and in preparing the LIP3, 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.
- 2.43 Delivering the proposals in the LIP3 will benefit all the people living in the borough with resultant positive impacts on the following groups:

Protected characteristic	Programmes	Impact
Age (young and old)	<ul style="list-style-type: none"> • Healthy streets suitable for improved access for all; road safety, additional seating, an improved environment for walking and cycling and general environmental improvements. • More active travel provides health benefits, cycle training and walking for Health encouraged. • School travel planning supports safer and more sustainable journeys to school. • 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. 	Positive
Disability (People with mobility difficulties)	<ul style="list-style-type: none"> • More appropriately located disabled parking spaces. • Ongoing shopmobility and travel training support. • Healthy streets reviews to include appropriate dropped kerbs and improved road crossings suitable for those with visual or auditory impairments. • Increased provision of healthy streets suitable for improved access for all; including improved road safety, additional seating, an improved environment for walking and cycling and general environmental improvements. • Independent travel training supported for people with learning difficulties. 	Positive

Council Priorities

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

Council priorities	LIP3 key input
Building a Better Harrow	Sustainable transport support for growth areas, healthy streets, liveable neighbourhoods, 20mph zone extensions, road safety improvements and training, Electric charging infrastructure, cycle facilities and training

Section 3 - Statutory Officer Clearance

Name: Jessie Man

☒

on behalf of the
Chief Financial Officer

Date: 25/04/19

Name: Abiodun Kolawole

☒

on behalf of the
Monitoring Officer

Date: 26/04/19

Name: Nimesh Mehta

☐

on behalf of the
Head of Procurement

Date: 23/04/19

Name: Paul Walker

☐

Corporate Director

Date: 29/04/19

Ward Councillors notified:

YES

EqlA carried out:

YES

EqlA 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:

Cabinet Report, 13th September 2018 - Draft Transport Local Implementation Plan 3

Overview and Scrutiny Committee Report, 13th November 2018 - Draft Transport Local Implementation Plan 3

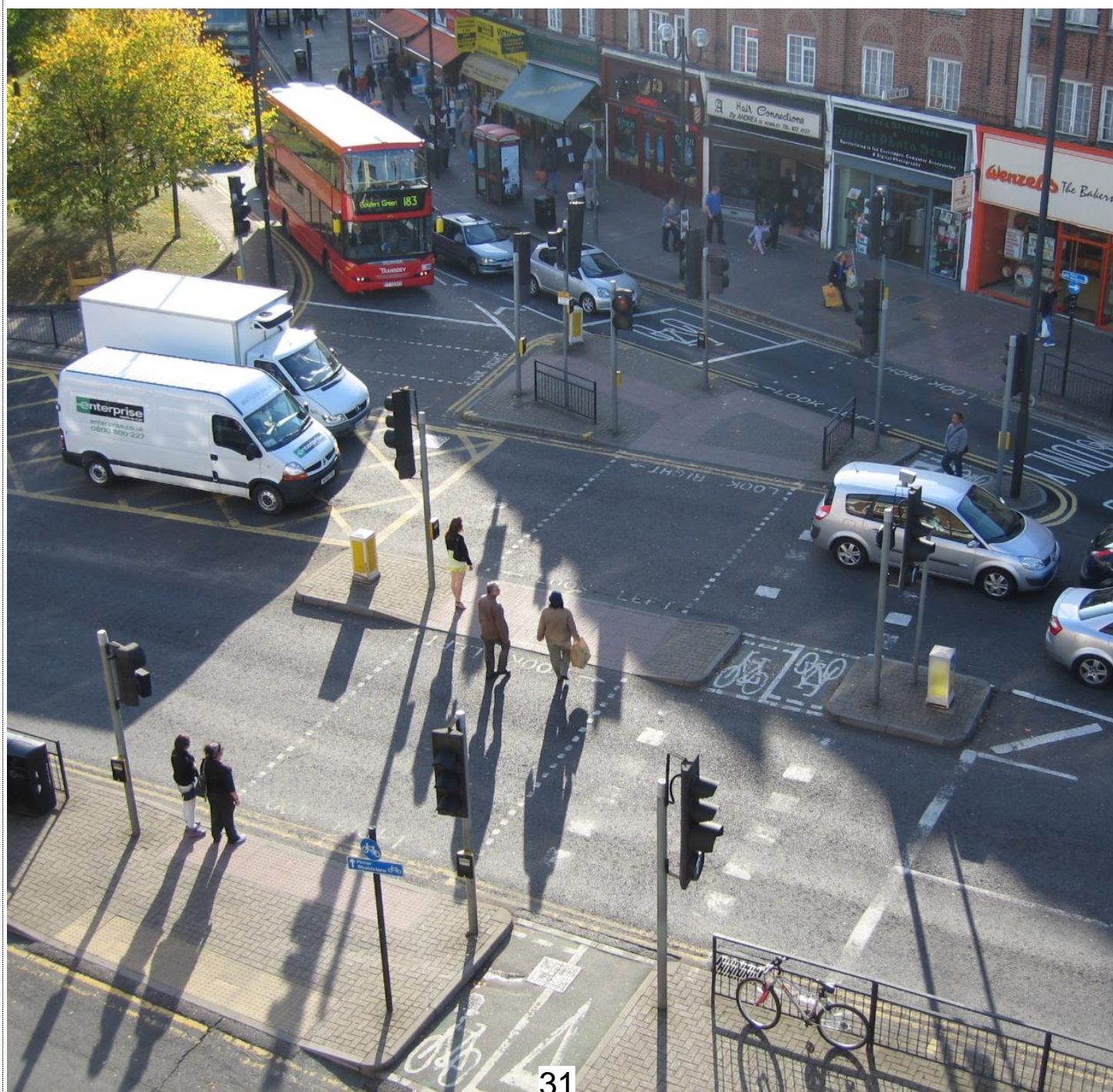
Portfolio Holder for Environment Report – February 2019 - Draft Transport Local Implementation Plan 3

Call-In Waived by the Chair of Overview and Scrutiny Committee	YES/ NO / NOT APPLICABLE*
<i>(for completion by Democratic Services staff only)</i>	<i>* Delete as appropriate If No, set out why the decision is urgent with reference to 4b - Rule 47 of the Constitution.</i>

This page is intentionally left blank

Harrow

Transport Local Implementation Plan 2019/20 - 2021/22



CONTENT

Foreword	7
Executive summary	8
1. Introduction and preparing a LIP	9
1.1 Introduction.....	9
1.2 Local approval process	9
1.3 Statutory consultation.....	10
1.4 Statutory duties.....	12
1.5 LIP approval	13
2. Borough Transport Objectives	13
2.1 Introduction.....	13
2.2 TfL City planner tool	14
2.3 Local context.....	14
2.4 Changing the transport mix.....	27
2.5 Mayor's Transport Strategy outcomes.....	36
Outcome 1: London's streets will be healthy and more Londoners will travel actively	36
Outcome 2: London's streets will be safe and secure.....	54
Outcome 3: London's streets will be used more efficiently and have less traffic on them	64
Outcome 4: London's streets will be clean and green	73
Outcome 5: The public transport network will meet the needs of a growing London	81
Outcome 6: Public transport will be safe, affordable and accessible to all	85
Outcome 7: Journeys by public transport will be pleasant, fast and reliable	88
Outcome 8: Active, efficient and sustainable travel will be the best option in new developments	91
Outcome 9: Transport investment will unlock the delivery of new homes and jobs'	95
2.6 Other Mayoral Strategies	99
3. The Delivery Plan	101
3.1 Introduction.....	101
3.2 Linkages to the Mayor's Transport Strategy priorities	101
3.3 TfL Business Plan	103
3.4 Sources of funding.....	103
3.5 Long-Term interventions to 2041.....	104
3.6 Three-year indicative Programme of Investment	106
3.7 Supporting commentary for the three-year programme.....	107
3.8 Risks to the delivery of the three-year programme	109
3.9 Annual programme of schemes and initiatives.....	111
3.10 Supporting commentary for the annual programme.....	111
3.11 Risk assessment for the annual programme	111
3.12 Monitoring the delivery of the outcomes of the Mayor's Transport Strategy.....	113
Appendix A: Borough Transport policies	118
Glossary	130

FIGURES

Figure 1: City Planner index of multiple deprivation summary.....	15
Figure 2: Children exercise level in Harrow.....	17
Figure 3: Harrow in London.....	21
Figure 4: Borough metropolitan, major, district and local centres.....	22
Figure 5: Harrow key environmental features.....	23
Figure 6: Road and rail lines surrounding the borough.....	24
Figure 7: Cycle routes in Harrow.....	25
Figure 8: PTAL across Harrow.....	26
Figure 9: City Planner active travel summary.....	37
Figure 10: Healthy Streets indicators.....	38
Figure 11: 20mph zones within Harrow.....	40
Figure 12: Roads and paths in Harrow with the highest current cycle flow.....	41
Figure 13: Roads and paths in Harrow with the highest potential cycle demand.....	42
Figure 14: City planner cycling potential switchable trips 2010-15.....	43
Figure 15: Harrow connectivity map.....	45
Figure 16: Harrow cycling connectivity map and aspirational routes.....	46
Figure 17: Prioritised Strategic Cycling Connections.....	47
Figure 18: City Planner walking potential summary 2010-2015.....	49
Figure 19: City Planner safety summary.....	54
Figure 20: City Planner vulnerable road users KSI casualties 2014-2016.....	55
Figure 21: City Planner motorcycle KSI casualties 2014-2016.....	56
Figure 22: City Planner pedestrian KSIs casualties 2014-2016.....	57
Figure 23: Cycle KSI casualties 2014-2016.....	57
Figure 24: Reported locations of anti-social behaviour in 2017 Q2.....	60
Figure 25: Harrow modal split 2014/15 to 2016/17.....	64
Figure 26: City Planner efficiency summary.....	67
Figure 27: Average delays on Harrow roads (7-10am) (Jan 2016 to Nov 2016).....	68
Figure 28: NO ₂ emissions, 2013.....	74
Figure 29: City Planner green indicator summary.....	75
Figure 30: City Planner connected public transport summary.....	82
Figure 31: City Planner inclusive public transport summary.....	85
Figure 32: City Planner quality public transport summary.....	88
Figure 33: City Planner sustainable travel summary.....	91
Figure 34: City Planner unlocking development summary.....	96
Figure 35: Growth areas in Harrow.....	97

TABLES

Table 1: Consultation responses to SEA	12
Table 2: Link between Harrow objectives and Mayoral outcomes	32
Table 3: Cycling connectivity timetable.....	44
Table 4: Key document influences on LIP3.....	99
Table 5: Key ambitions and targets from Mayoral policy documents.....	100
Table 6: Linkages between LIP projects and programmes and the Mayor's Transport Strategy outcomes (ST01)	102
Table 7: Potential funding for LIP3 delivery (ST02)	104
Table 8: Long-term interventions up to 2041 (ST03)	105
Table 9: Three-year indicative programme of investment for the period 2019/20-2021/22 (ST04).	106
Table 10: LIP3 Risk Assessment for three-year programme 2019/20-2021/22 (ST05).....	110
Table 11: LIP3 Risk Assessment for annual programme - 2019/20 (ST06).....	112
Table 12: Borough outcome indicator targets (ST07)	114

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.

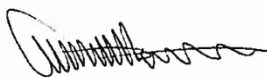
This transport plan will also support Harrow's Core Strategy which sets out the Borough development strategy for the next fifteen years. The delivery of the transport plan proposals will help the borough to ensure that where housing and population growth occurs, the population does not become car dependent 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, policies 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.

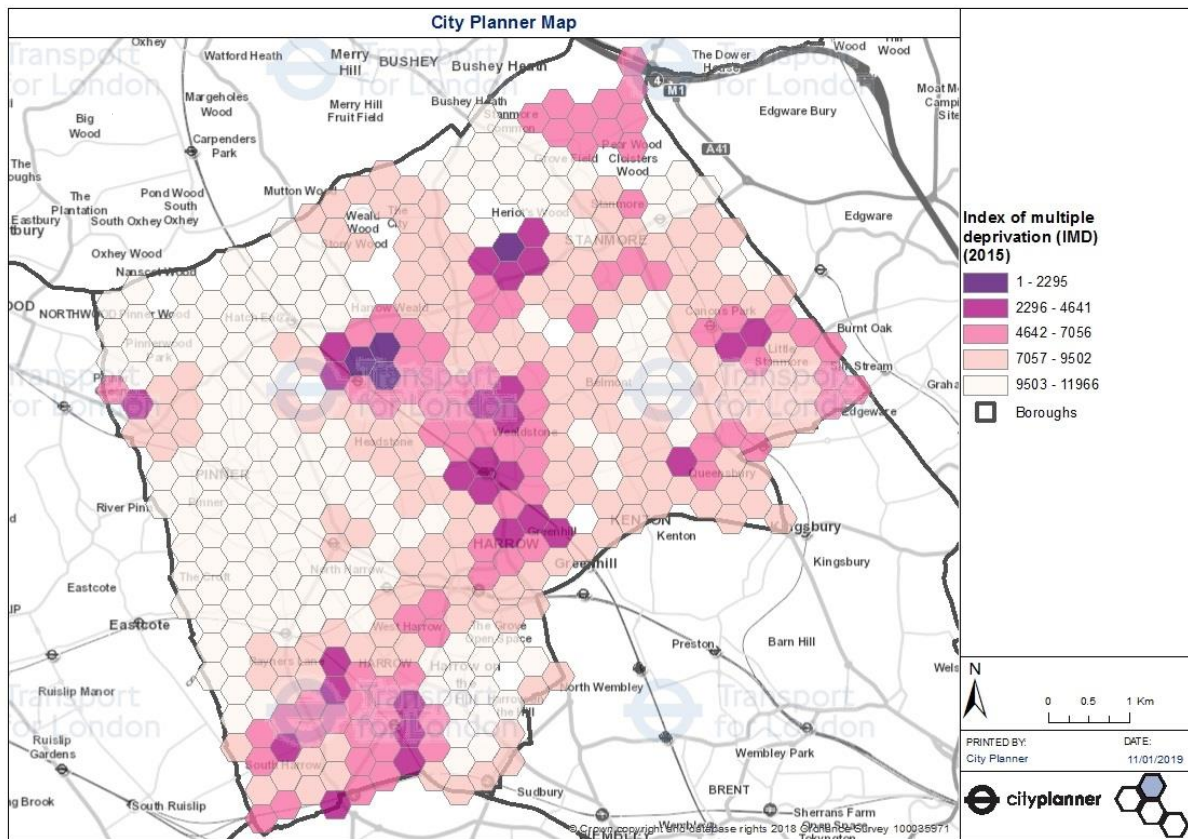
2.3 Local context

- 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

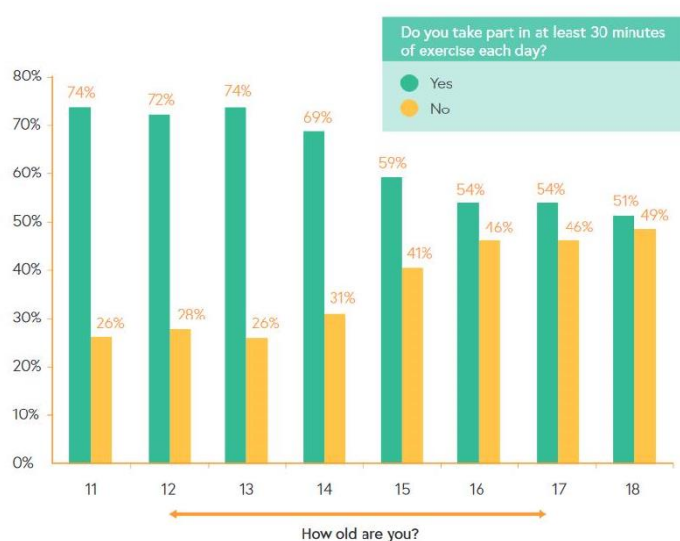
- 2.3.15 One in five children in Harrow is overweight at age 5 rising to more than one in three by the time they are 11. Two thirds of Harrow adults are estimated to be overweight. Obesity increases the risk of developing heart disease, stroke, cancer and long term health conditions such as diabetes 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

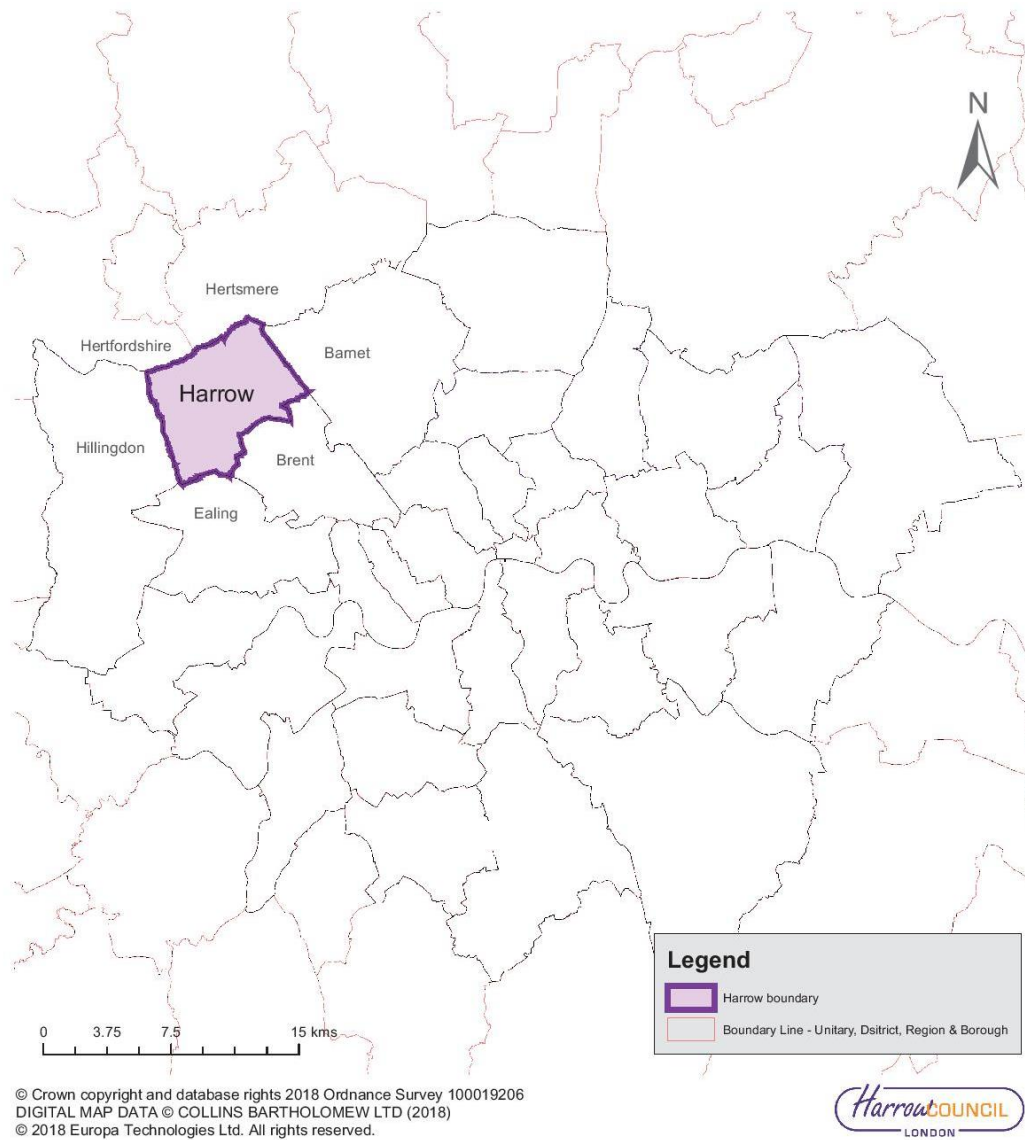


Figure 4: Borough metropolitan, major, district and local centres

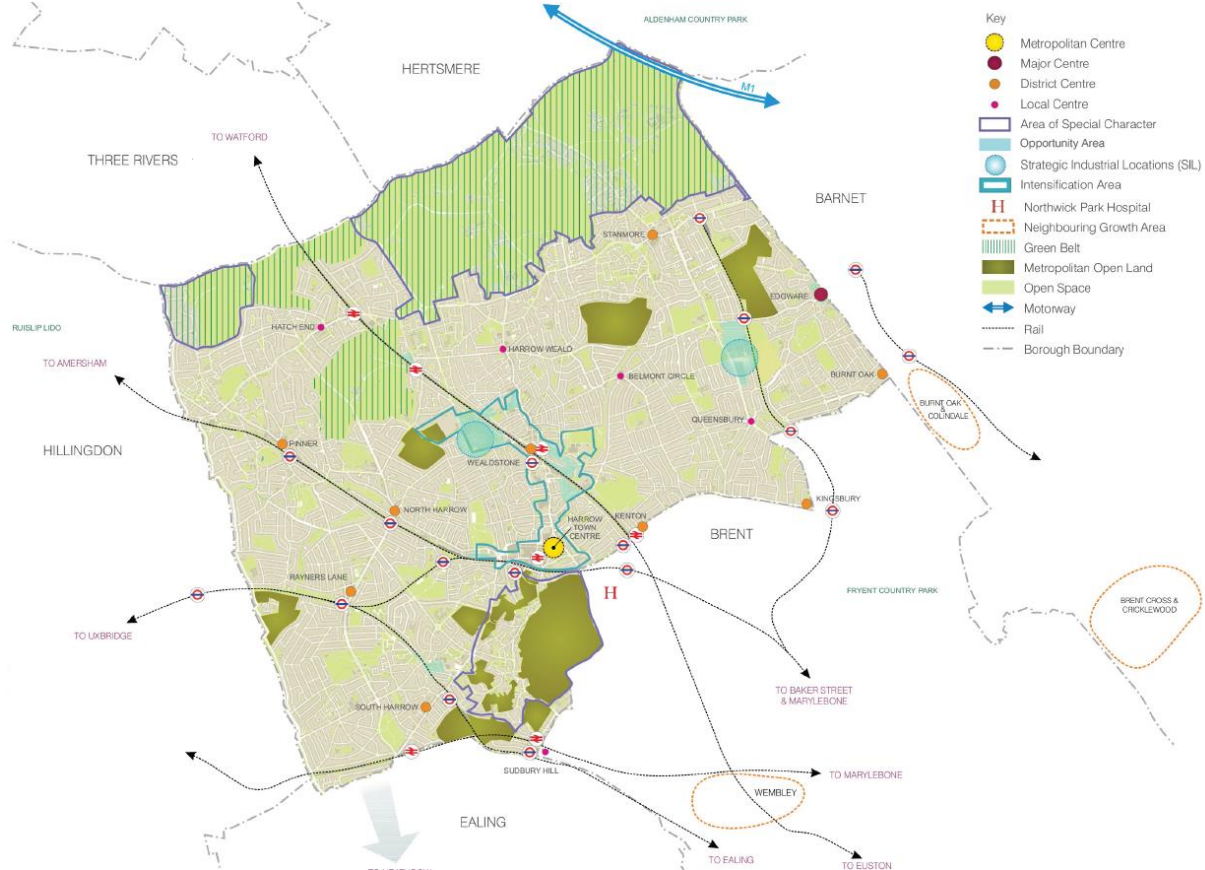
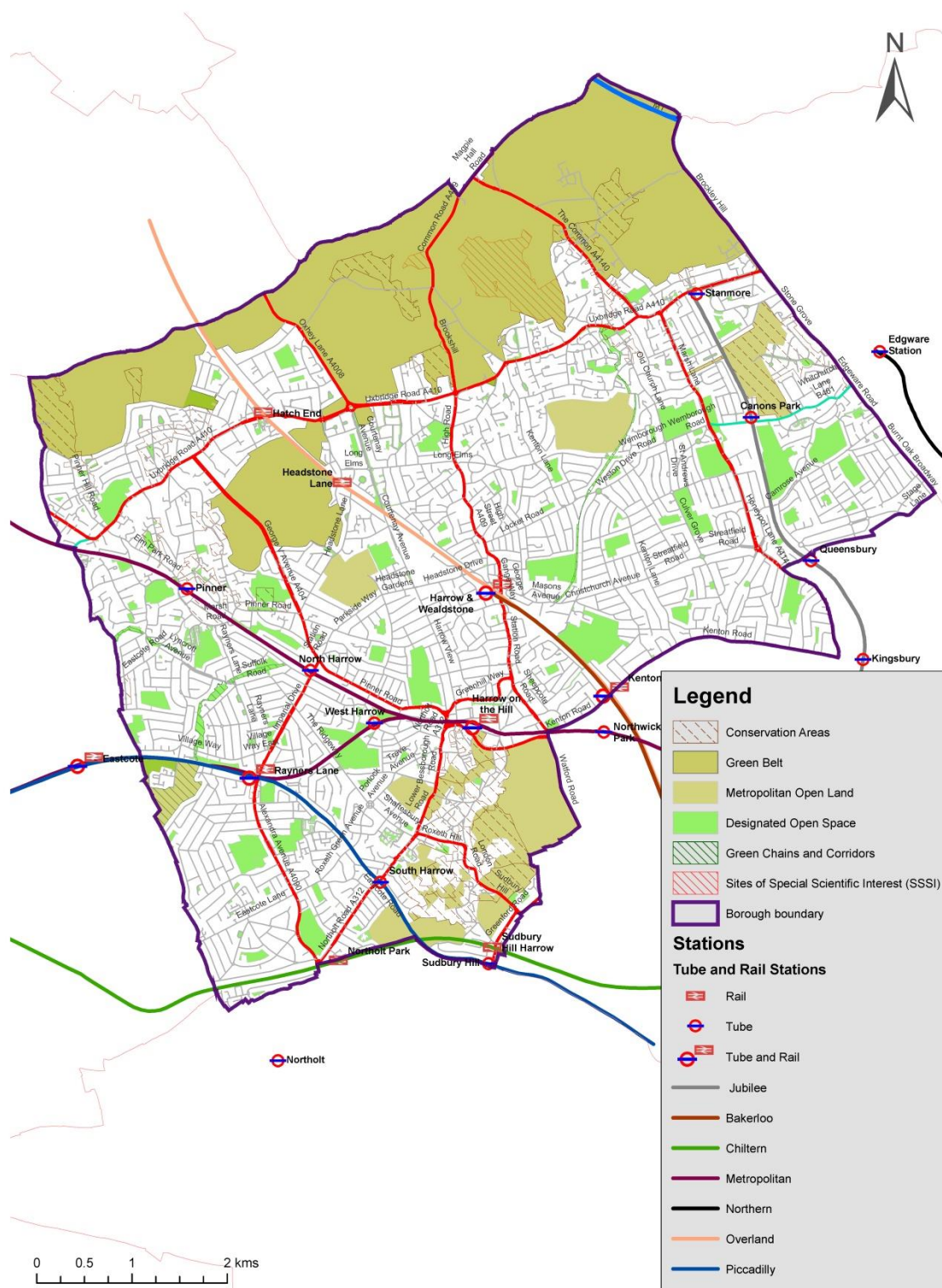


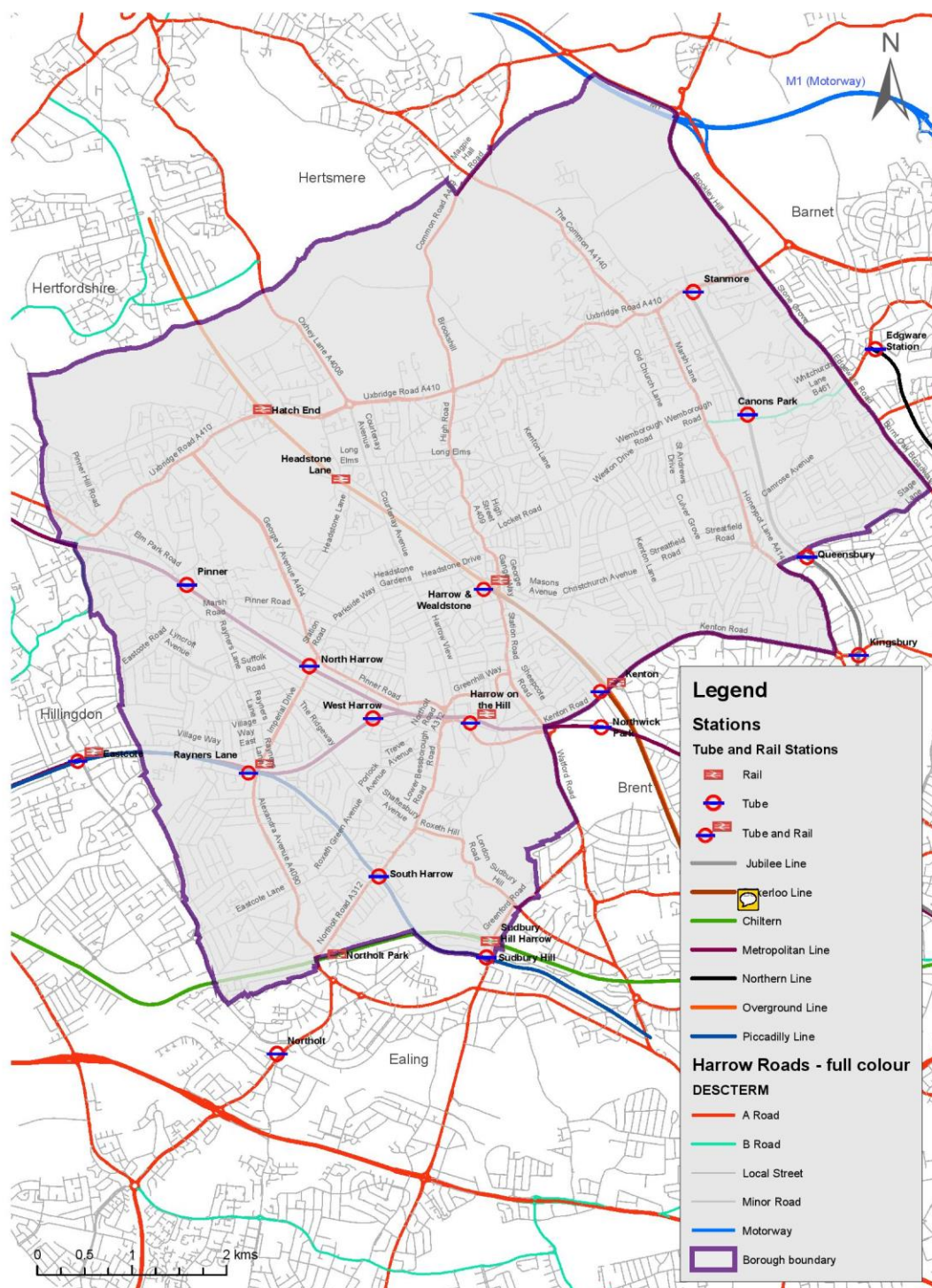
Figure 5: Harrow key environmental features



© Crown copyright and database rights 2018 Ordnance Survey 100019206
DIGITAL MAP DATA © COLLINS BARTHOLOMEW LTD (2018)
© 2018 Europa Technologies Ltd. All rights reserved.



Figure 6: Road and rail lines surrounding the borough



© Crown copyright and database rights 2018 Ordnance Survey 100019206
 DIGITAL MAP DATA © COLLINS BARTHOLOMEW LTD (2018)
 © 2018 Europa Technologies Ltd. All rights reserved.



Figure 7: Cycle routes in Harrow

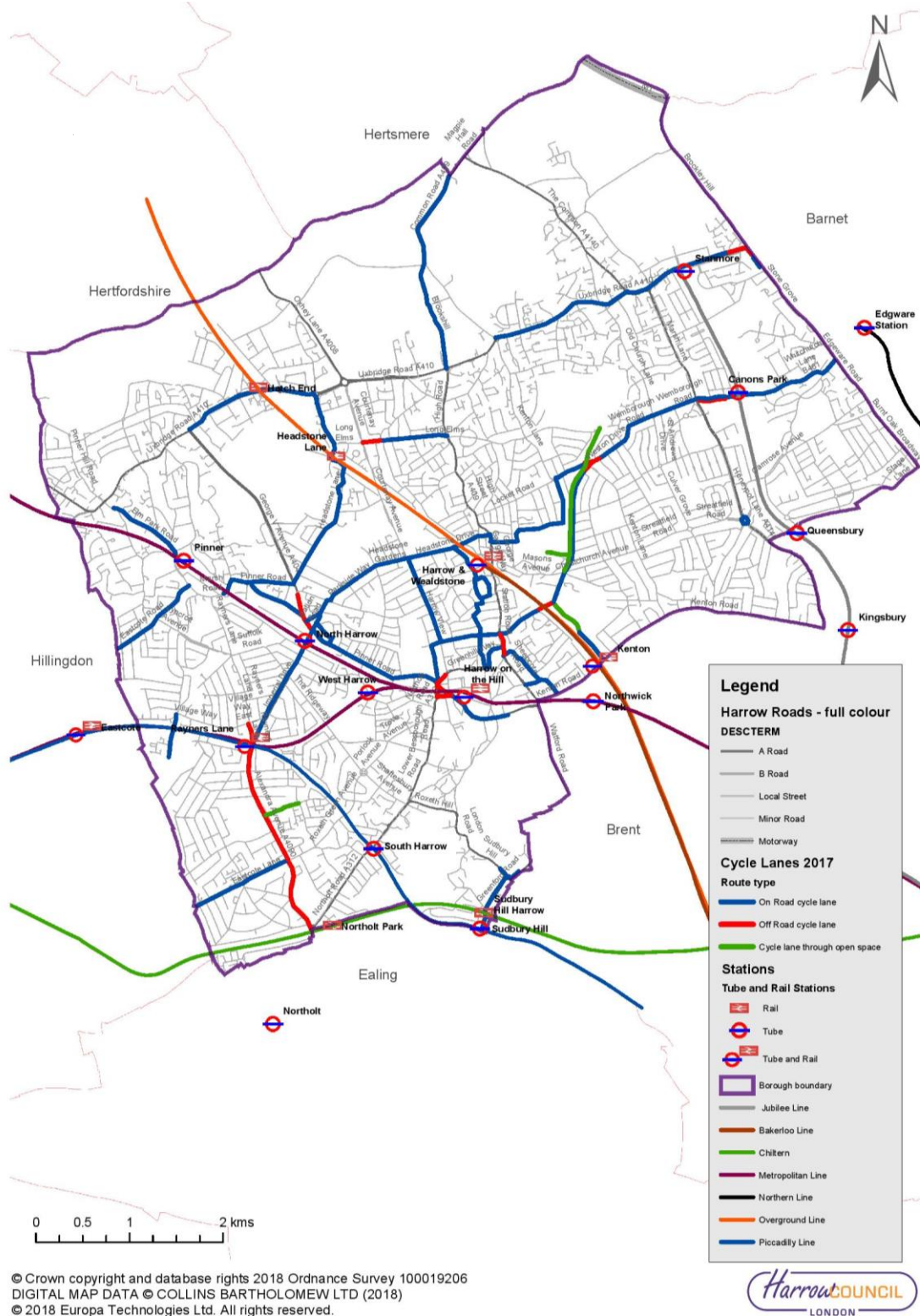
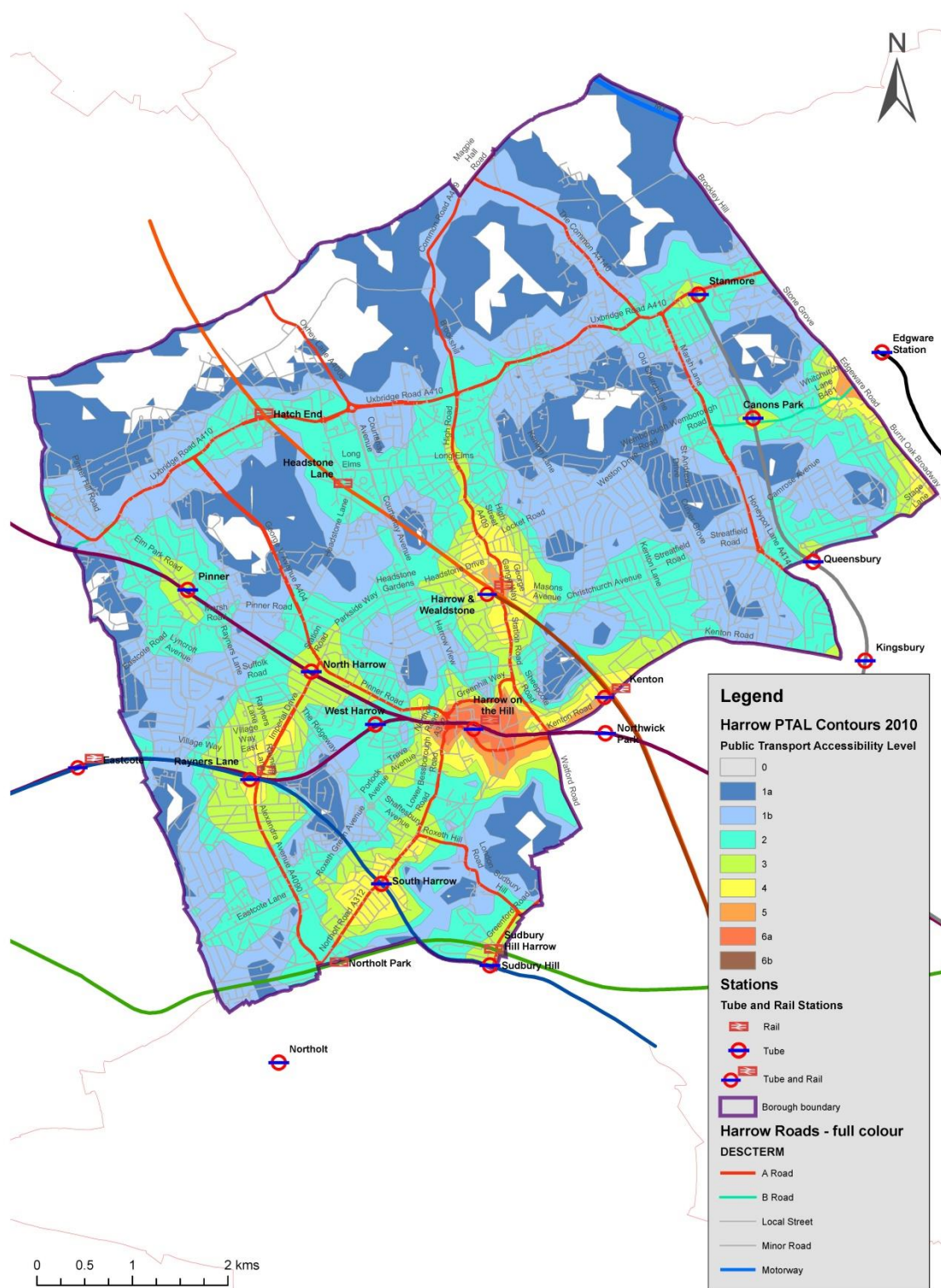


Figure 8: PTAL across Harrow



© Crown copyright and database rights 2018 Ordnance Survey 100019206
DIGITAL MAP DATA © COLLINS BARTHOLOMEW LTD (2018)
© 2018 Europa Technologies Ltd. All rights reserved.



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

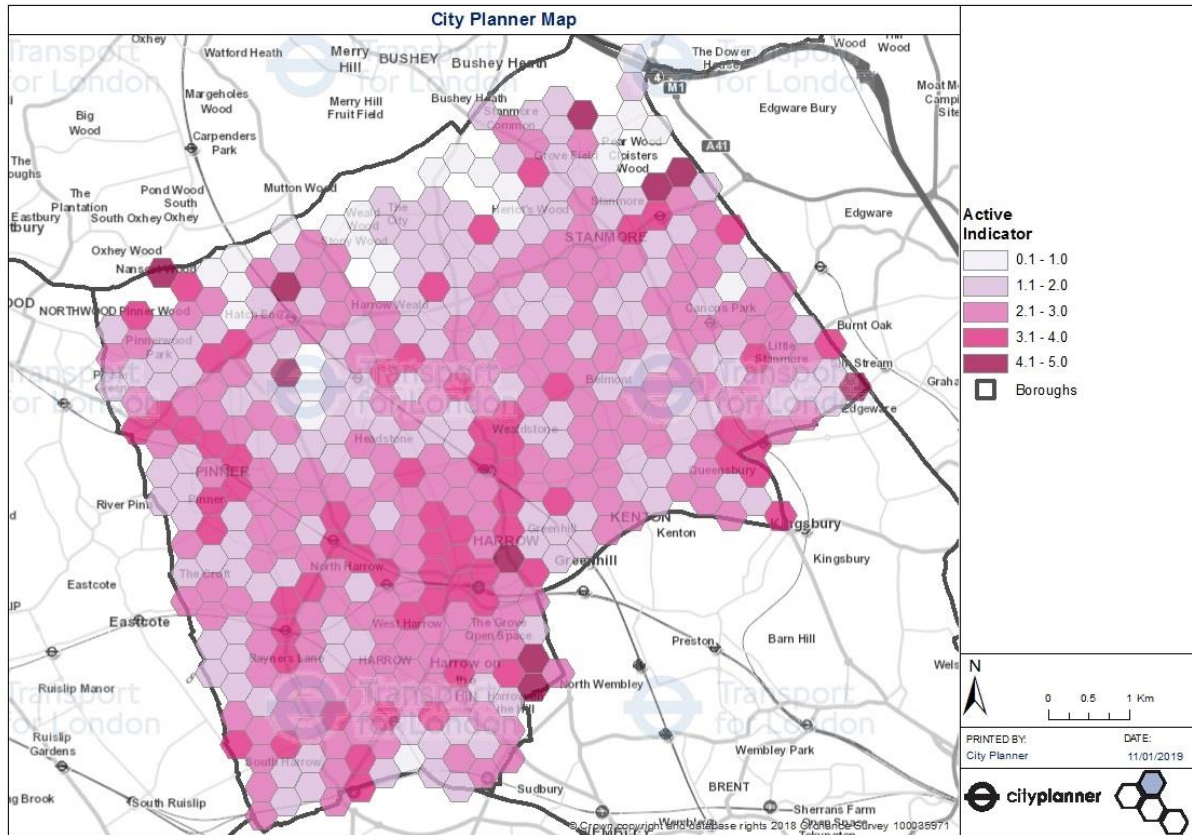
Challenges and opportunities

- 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.

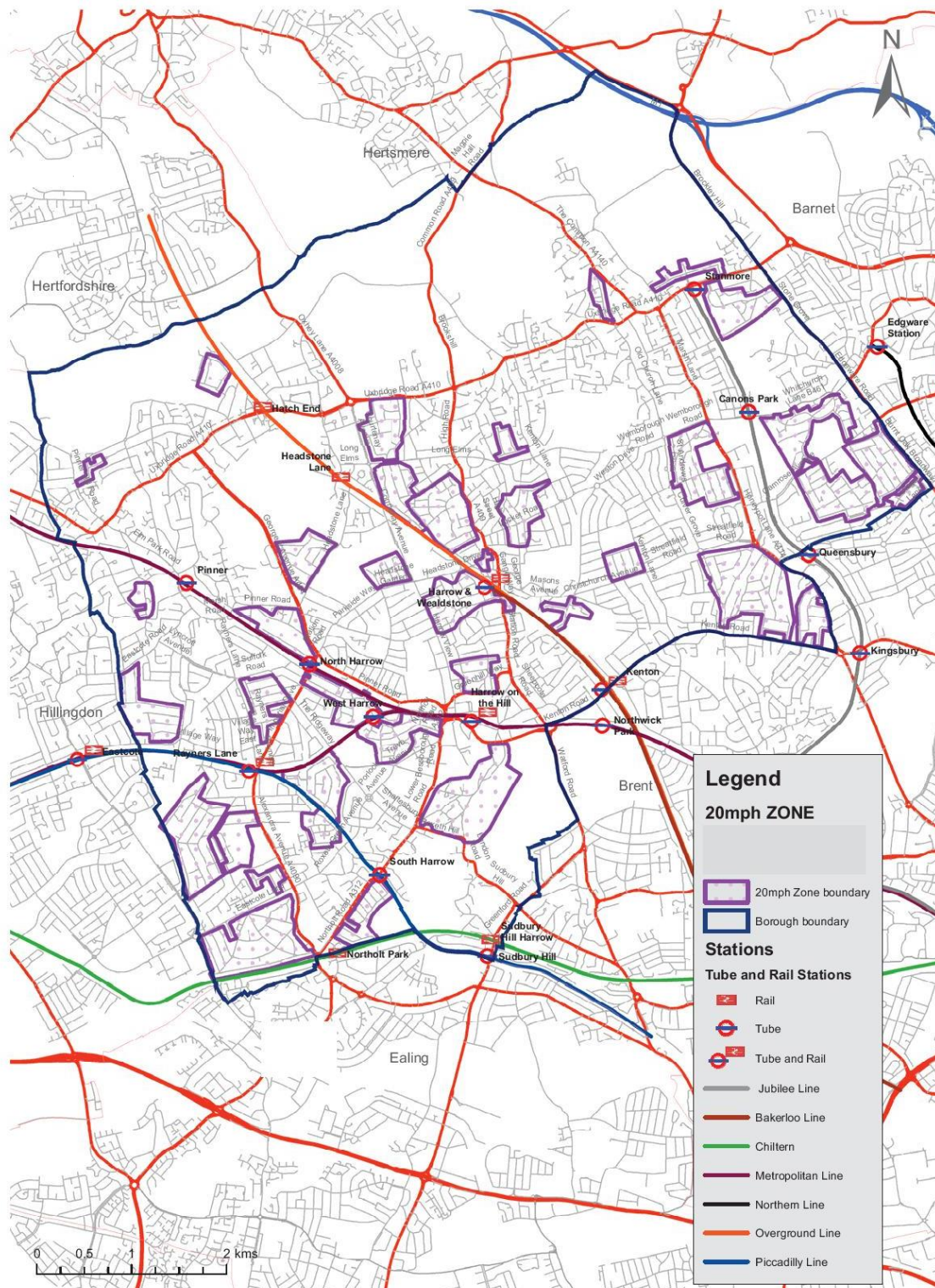
2.5.11 Encouraging active travel for children and those without access to a car is far easier. Awareness of both the physical and psychological health benefits of cycling and walking and the importance of protecting the environment are all issues that encourage increased use of sustainable modes. The 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



© Crown copyright and database rights 2018 Ordnance Survey 100019206
 DIGITAL MAP DATA © COLLINS BARTHOLOMEW LTD (2018)
 © 2018 Europa Technologies Ltd. All rights reserved.



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

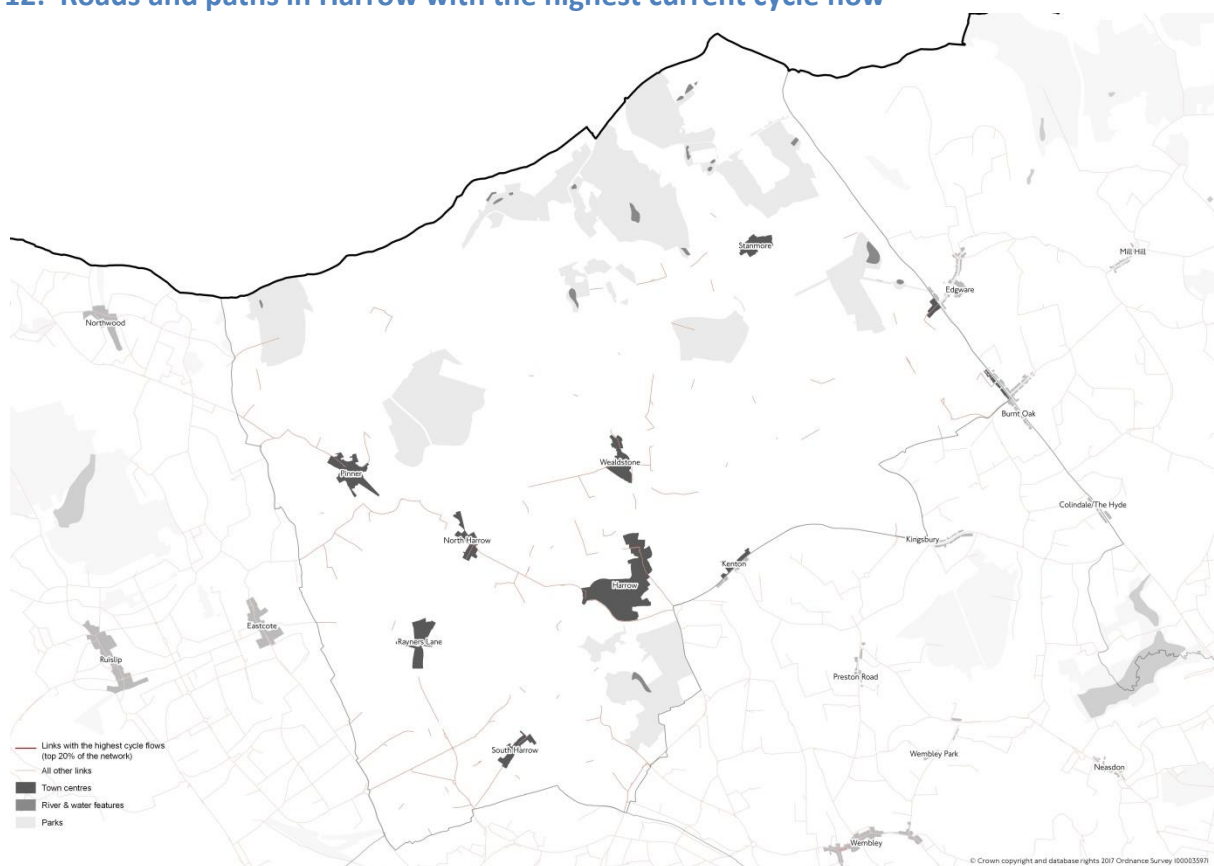
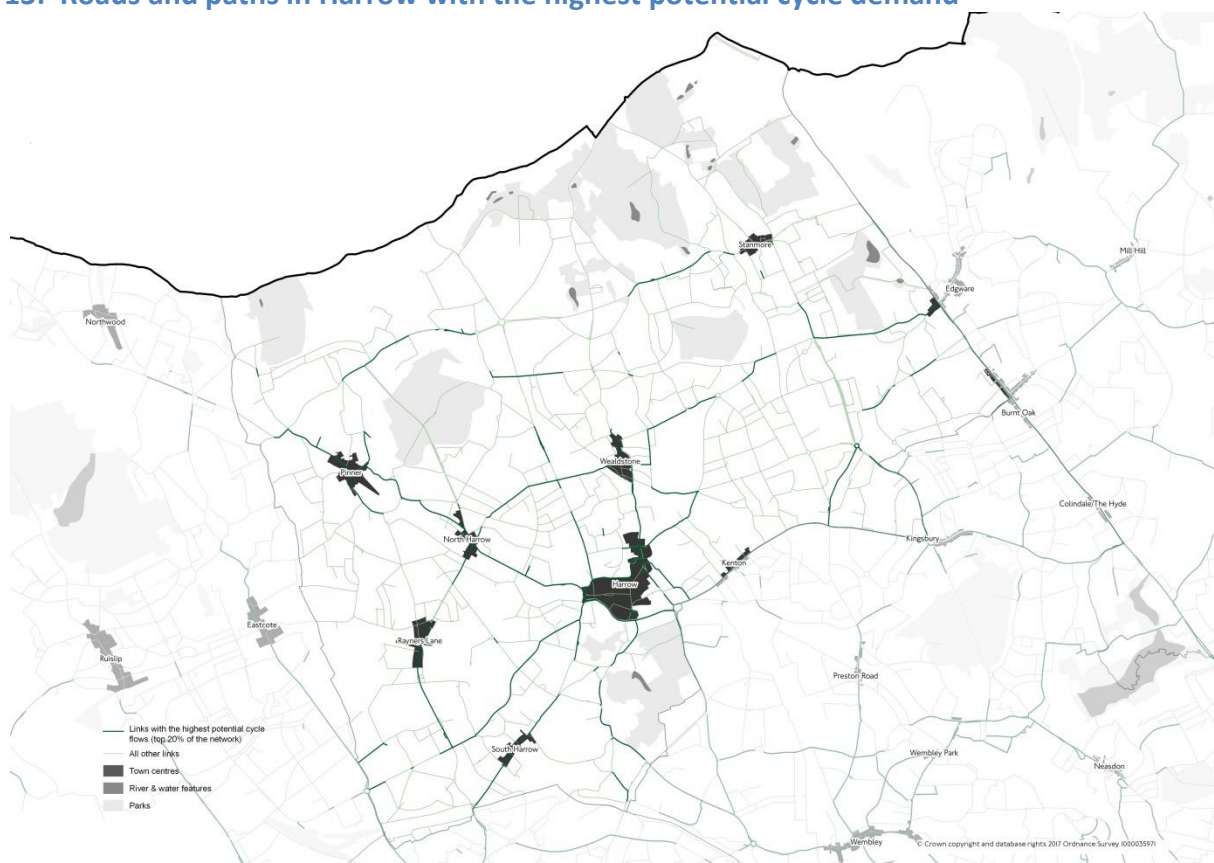


Figure 13: Roads and paths in Harrow with the highest potential cycle demand



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

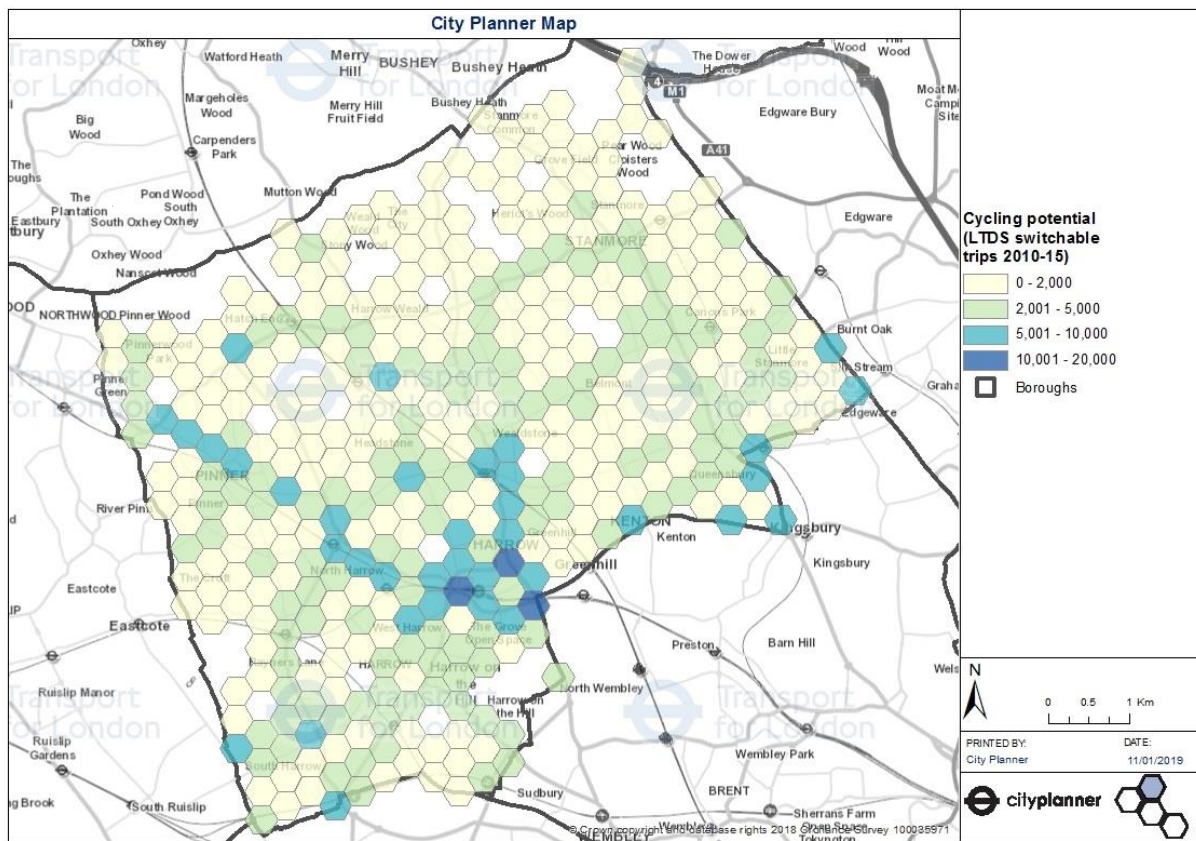
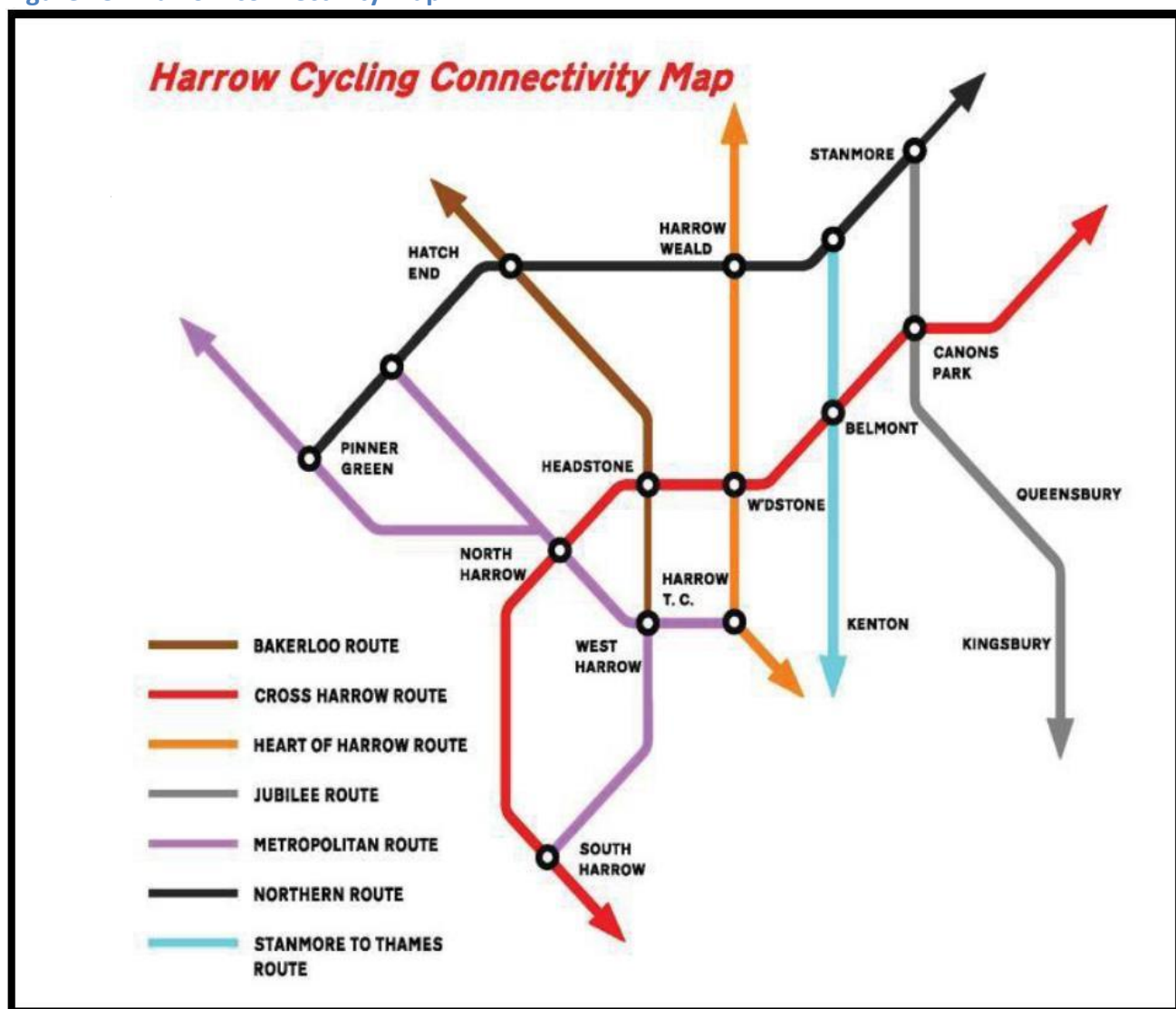


Figure 15: Harrow connectivity map



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

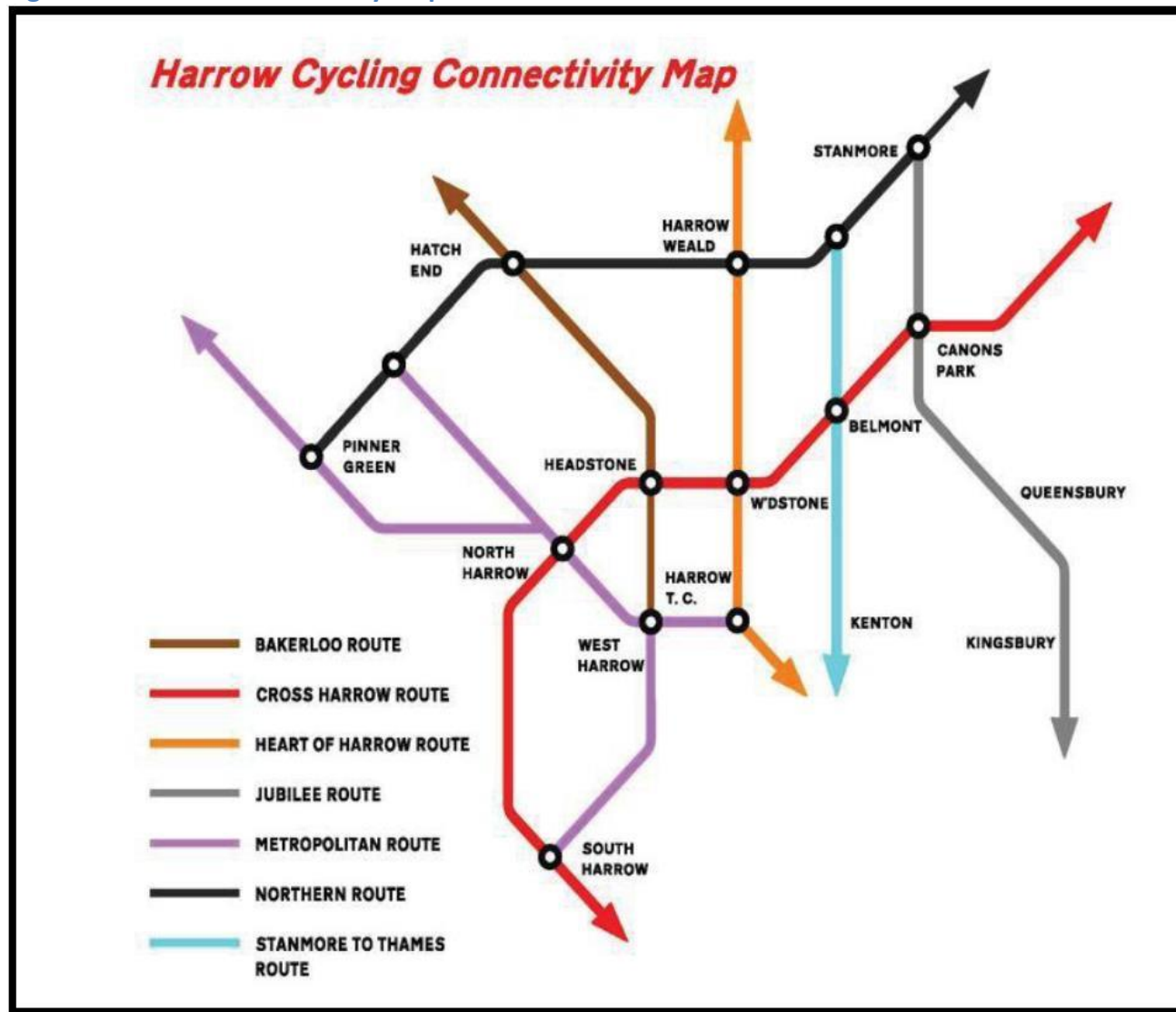
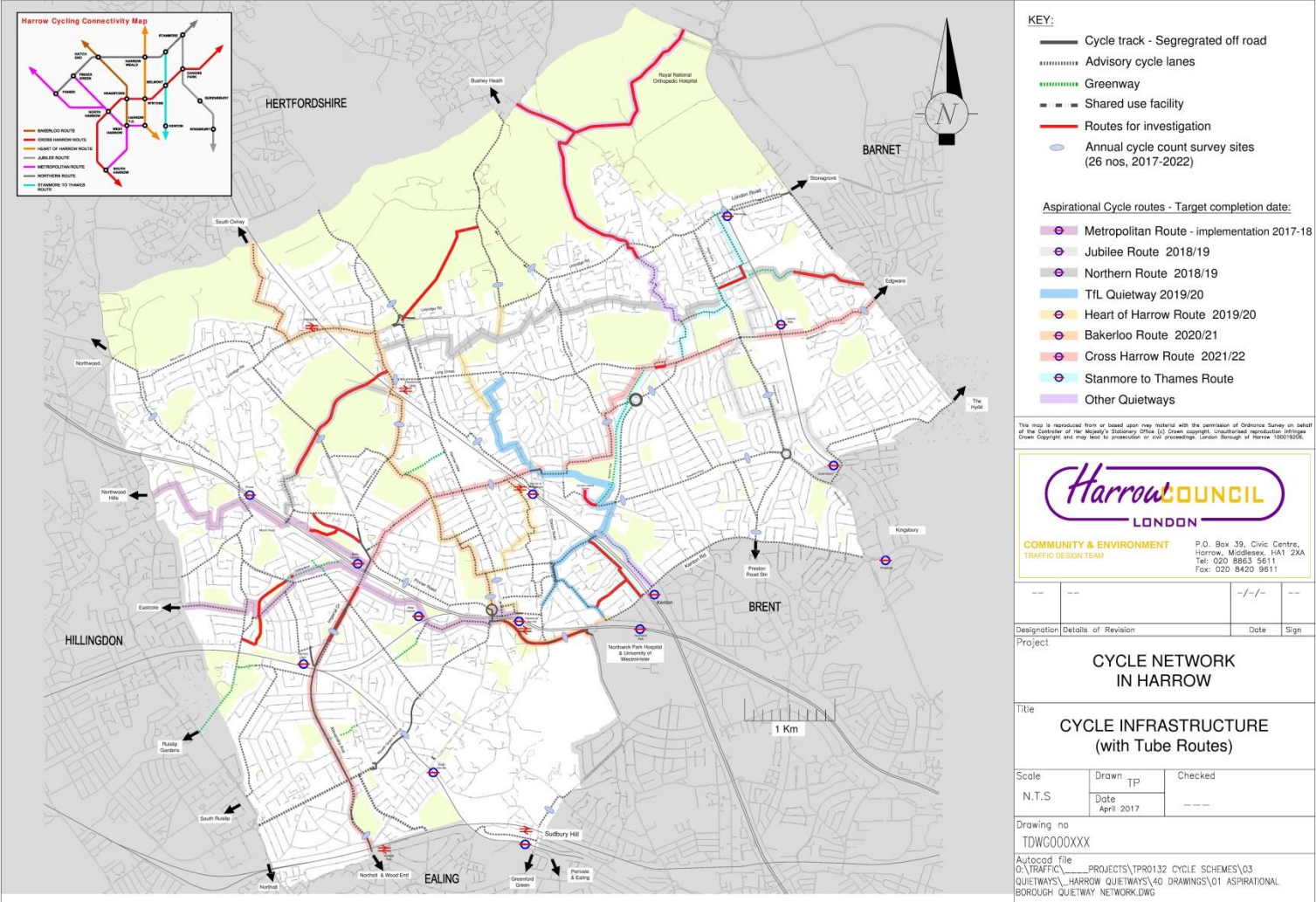
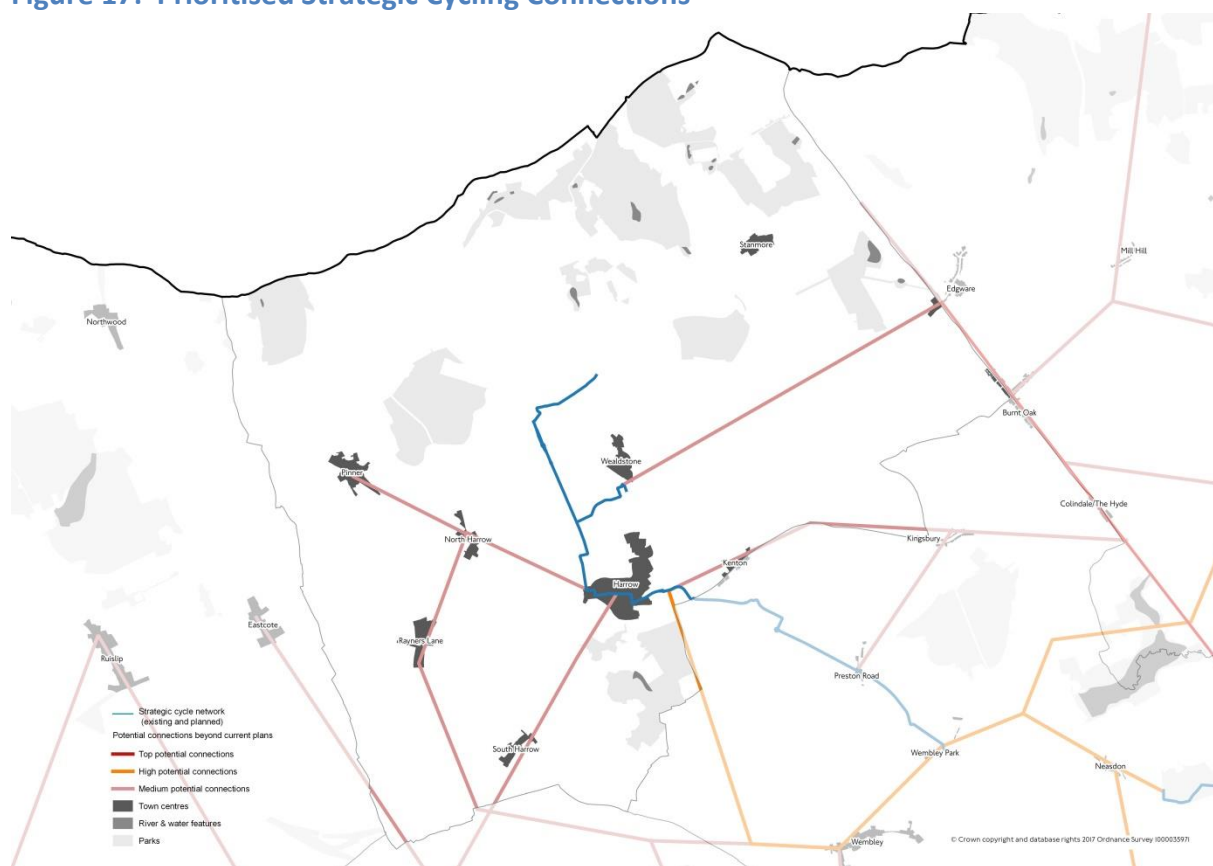


Figure 16: Harrow cycling connectivity map and aspirational routes



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



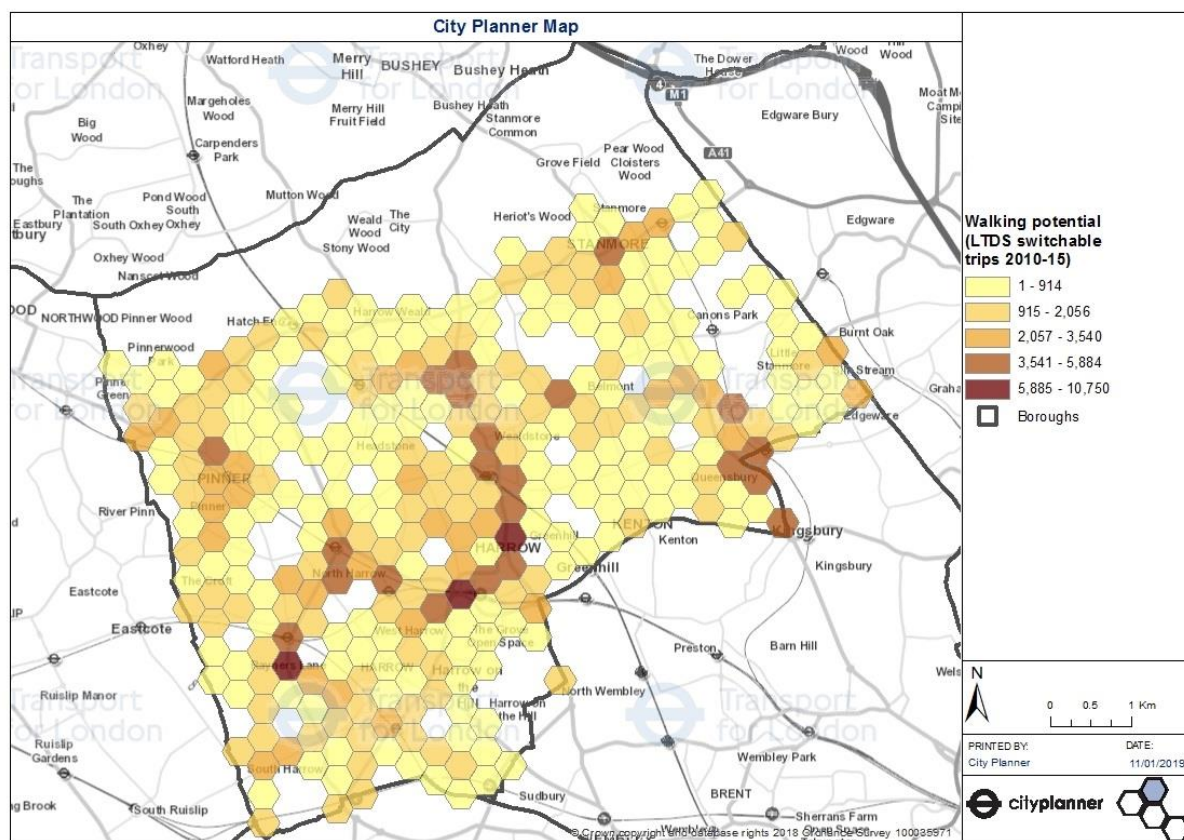
2.5.20 To encourage increased cycling, cycle training is offered to all schools in the borough as well as offered outside the school environment. Cycle training is also facilitated for Special Educational Needs and Disability (SEND) schools providing an extended duration of training and adapted bikes 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

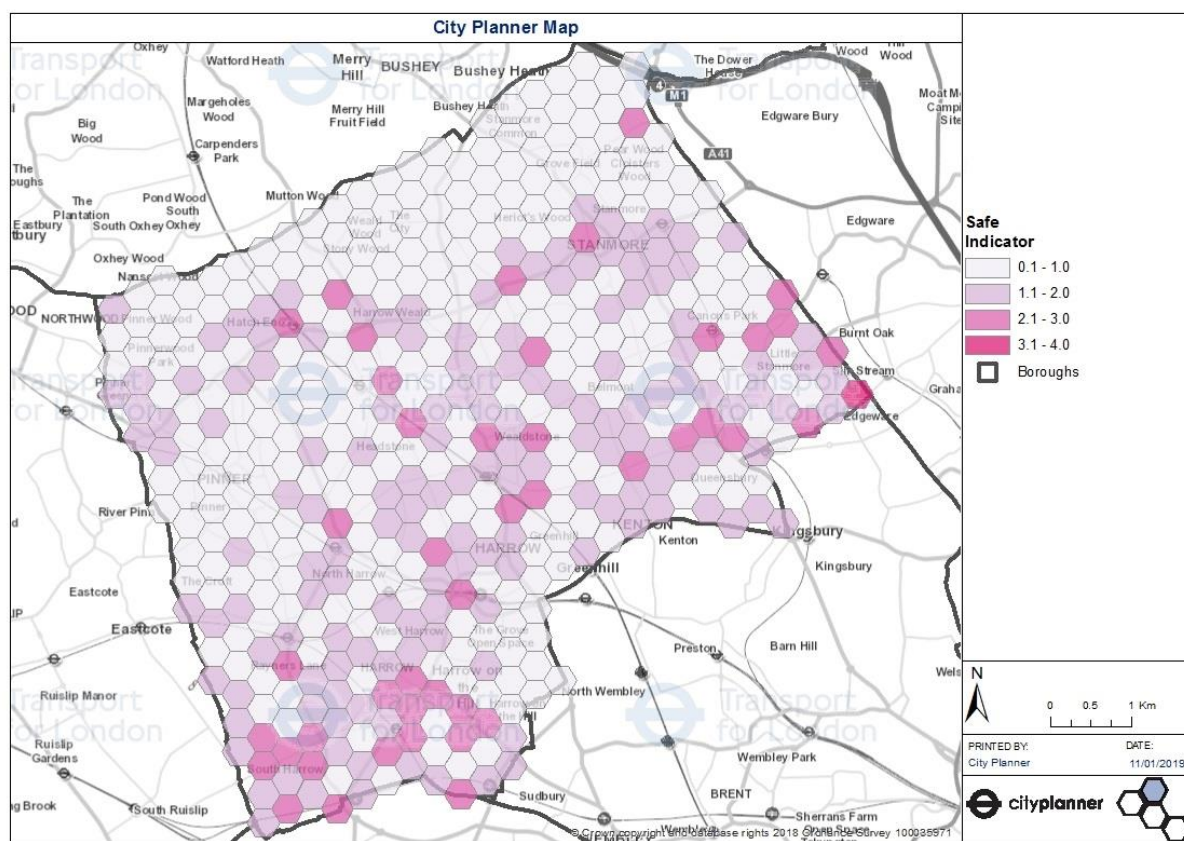
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use 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

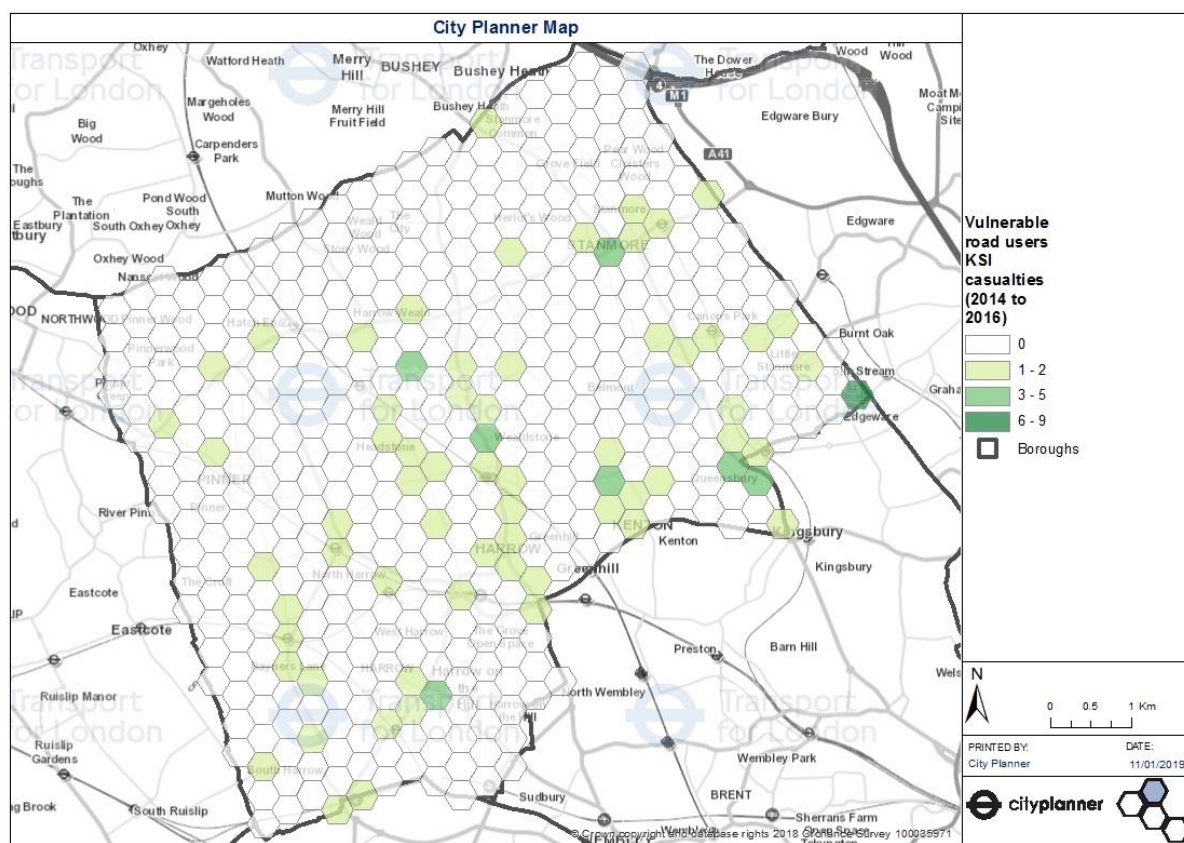
2.5.38 Figure 19 provides a summary of TfL City Planner safety information in the borough. A higher score represents a higher relative priority location. This was developed using a combination of scored All modes total casualties (2014 to 2016) and Street Crime Rate (2014-15).

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.

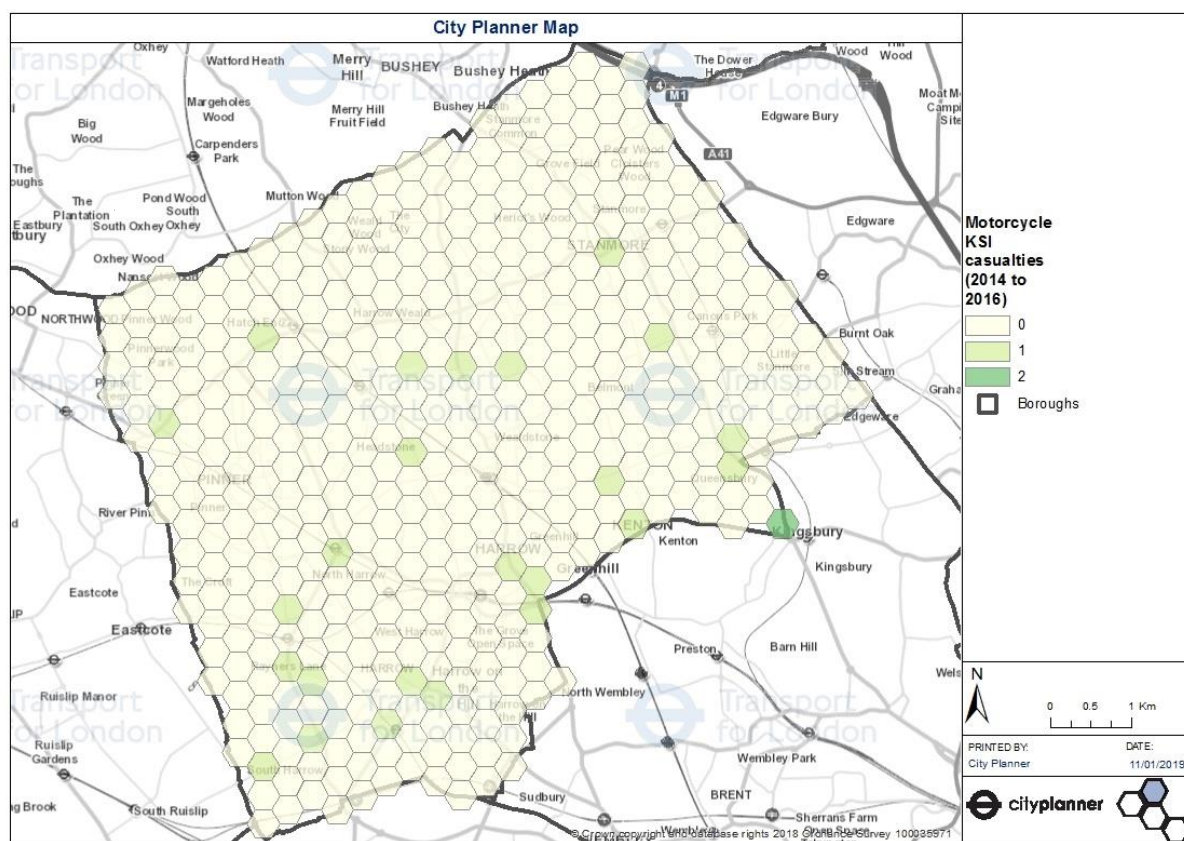
Figure 20: City Planner vulnerable road users KSI casualties 2014-2016



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

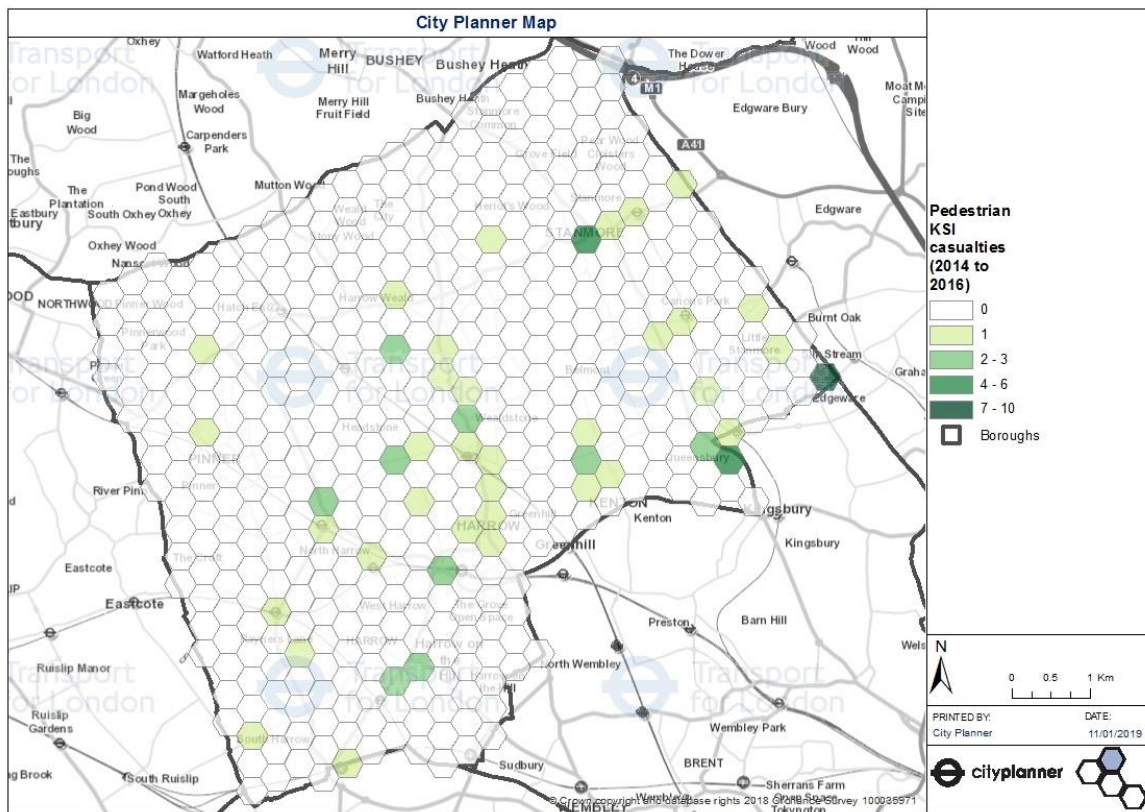
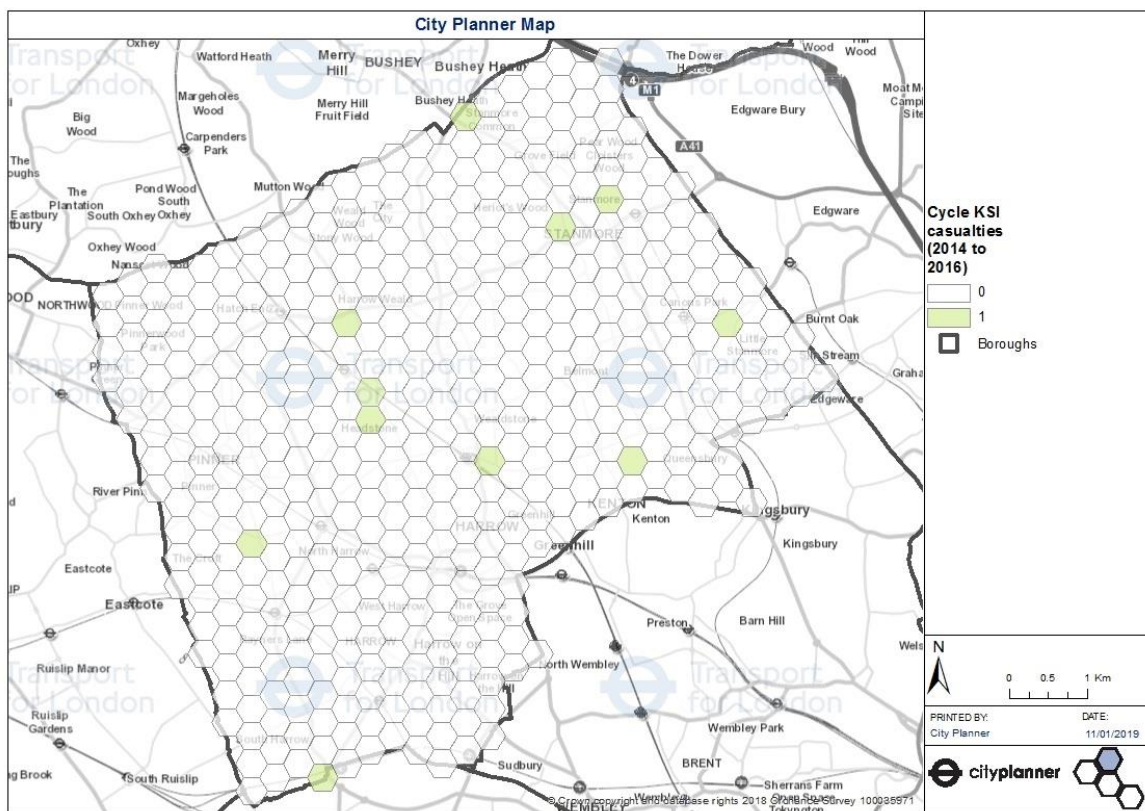


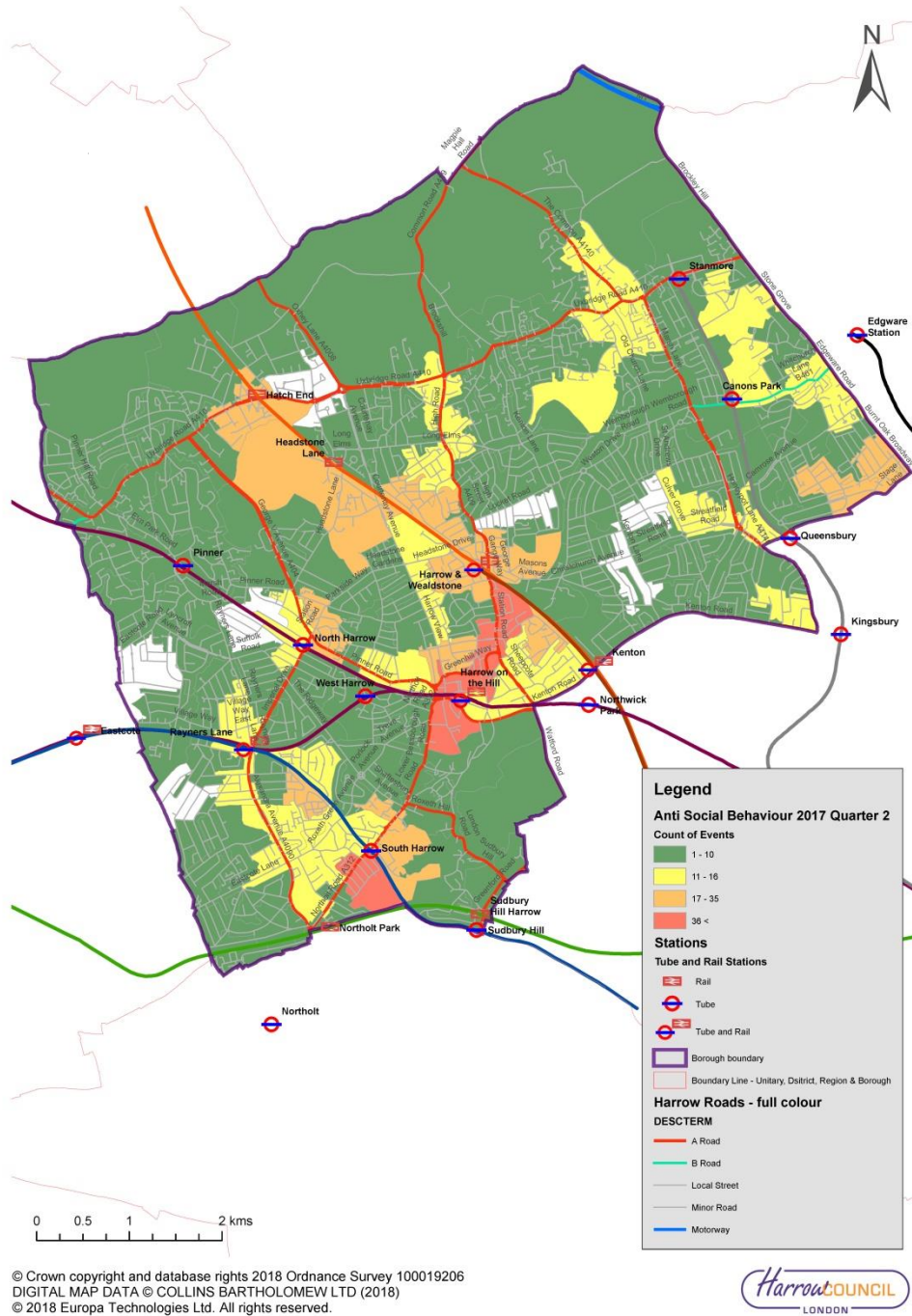
Figure 23: Cycle KSI casualties 2014-2016



- 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



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

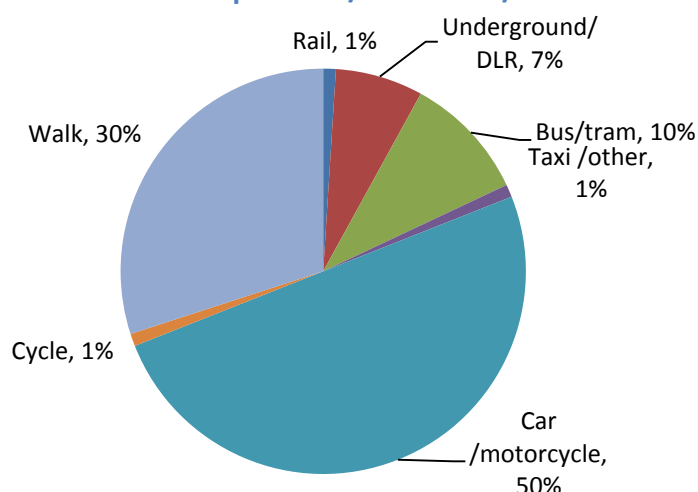
Challenges and opportunities

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

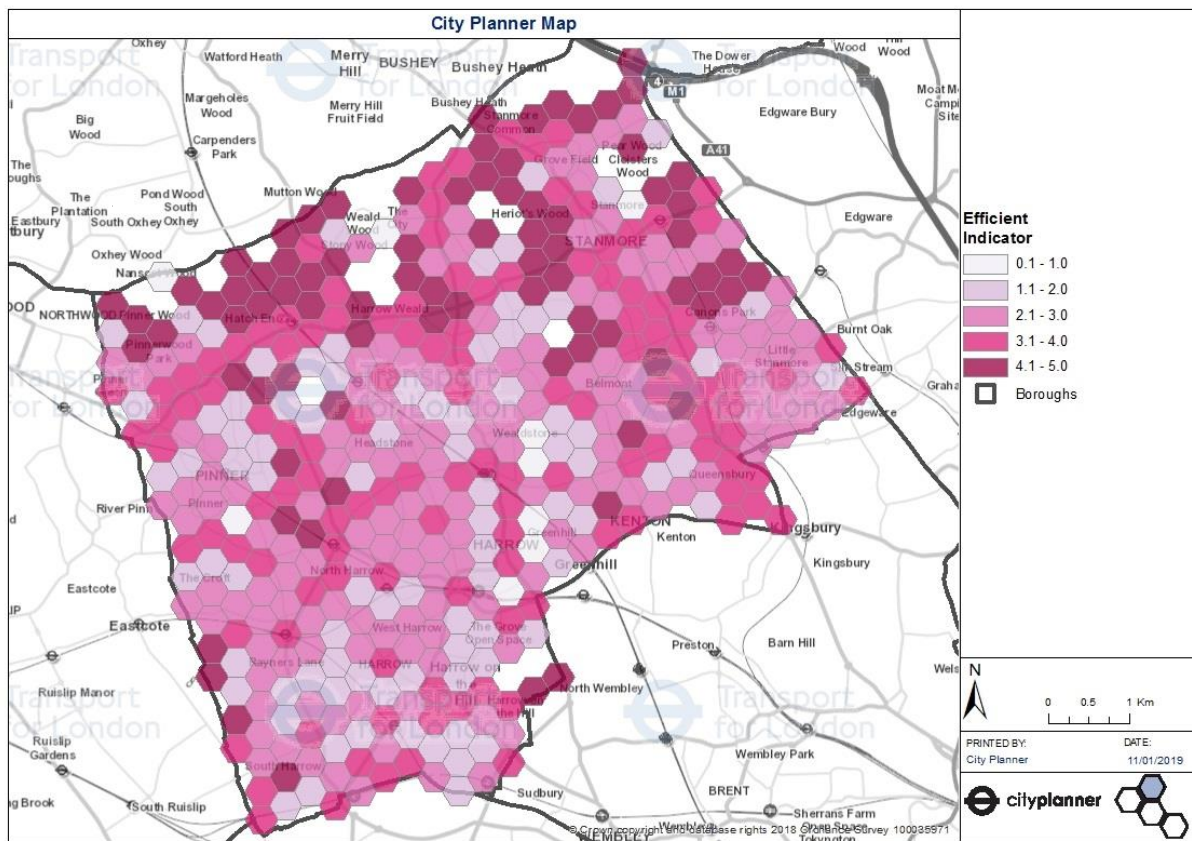
2.5.59 The most congested roads in Harrow are the A409, Marsh Lane/London Road/Stanmore Broadway in Stanmore, Marsh Road, Imperial Drive and Northolt Road. In all these locations, congestion issues will be addressed through managing the network performance and encouraging sustainable travel choices. 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

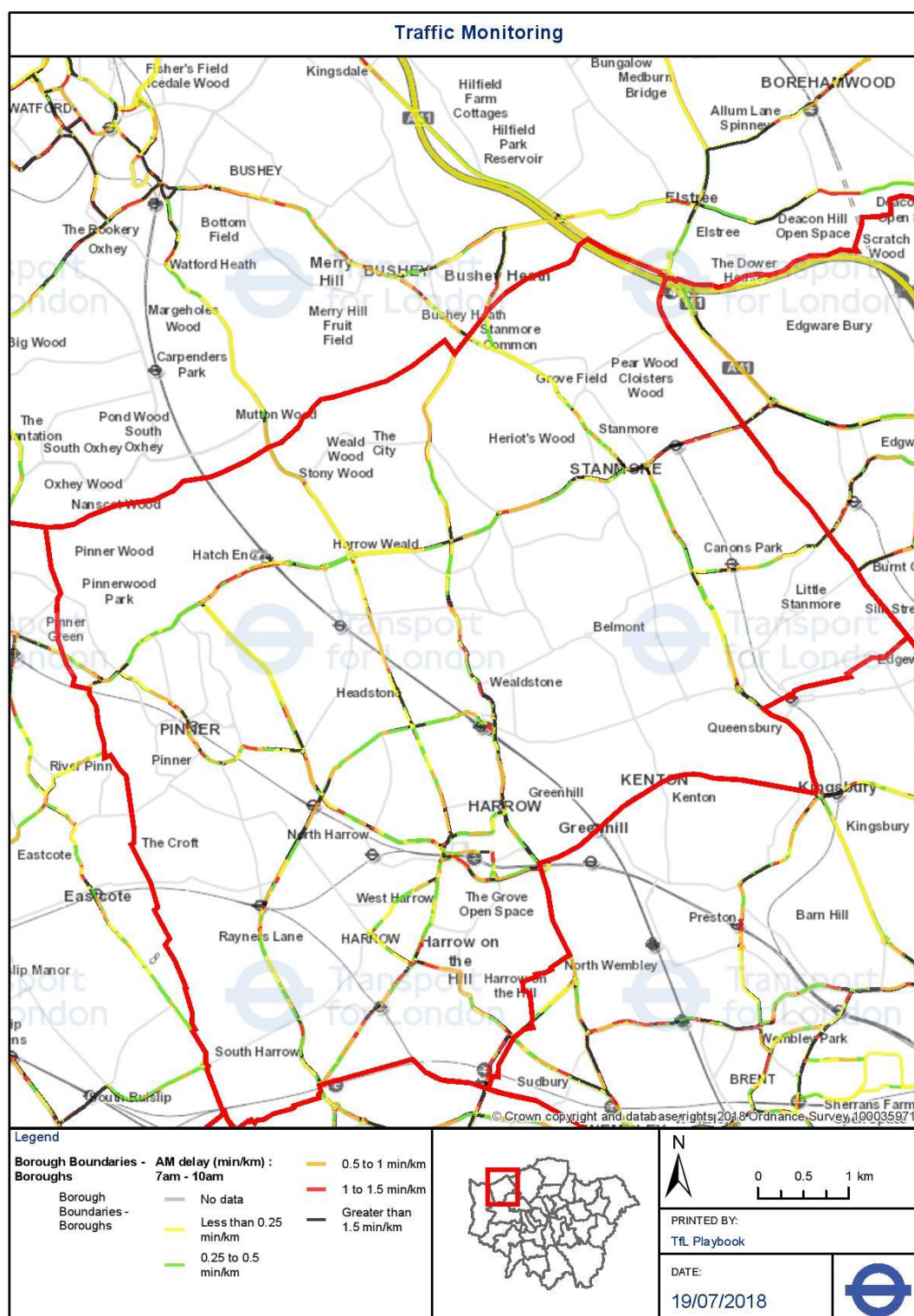
- 2.5.65 Badly managed parking regulations can result in inefficient road use and as mentioned can also result in increased congestion and drivers wasting journeys looking for parking spaces or places to park or load. There is also an economic impact of poorly managed parking with time wasted by delivery 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 (µg/m³, 2020) and PM₁₀ levels (µg/m³, 2020).

Figure 28: NO₂ emissions, 2013

Focus Areas LAEI 2013 in Harrow

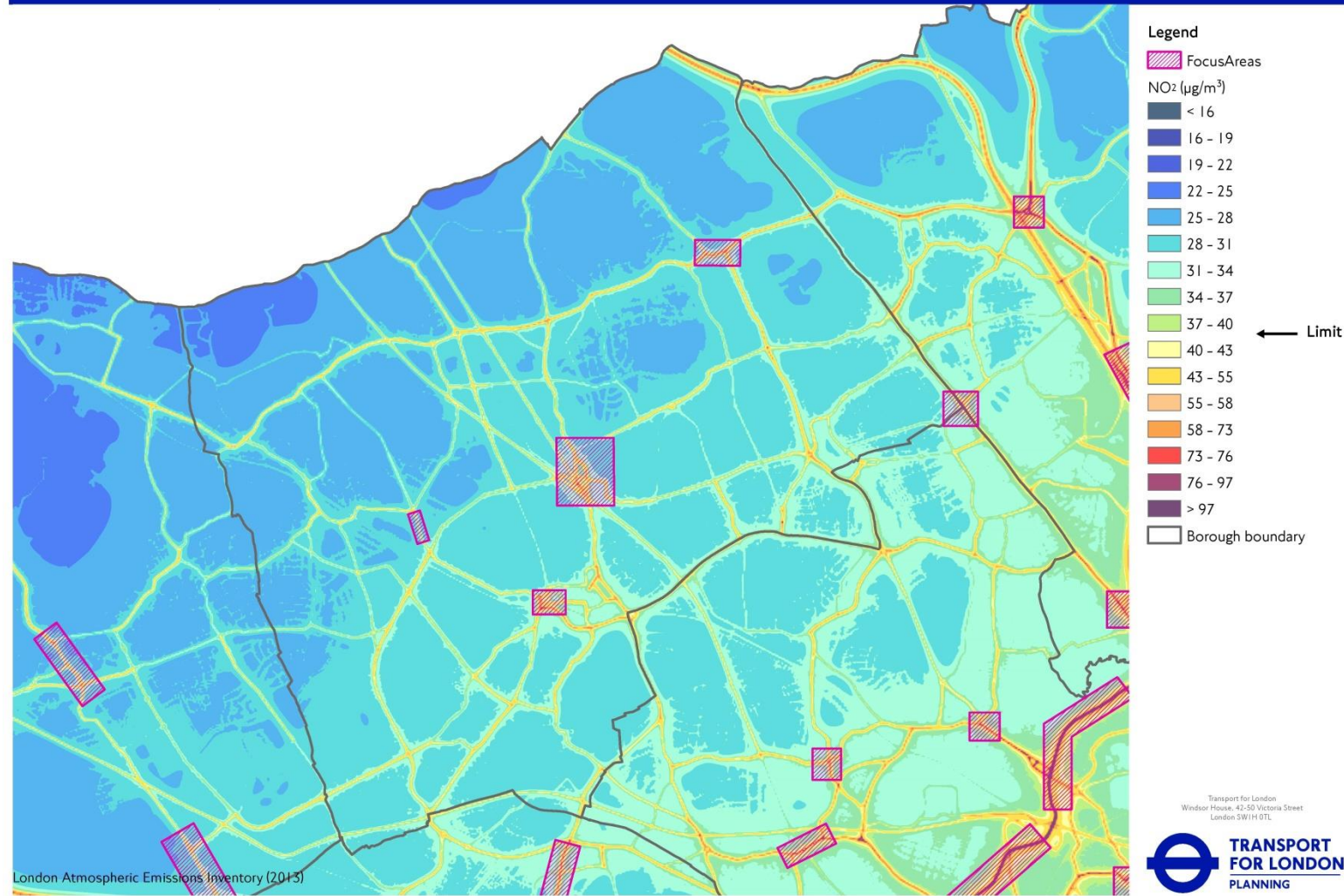
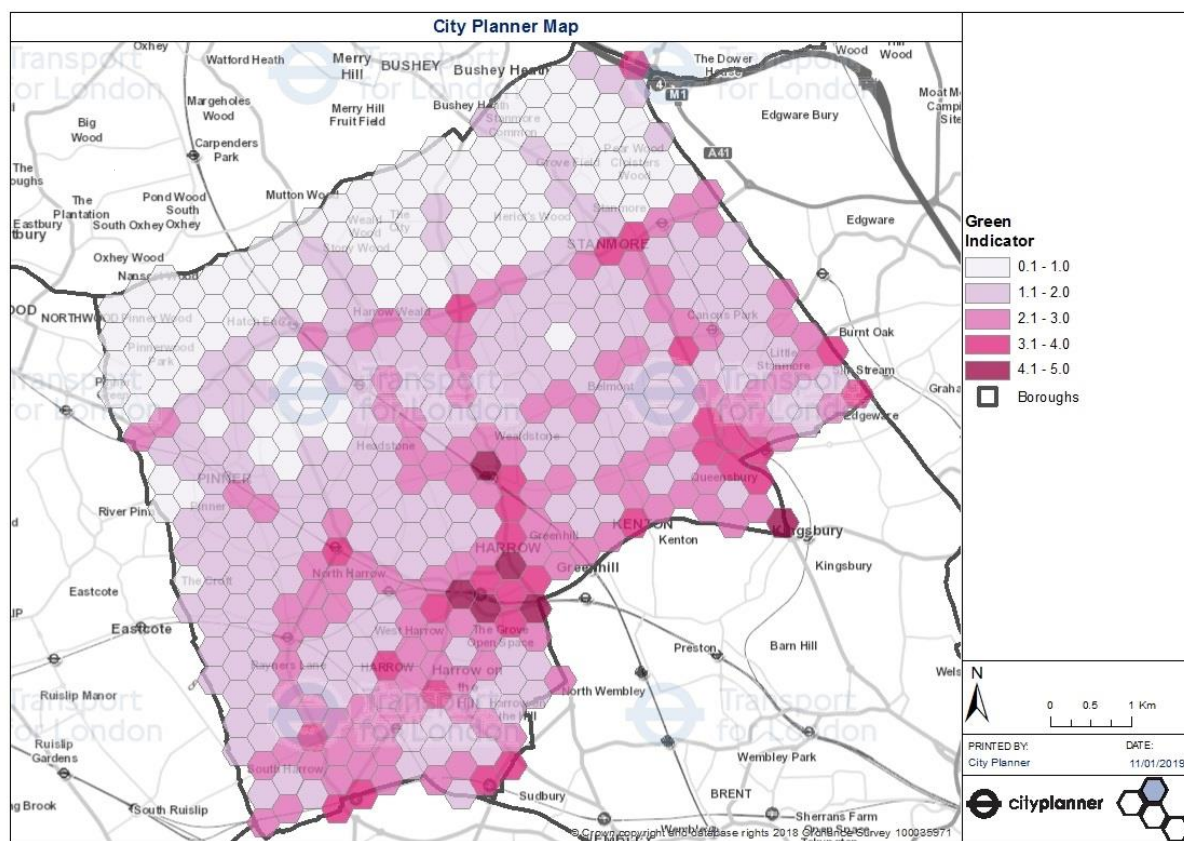


Figure 29: City Planner green indicator summary



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

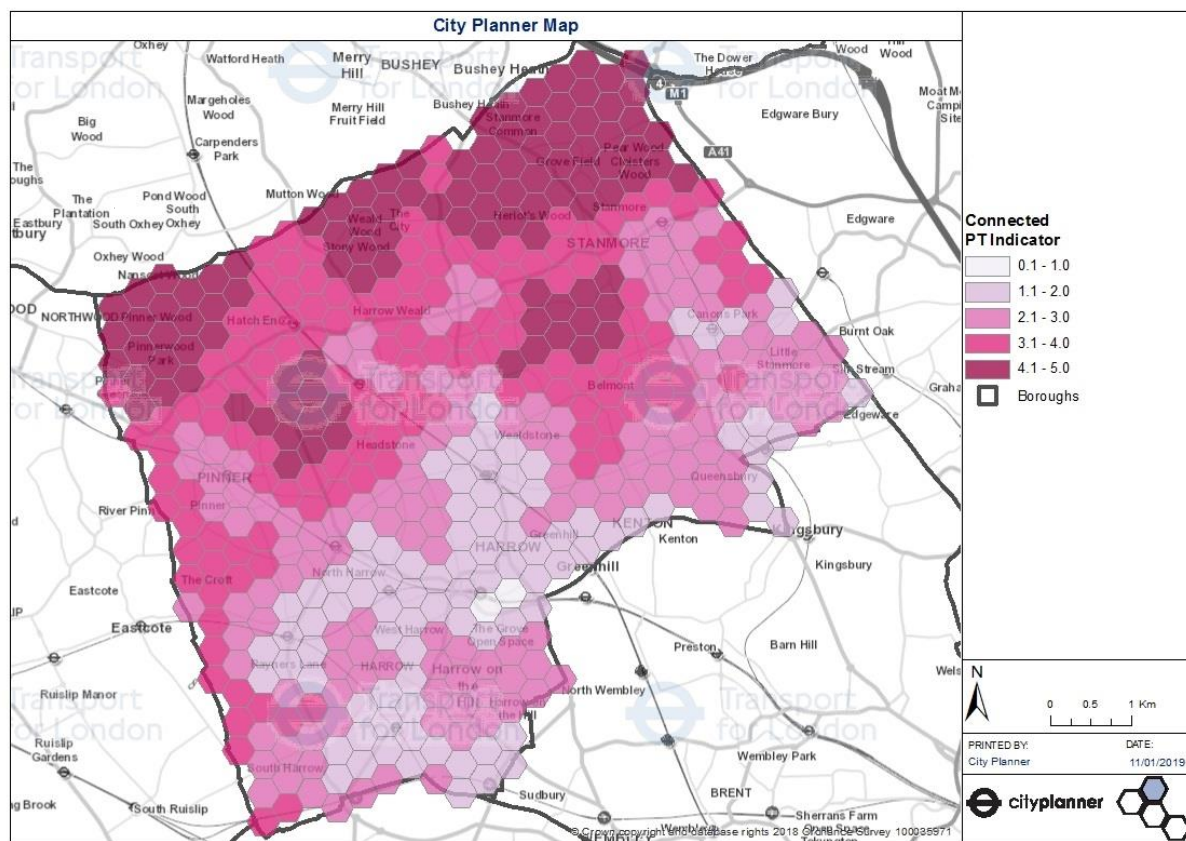
3. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use 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:

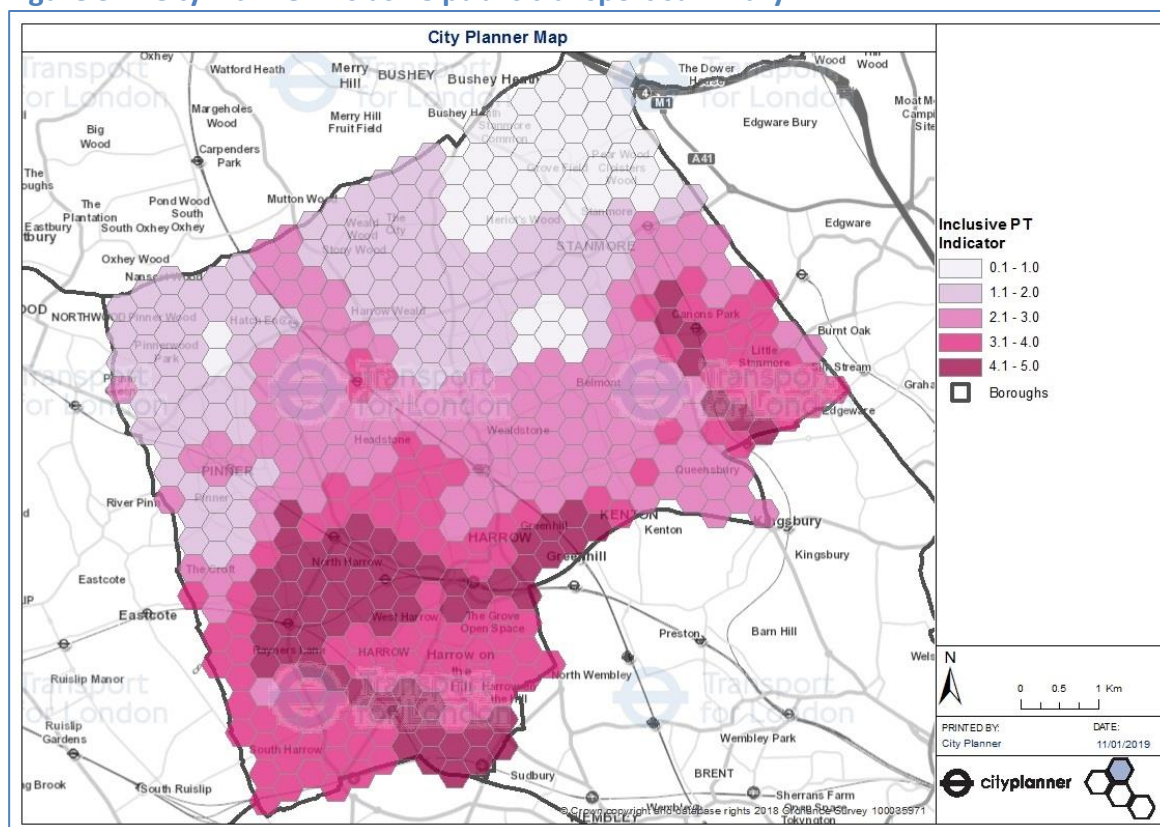
5. Encourage the uptake of more sustainable modes of travel including travel for those with mobility difficulties and dissuade use of private cars through active travel initiatives, delivering additional healthy routes to school, promotion of cycle hire schemes, the use of parking and permit policies 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:

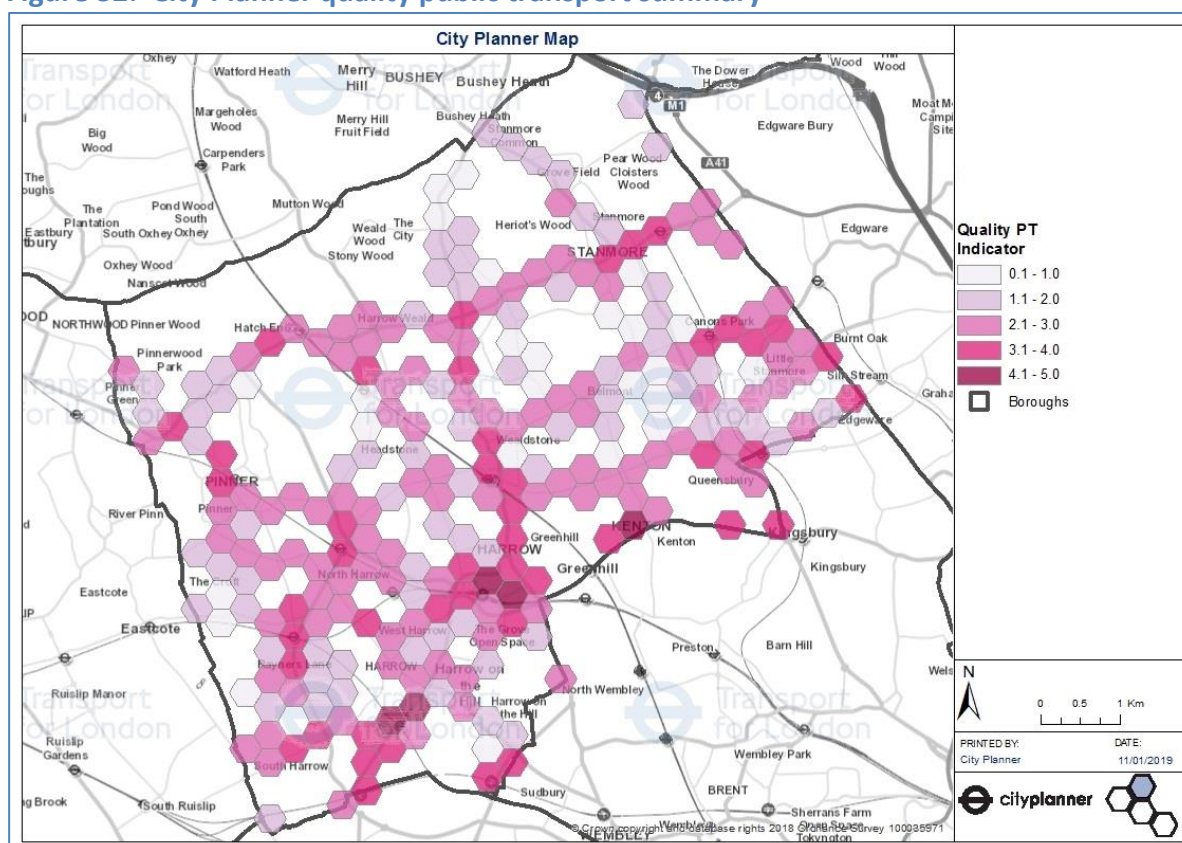
2. Adopt a Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041 and focus on reducing the number of motorcycle casualties across the borough
10. Improve public transport accessibility, support the expansion of bus and rail services throughout Harrow and in particular, 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

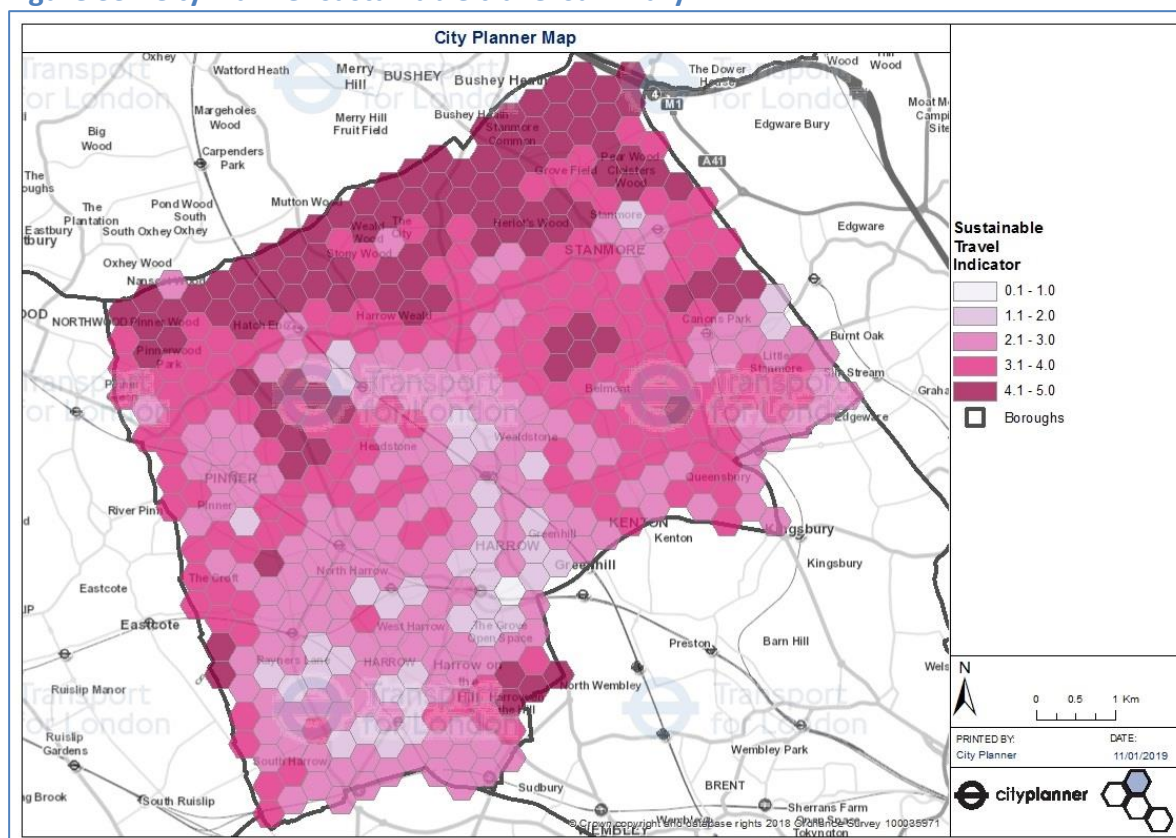
Outcome 8: Active, efficient and sustainable travel will be the best option in new developments

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

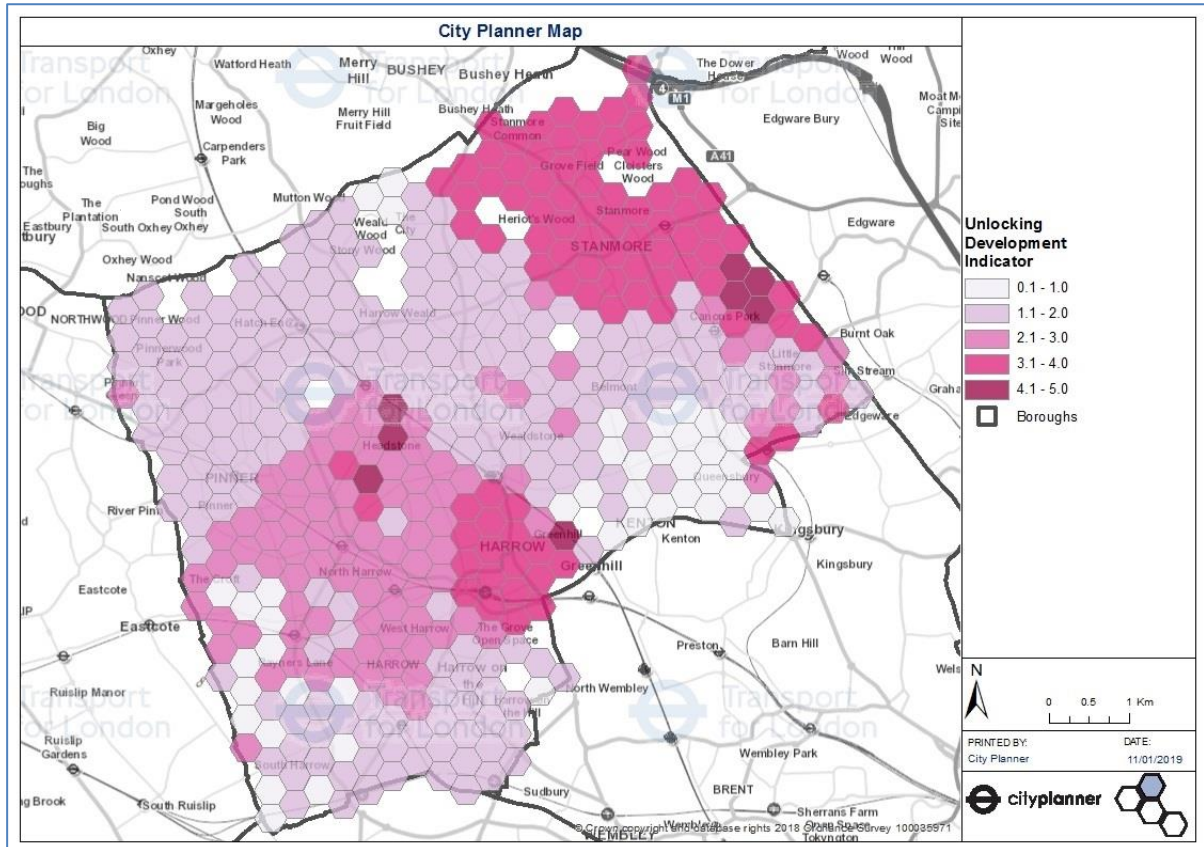
2.5.124 London faces significant projected population growth (70,000 every year), reaching 10.5 million in 2041. This means that just to meet demand, at least 66,000¹² new homes need to be built in London every single year. In Harrow, the borough needs to build 13,920 new homes by 2028/29.

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

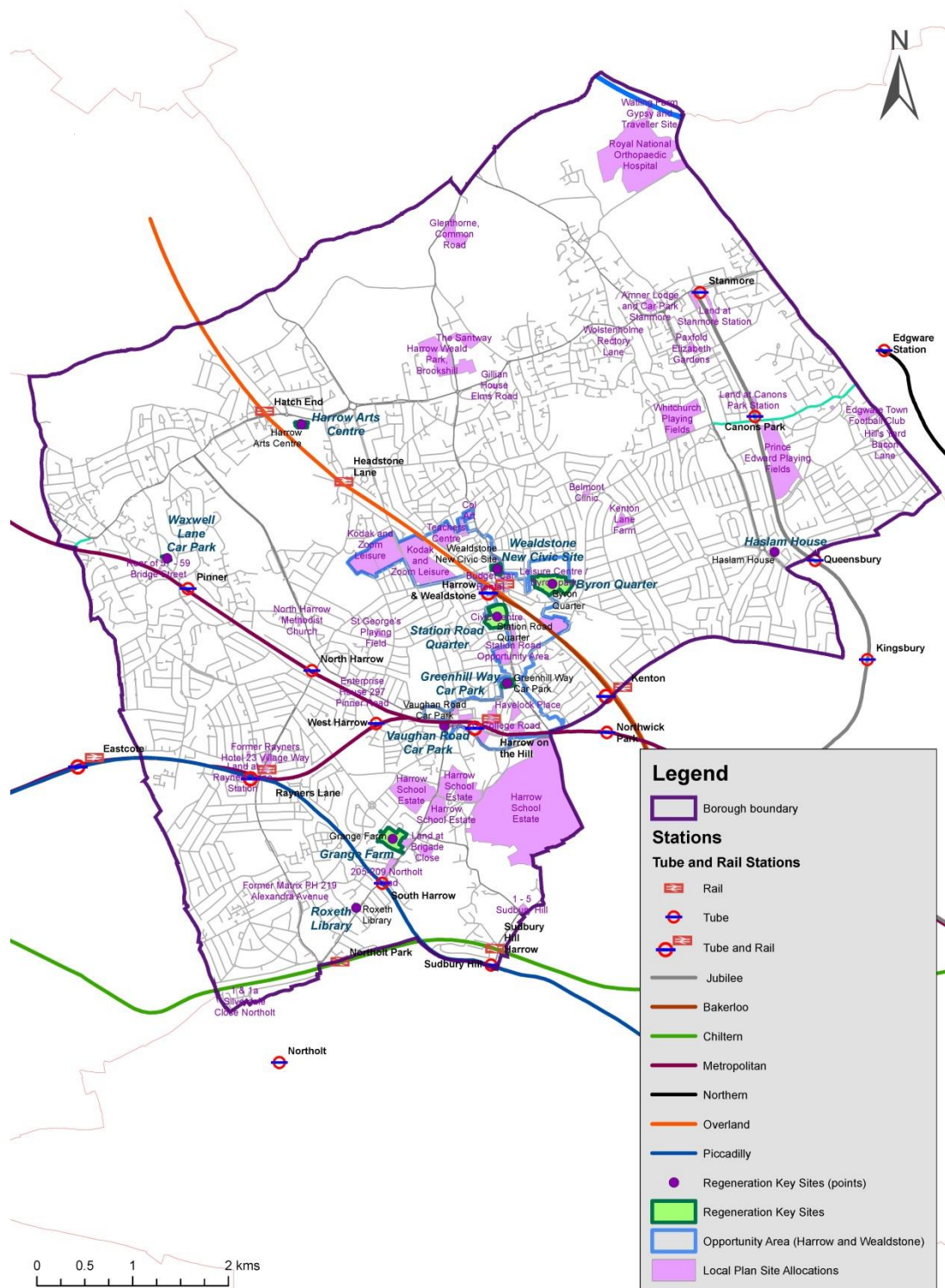


2.5.127 Bus routes throughout the borough may need to be extended to ensure that the growth in population doesn't result in a disproportionate and unsustainable growth in car use. Good bus services as well as walking and cycling facilities are all vital to unlocking the delivery of new homes and jobs 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



© Crown copyright and database rights 2018 Ordnance Survey 100019206
 DIGITAL MAP DATA © COLLINS BARTHOLOMEW LTD (2018)
 © 2018 Europa Technologies Ltd. All rights reserved.



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
The Mayor's Transport Strategy And Local Implementation Plan guidance	<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>
Draft London Plan, Spatial Development Strategy for Greater London	<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>
London Environment Strategy	<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	Nos 8 & 9 Sustainable Growth/Unlocking
	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

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

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.

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
 - 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
- 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

**Strategic Environmental
Assessment Statement
for
Harrow
Transport Local Implementation Plan
2019/20 – 2021/22**

CONTENTS

1. Introduction	5
2. The SEA process	7
3. Environmental changes made as a result of consultation	10
4. Alternative options and their significance	11
5. Environmental benefits from LIP3	13
6. Monitoring the environmental impact	14
7. Conclusion	16
Appendix A	17

Tables

Table 1: Contents, purpose and timetable for SEA reports	6
Table 2: SEA process and timetable	7
Table 3: Environmental changes made to the SEA following scoping report consultation	10
Table 4: Changes made to LIP3 following scoping report consultation	11
Table 5: Measures for monitoring environmental impact of LIP3	14
Table 6: Reporting of environmental impact of LIP3	15

1. Introduction

- 1.1 This Strategic Environmental Assessment (SEA) statement is being produced to accompany the London Borough of Harrow's third Transport Local Implementation Plan 2019/20 – 2021/22 (LIP3).
- 1.2 The following reports provide the background to this statement:
 - LIP3 Strategic Environmental Assessment scoping report
 - LIP3 Environment Report
 - Draft Harrow Transport LIP3
 - Adopted and final Transport LIP3
- 1.3 The *Local Implementation Plan* is a statutory document required by the Mayor of London. All boroughs are required to produce a Local Implementation Plan which demonstrates how each borough is implementing the Mayor of London's Transport strategy. In line with the regulations, LIP3 sets out all of the following:
 - Harrow transport objectives
 - Harrow transport policies
 - Initial three-year programme of investment to be delivered over 2019/20 – 2021/22
 - How Harrow will work to deliver each of the Mayoral outcomes
 - How Harrow will work towards achieving the MTS priorities which are:
 - Healthy Streets and healthy people
 - A good public transport experience
 - New homes and jobs
- 1.4 statement.
- 1.5 This statement is being produced to show the reasons for the decisions made in the final transport LIP3 and thereby making this process more transparent.
- 1.6 The entire SEA process has ensured transparency in the environmental decisions made as well as ensuring that the full environmental impact of all options have been considered during the development of LIP3 and not just considered as an afterthought.

- 1.7 Table 1 shows the reports that have been prepared in advance of preparing this environmental statement.
- 1.8 This statement is being produced to show the reasons for the decisions made in the final transport LIP3 and thereby making this process more transparent.
- 1.9 The entire SEA process has ensured transparency in the environmental decisions made as well as ensuring that the full environmental impact of all options have been considered during the development of LIP3 and not just considered as an afterthought.

Table 1: Contents, purpose and timetable for SEA reports

Report	Purpose	Contents
LIP3 SEA screening	To determine whether or not the LIP3 required a Strategic Environmental Assessment (SEA) in accordance with the European Directive 2001/42/EC and associated Environmental Assessment of Plans and Programmes Regulations 2004.	Description of geographical area, borough environmental issues and LIP3 possible environmental impacts and extent of impacts and environmental links with draft LIP3 objectives.
LIP3 SEA scoping	To ensure that the issues referred to in the SEA regulations as the 'significant environmental effects' are identified. The report sets out the context and objectives, establishes an environmental baseline and the scope of the assessment including consideration of alternative ways to deliver LIP3.	Reviews links with other plans and programmes relevant to producing LIP3, further identifies local environmental issues, identifies draft SEA environmental objectives, identifies baseline environmental data sources for objectives, tests links between LIP3 draft objectives and the SEA objectives and considers alternative objectives for delivering LIP3.
LIP3 SEA environmental report	Enables improved and effective consultation on the environmental components of LIP3. This also illustrated compliance with the SEA regulations.	Includes non-technical summary of the environmental report, considers environmental impact of not delivering LIP3, environmental impact of not receiving additional TfL funding, improves the baseline data identified in the scoping report, includes baseline data, considers and assesses alternative ways to deliver LIP3 draft objectives, assesses the significance of a selection of alternative ways to deliver LIP3 on population and human health and on air quality and the cumulative effects of the plan and also summaries changes made following scoping consultation.

2. The SEA process

- 2.1 The SEA has been designed to promote the consideration of environmental issues into every stage of the decision making processes. The SEA is an iterative process, thereby influencing and informing each stage of LIP3 development. In this instance, this was easily enabled because both the SEA and LIP3 documents were managed, prepared and overseen by the same people.
- 2.2 Table 2 shows the stages of the SEA process and timetable.

Table 2: SEA process and timetable

Process	Sent to:	Consultation Dates
SEA Scoping report The scoping report for the SEA for LIP3 was started at the same time as LIP3.	Statutory environmental consultees and all local environmental and heritage groups	6th July 2018 and 10th August 2018.
SEA Environmental Report Consultation took place alongside draft LIP3 consultation	Statutory environmental consultees and local environmental and heritage groups as well as transport consultees	17th September to 26th October 2018
SEA statement	Published on website	May 2019

- 2.3 Consultation on the draft LIP3 and the SEA Environmental Report took place together.
- 2.4 Statutory Consultees for the SEA were:
- The Environmental Agency
 - Natural England
 - Historic England
- 2.5 Other environmental groups consulted on the scoping report were as follows:
- 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

- 2.6 The results from the LIP3 scoping consultation were fed into the next stage of LIP3 and also into the environmental report and appropriate changes were made to various sections of both documents.
- 2.7 Consultation on the draft LIP3 was carried out using the Harrow consultation portal. This consultation included the SEA Environmental Report. Invites to participate were sent to the following organisations:

Government / statutory bodies

- Transport for London
- WestTrans
- Metropolitan Police Service
- London Borough of Hillingdon
- London Borough of Barnet
- London Borough of Brent
- London Borough of Ealing
- Three Rivers District Council
- Hertsmere Borough Council
- Hertfordshire County Council

Environmental organisations

- Historic England
- The Environment Agency
- Natural England
- 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

User groups and organisations

- Harrow Association of Disabled People
- Harrow Public Transport Users Association
- Voluntary Action Harrow
- London Travel Watch
- Freight Transport Association
- Harrow Cyclists
- The RAC
- The AA
- Road Haulage Association
- Brent and Harrow chamber of commerce
- Living Streets
- London cycling campaign
- London First
- London Taxi Drivers Association

- Sustrans
- Harrow BID
- Shopmobility
- British Motorcycle Federation
- Motorcycle Action Group
- ROSPA

Internal to Harrow Council

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

- 2.8 Because the main focus of LIP3 is to implement the Mayor's Transport Strategy, which itself has undergone a SEA and as a result of previous LIP documents, minimal environmental effects were identified in preparing the SEA.
- 2.9 The environmental report showed that there would be no significant adverse effects from introducing LIP3. It also showed that there were likely to be positive impacts on air quality and on human health and population.

3. Environmental changes made as a result of consultation

- 3.1 Because both of Harrow's previous LIPs had undergone an SEA and both of these significantly influenced the development of LIP3, there were less significant changes to be made to LIP3.
- 3.2 Table 4 shows the environmental changes made to the SEA following the scoping report consultation.

Table 3: Environmental changes made to the SEA following scoping report consultation

Organisation	Comment / Change recommended	Change made in response / Officer response
The Environmental Agency	No comment	
Natural England	No comment	
Historic England	Suggested monitoring impact on historic environment	Added objective to address impact on the historic environment
TfL	Add information about recycling	Added to SEA objective: Promote recycling by encouraging responsible sourcing of materials as well as BES 6001 accreditation for appropriate suppliers
Harrow Nature Conservation Forum	Stress the importance of protecting local green spaces from development. Cycling should be supported for all the reasons outlined in the report.	Added the following from Harrow's core strategy: Protect the Green Belt, Metropolitan Open Land, and Areas of Special Character And also added overarching policy objectives include: 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
Internal Harrow consultation	Not possible to measure m ² of increased grass verge and suggested an alternative	Changed to Square meterage of removed hard paving to introduce soft landscaping such as grass verges

3.3 Table 4 shows the environmental changes made to LIP3 following the LIP3 and scoping report consultation.

Table 4: Changes made to LIP3 following scoping report consultation

Organisation	Comment / Change recommended	Change made in response / Officer response
The Environmental Agency	No comment	No comment
Natural England	Does not consider that the plan poses any likely risk or opportunity in relation to statutory purpose, and so does not wish to comment on this consultation.	No change
Historic England	Advise that all proposals take into account their impact on heritage assets and archaeological potential. Importance in considering the environmental issues relating to pollution and emissions on those experiencing the historic environment, particularly the increase in environmental aggressors deriving from emissions.	New policy added: 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. Included information on damage to enjoyment from emissions.
Other	Encourage more cycling, more modal shift, provide more cycle parking, do more to reduce road casualties, consider reallocation of road space, consider noise more, consider other types of freight delivery services	Included all these changes.

3.4 **Error! Reference source not found.** provides more information on consultation responses to the final LIP3 which contain an environmental aspect.

4. Alternative options and their significance

4.1 The significance of alternatives options was considered for all environmental aspects. However, because the impact of alternative options was considered not to be significant for

Biodiversity, flora and fauna, Water, Soil, Climate factors, Material assets, Cultural heritage and Landscape, only Population and Human Health and Air Quality were assessed further regarding their significance.

4.2 Alternative options were therefore considered in the environmental report for their impact on population and human health and on air quality. The alternative options considered were:

- Continue with the current approach and continue to deliver the current policy outlined in LIP2
- Only promote sustainable forms of transport
- Only deliver infrastructure management
- Only increase capacity for sustainable forms of transport
- Do nothing

4.2.1 Only promoting sustainable forms of transport includes:

- Increase cycle training
- Increase school road safety training
- Increased motorcycle safety training
- Increase school travel awareness training
- Provide dockless cycle hire facilities

4.2.2 Only delivering infrastructure management includes:

- Extend and increase 20mph zones around schools
- More neighbourhoods of the future
- More liveable neighbourhoods
- Increased healthy streets
- Provide additional freight loading facilities
- Increase hours for freight loading
- Bus stop accessibility improvements
- Bus priority measures
- Extend borough cycle routes
- Increase cycle parking facilities
- Controlled parking zones
- Improved lighting
- Extend Shopmobility facilities
- Increased blue badge parking
- More dropped kerbs
- Legible London

4.2.3 Only increasing capacity for sustainable forms of transport includes:

- Extend borough cycle routes
- Increase cycle parking facilities
- Increase bus priority measures
- Increase provision of electric vehicle charging points
- Increased cycle facilities in developments
- Electric vehicle charging in developments
- Shared vehicle charging for developments

- 4.3 The cost of cars, fuel, air flights, healthy food, air flight paths, the cleanliness of water supplies, the local doctor and hospital facilities, how close we live to main roads, our working location and environment also greatly affect all of our health as well as our surrounding air quality and will most likely have a greater impact on all individuals than the programmes included in LIP3. However small changes particularly around schools and for children can make long term improvements.
- 4.4 It is a requirement of the SEA regulations to evaluate the cumulative effects of the plan and thereby to enable them to be avoided or at least minimised. Many of the proposals in LIP3 have a number of inter-related environmental effects.
- 4.5 All schemes which improve road safety such as 20mph extensions improve human health by reducing accident levels. At such locations, more people tend to walk and cycle more thereby also improving human health. As speeds slow down and drivers' journeys are smoother, less pollutants are emitted and noise and community severance is reduced. As people walk and cycle more, their health improves through a reduced risk of obesity and diabetes and improvements to their overall fitness levels.
- 4.6 Slower traffic speeds across the network improve human health as accident numbers reduce. However, where congestion is associated with the slower traffic, air pollution can increase as can community severance. Areas with low traffic volumes can also act as an inducement to increased traffic levels thereby increasing air pollution.
- 4.7 Increasing awareness of biodiversity, fauna and flora tends to increase how much people care about the issue. However large visitor numbers can also destroy such environments and therefore increasing visitor numbers needs to be managed carefully. In addition, when schemes are introduced, materials used need to be sensitive to the environment and can provide greater protection for some species.
- 4.8 All impacts of climate change are likely to be cumulative and permanent and are considerably impacted by traffic levels.
- 4.9 During all works implemented as a result of LIP3 the environment is considered during all stages. This is monitored through Harrow's Environmental Management System. Where necessary, materials will be changed and schemes revised to minimise the cumulative environmental impact.
- 4.10 From completing the SEA, it was determined that there are no significant adverse effects from the proposals outlined in LIP3.
- 4.11 The option selected for implementation in LIP3 was influenced by the analysis in the Environmental Report and the results of the consultation. However, the major influence on the final option selected was the obligation to implement the Mayor's Transport Strategy and the financial constraints which limit borough choices. The final option to be implemented will be a combination of all of the alternatives considered with the exception of the Do Nothing option.

5. Environmental benefits from LIP3

- 5.1 The findings of the Environmental Report are that no significant environmental impacts resulting from implementation of LIP3. The greatest environmental benefits resulting from implementing the initiatives in LIP3 will be on human health and air quality, however these

impacts although positive are also not significant. These issues are both more affected by issues beyond the control of the council.

- 5.2 The likely environmental benefits as a result of implementing LIP3 will be as follows:
- Increased trees planted as part of various schemes
 - Location specific improvements to air quality
 - Less car pollution as cars get cleaner and as a result of incentives to use greener vehicles particularly electric vehicles
 - Reduced road casualties
 - Better life expectancy as a result of less air pollution and more active travel
 - Increase in cycling – particularly cycling to school
 - Modal shift away from motorised vehicles towards walking and cycling improving local air quality
 - Healthier lifestyles from increased walking and cycling
 - Reduced congestion at specific locations – partly also as a result of economic issues
 - Less traffic dominance improving air quality
 - Reduced CO2 emissions from modal shift
 - Improved condition of material assets where schemes take place
 - Some areas regenerated
 - In some areas reduced pollution will cause less damage to heritage buildings

6. Monitoring the environmental impact

- 6.1 To ensure that the council takes full consideration of unforeseen changes as a result of implementing LIP3, the council will monitor the impacts on human health and air quality.
- 6.2 Programmes that impact on human health include all those that encourage walking, cycling, reduce accidents, increase road safety and improve air quality either through modal shift or using greener vehicles. This is the vast majority of programmes included in LIP3.
- 6.3 Programmes that impact on air quality include all those that reduce congestion, encourage use of sustainable transport, modal shift and encourage change of vehicle type to greener vehicles. This is also the vast majority of programmes included in LIP3.
- 6.4 Table 5 shows possible measures for monitoring impacts on air quality and human health:

Table 5: Measures for monitoring environmental impact of LIP3

SEA Issue	LIP3 environmental impact	Existing possible measures for monitoring
Air Quality	<ol style="list-style-type: none"> 1. Less traffic 2. Less school run traffic 3. Modal shift towards cycling 4. Increased use of <i>greener</i> vehicles 5. Reduced vehicle idling 	<ol style="list-style-type: none"> 1. Not easily measurable 2. Results of school hands up survey for car use 3. Cycle counters introduced across the borough 4. Number of <i>greener</i> vehicle parking permits issued and use of new electric charging infrastructure 5. Anti-idling campaigns

Population and Human Health	<ol style="list-style-type: none"> 1. Less road accidents 2. Increased school travel plans 3. Participation in Harrow Health Walks 4. Reduced level of diabetes and depression 5. Less respiratory illness as a result of better air quality 	<ol style="list-style-type: none"> 1. Measured by police through STATS19 2. Number of accredited school travel plans 3. Numbers participating in Harrow Health Walks 4. Impact will be over a longer time period 5. Impact will be over a longer time period
-----------------------------	---	---

6.5 Based on the information in Table 5 and on the available resources for measuring the environmental impact of LIP3, it is recommended that the following monitoring takes place:

For air quality: Results of school hands up survey for car use and cycle count data
For population and human health: Total KSIs on Harrow roads, number of accredited school travel plans

6.6 The environmental impact of introducing LIP3 will be significantly influenced by many other issues and these other issues are likely to be greater than the impact of LIP3. These wider issues include the following:

- Impact of Brexit
- Possible impact of no deal Brexit
- State of the economy and employment levels
- Changing attitudes to car ownership
- National investment in public infrastructure and in particular rail infrastructure

6.7 The environmental data will be reported as shown in Table 6.

Table 6: Reporting of environmental impact of LIP3

Measure	Unit	Data Source	Frequency of reporting
School hands up survey	% of children using sustainable transport to get to school	School travel plan officer	Annual
Cycle count data	Total average daily cyclists passing all Council cycle counters	Traffic engineering	Annual
Total KSIs	Number of people killed and seriously injured on Harrow roads	STATS19	Annual – to be reviewed annually but reported on a 3 yearly basis
School STARS accreditation	Number of silver, bronze and gold accredited travel plans	School travel plan officer	Annual

6.8 The monitoring information for the environmental impact will be publicly available on request only.

7. Conclusion

- 7.1 The evidence base generated from the previous SEAs prepared for previous Harrow LIPs greatly helped the production of this SEA and statement for LIP3. It is likely that future SEAs in transport will also benefit from this.

Appendix A

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
Air quality related		
Suggest rewrite to: Improve freight servicing and delivery arrangements to reduce congestion and delays on the network, including encouraging consolidation centres and last-mile cargo-cycle or walking delivery of small orders, by limiting motor vehicle access to minor streets and pedestrianised areas.	Improve freight servicing and delivery arrangements to reduce congestion and delays on the network.	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.
Population and human health related		
Policies should enable and encourage walking and cycling amongst disabled people, by providing wide, uncluttered footways, places to stop and sit, convenient and safe pedestrian crossings, parking for tricycles and other non-standard bikes, and a good quality cycling network.	Encourage the uptake of more sustainable modes of travel 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.	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.

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
Borough should introduce street play time - after school where children can go out and play with friends without the risk of any cars driving by - this will prevent them sitting in front of the TV as an alternative.	As 'Liveable Neighbourhoods' and healthy streets are introduced, increased planting and street greening will be introduced and issues of severance caused by high traffic flow will be addressed.	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.
Encourage BAME members to cycle more	Not previously included	Introduce measures and programmes to encourage persons from BAME and other statistically cycling adverse groups to take up cycling and to cycle more often
Suggest rewriting as "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	Prioritise in all new schemes the needs of those with mobility difficulties who need to drive to work, shops or other facilities	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
Educate motorised road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist skills training and communications.	Educate road users on the shared responsibility for safer motorcycle journeys, through driver and motorcyclist skills training and communications	Educate road users on the shared responsibility for safer cycle and motorcycle journeys, through driver and motorcyclist/ cyclist skills training and communications

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
Would like to see improving road safety for horse riders	Ensure that the safety concerns of all road users are considered in traffic schemes	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
Encourage the uptake of cargo bikes and electric bikes to replace van journeys. Add a policy of supporting businesses in switching from vans to cargo bikes.	Encourage modal shift towards more sustainable forms of transport	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
No mention of noise pollution, especially motorbikes and cars that are modified to make noise.	Not previously included	Work with schools and police with regard to issues of traffic noise pollution, particularly from motorcycles
Review cycle parking at all stations across the borough and ensure that provision meets likely demand	Review cycle parking at stations, particularly at Wealdstone, Harrow on the Hill, Stanmore and Rayners Lane stations	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

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
The amount of anti-social behaviour displayed by teenagers on buses and in particular, recently, in the vicinity of Harrow Bus Station, is frightening people from using public transport and involving a lot of police resources, which could be better utilised elsewhere.	Not previously included	Support the police to address anti-social behaviour around Harrow bus station
Material Assets related		
All Bus stop clearways to be properly marked with cage painted on road	Not previously included	Ensure that road markings to better enable bus priority enforcement are prioritised in all schemes
Ensure growth and development conserve and enhance the borough's heritage assets	Ensure that all schemes implemented follow the Harrow public realm design guides ensuring best practice for materials and reducing street clutter	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
Cultural heritage related		

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
<p>The wider context within which the historic environment is experienced is an important aspect of its settings and therefore its significance. Settings go beyond visual links to include atmospheric factors such as</p> <p>The increase in environmental aggressors deriving from emissions that could accelerate the erosion and decline of the historic fabric are an issue.</p>	Not previously included	<p>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.</p>
<p>Measuring success which improve, enhance or better reveal the significance of heritage assets and their setting.</p> <p>Consideration should be given to the impact of proposals upon the setting of both the designated and non-designated assets together with the potential for unknown archaeology.</p>	Not previously included	<p>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</p>
Landscape	No comments received	
Biodiversity, Fauna and Flora	No comments received	
Soil	No comments received	

Consultation Comment	Pre-consultation LIP3 content	Revised LIP3 content (changed wording shown in bold)
Water	No comments received	
Climatic Factors	No comments received	

This page is intentionally left blank