Reading Borough Council
Working better with you

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To: Councillor Cross (Chair)
Councillors Hornsby-Smith, Ballsdon, Ennis,
Griffith, Juthani, Keeping, Lanzoni, Leng,
Magon, McElroy, Moore, Page, R Singh and
Terry

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21 June 2023

Your contact is: Richard Woodford - Committee Services

NOTICE OF MEETING - STRATEGIC ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE 29 JUNE 2023

A meeting of the Strategic Environment, Planning and Transport Committee will be held on Thursday, 29 June 2023 at 6.30 pm in the Council Chamber, Civic Offices, Reading. The Agenda for the meeting is set out below.

		WARDS AFFECTED	**Page No**
1.	DECLARATIONS OF INTEREST		
2.	MINUTES		5 - 16
3.	MINUTES OF THE MEETING OF THE TRAFFIC MANAGEMENT SUB-COMMITTEE		17 - 24
4.	MINUTES OF OTHER BODIES		25 - 58

- Joint Waste Disposal Board – 2 March 2023
- AWE Local Liaison Committee – 25 April 2023
- Reading Climate Change Partnership Board – 19 January 2023

5.   **PETITIONS**

Petitions submitted pursuant to Standing Order 36 in relation to matters falling within the Committee's Powers & Duties which have been received by Head of Legal & Democratic Services no later than four clear working days before the meeting.

6.   **QUESTIONS FROM COUNCILLORS AND MEMBERS OF THE PUBLIC**

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Questions submitted pursuant to Standing Order 36 in relation to matters falling within the Committee's Powers & Duties which have been submitted in writing and received by the Head of Legal & Democratic Services no later than four clear working days before the meeting.

7. **READING TRANSPORT STRATEGY 2040 - DRAFT FOR CONSULTATION** BOROUGHWIDE 59 - 246

A report providing an overview of the work which has been undertaken to prepare the draft Reading Transport Strategy 2040, the new Local Transport Plan (LTP) for the borough, and to seek approval to undertake a 12-week statutory public consultation on the draft strategy.

8. **ELECTRIC VEHICLE INFRASTRUCTURE STRATEGY - DRAFT FOR CONSULTATION** BOROUGHWIDE 247 - 324

A report providing an overview of the work undertaken to prepare a draft Electric Vehicle Charging Infrastructure Strategy for Reading, and to seek approval to undertake a public consultation on the draft strategy as part of the proposed statutory consultation on the new Local Transport Plan (see Item 7 above).

9. **STRATEGIC TRANSPORT SCHEMES UPDATE** BOROUGHWIDE 325 - 334

A report providing the Committee with an update on the progress made towards the delivery of the current programme of strategic transport schemes in Reading, including major public transport enhancements for both bus and rail services, active travel improvements to enable more walking and cycling, and associated incentivisation and communications initiatives to encourage more healthy lifestyles.

10. **BOROUGHWIDE SMOKE AREA CONTROL DECLARATION** BOROUGHWIDE 335 - 342

A report asking the Committee to revoke all the existing Smoke Control Orders (SCA) currently covering a large part of the Borough, and to replace them with a new single Order declaring the whole of the Borough a smoke control area.

11. **LOW CARBON ENERGY CAPITAL INVESTMENT PROGRAMME UPDATE (ANNUAL REPORT)** BOROUGHWIDE 343 - 348

A report providing the Committee with an update on the progress with implementation of the Council's Low Carbon Energy Capital Investment Programme.

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STRATEGIC ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE
23 MARCH 2023

Present: Councillors Gittings (Chair); Carnell, Challenger, Cross, Griffith, Hornsby-Smith, Keeping, Leng, McElroy, Moore, Page, Robinson, Terry and Yeo.

27.   DECLARATIONS OF INTEREST

Councillor Page declared an interest in item 34 on the grounds that he was Vice-Chair of Transport for the South East.

28.   MINUTES

The Minutes of the meeting held on 16 November 2022 were confirmed as a correct record and signed by the Chair.

29.   MINUTES OF THE TRAFFIC MANAGEMENT SUB-COMMITTEE

The Minutes of the meeting of Traffic Management Sub-Committee held on 12 January 2023 were received.

30.   MINUTES OF OTHER BODIES

The Minutes of the following meetings were received:

- Joint Waste Disposal Board – 29 September 2022 and 9 January 2023
- AWE Local Liaison Committee – 23 November 2022
- Reading Climate Change Partnership – 18 October 2022

31.   QUESTIONS

Questions on the following matters were asked in accordance with Standing Order 36.

Questioner	Subject
Councillor McElroy	Incentivising Smaller and More Environmentally Friendly Cars
Councillor McElroy	Electric Vehicle Charging Strategy

(The full text of the questions and replies were made available on the Reading Borough Council website).

32.   HIGHWAY ASSET MANAGEMENT ANNUAL UPDATE REPORT 2022/23

Further to Minute 29 of the meeting held on 14 March 2022, the Executive Director of Economic Growth and Neighbourhood Services submitted a report that provided the Committee with an update on the progress of the investigatory level safety defect criteria (potholes) in relation to highway carriageway defects, sought approval to amend the Policy for the management of Advertising A Boards on the public highway and updated the Committee on the Annual Status Options Reports for structures,

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carriageways and pavements. A copy of the Council's A Board Policy Application Process and Conditions was attached to the report at Appendix A.

The report included a table that showed that there had been a significant decrease in actionable defects over the previous Financial Year (2022/23). Customer contacts reporting carriageway defects had also significantly decreased over the previous two calendar years with 512 reported carriageway defects in 2021 and 271 in 2022. The Council's £9M capital investment into residential roads and pavements over the three years 2021/22 to 2022/23 had addressed the residential roads that were in most need. This had reduced demand on actionable carriageway defects/pothole repairs, which along with service improvements had enabled the transition to addressing defects of a lesser depth manageable. This had improved efficiency in the Highways and Drainage Operations Team as well as customer satisfaction, road safety and defending public liability claims. Analysis of performance compared with standard defect repair times had shown that the Highway Works Team were exceeding the performance standard for repair times which showed that there was currently capacity to continue with the lower investigatory level criteria. The Highways Asset Management Team had also made further efficiency savings by adopting a cloud based management tool that had improved speed of data transfer and had also allowed a saving of over £1,000 per asset management tablet, which was being reinvested back into the service. The Annual National Highways and Transport MORI Residents Satisfaction Surveys for 2022 had shown an improvement with 142 indicators being about average and 90 indicators improving, with the biggest improvement being in how the Council was dealing with the potholes/damaged roads indicator. The Highways Works Team were repairing the statutory pothole safety defect repairs within repair timescales and the vast majority of 28 day repair orders were being completed within the first week of issue. This had created capacity within the team to not only manage the statutory repair work, but also to take on additional income generation opportunities.

The report explained that the A-Board Policy, that had been adopted in November 2018, had had varying degrees of success and following the Covid-19 pandemic, and the subsequent need to support business recovery, enforcement of the Policy had reduced. However, this had created incidents of obstruction for pedestrians and other users of the public highway and therefore enforcement was to be tightened and increased to ensure compliance with the Policy. The Area Highway Inspectors regularly monitored A-Boards on the public highway, in the town centre this was carried out fortnightly. The Inspectors would raise any issues of non-compliance with the business owner in the first instance and they would be told that if there was a repeated, second, offence the A-Board would be removed and taken to the Council's depot. A fee equal to one year's Licence renewal fee, currently £80, would be payable on collection and any Boards not collected after 12 weeks would be scrapped/recycled. In order to address non-compliance concerns and to continue supporting businesses, amendments/updates to the existing Policy were necessary. The proposed amendments were as follows:

- Removal of any ambiguity regarding the siting/location of the 'A–Board' on the public highway;

- Ensuring that the public highway was not obstructed and that the 'A-Boards' were sensibly positioned to maintain a clear pathway for all users of the public highway;
- Agreeing the number of 'A-Boards' permitted per applicant;
- Increasing the application fee and annual renewal fee;
- Detailing the enforcement action for non-compliance of the 'A-Board' Policy;
- Specifying that the Council's decision on A-Board applications was final, in its capacity as the Local Highway Authority.

Community, Church and Charity Organisations would still need to apply for the licence for any individual event and the Council would waive the application fee and the terms of the licence would apply.

Finally, the report stated that the Highway Asset Management Board had met in December 2022 and had reviewed the Annual Status Options Report (ASOR) for structures, carriageways and pavements. The ASORs were an Asset Management Tool and were used by the Council to report on the condition, asset value and future funding requirements of public highway maintainable structures, carriageways and pavement assets. They were used to calculate future funding requirements to ensure that the assets were maintained in a reasonable and serviceable condition and assisted the Council by targeting available funding to assets in greatest need, thereby extending the life of the asset before it became necessary to carry out more expensive reconstruction. The updated ASORs would be submitted to a future meeting and would be published later in the year.

Resolved –

(1) **That the progress of the investigatory level safety defect criteria (potholes) be noted;**

(2) **That the updated Policy for the management of Advertising Boards (A-Boards) on the public highway, as set out in Section 4 of the Report, be approved;**

(3) **That the update on the Annual Status Options Report (ASOR) be noted.**

33. STRATEGIC TRANSPORT SCHEMES UPDATE

The Executive Director of Economic Growth and Neighbourhood Services submitted a report providing an update on the progress with delivery of the current programme of major transport projects in Reading, which were as follows:

- Bus Service Improvement Plan Programme
- South Reading Mass Rapid Transit
- Reading Green Park Station
- Reading West Station Upgrade
- Tilehurst Station Upgrade
- Active Travel Fund Tranche 2 – Shinfield Road
- Active Travel Fund Tranche 3 – Bath Road
- Active Travel Capability Fund

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- School Streets Programme

The report stated that in respect of the Bus Service Improvement Plan Programme (BSIP), detailed discussions had taken place with DfT officials that had resulted in the Enhanced Partnership (EP) Board agreeing an EP Variation in December 2022, which set out more detail on the various schemes and initiatives to be delivered with the initial phase of Government funding. Subsequently, the DfT had confirmed the full funding allocation of £26.263m to Reading in January 2023 which meant delivery of the programme could commence. The overall grant had consisted of £15.939m capital and £10.324m revenue funding. The BSIP programme included a range of capital and revenue measures to encourage passenger usage in Reading. The EP Scheme Variation set out the commitment to deliver, in partnership with operators, and the schemes that the DfT had awarded grant funding for, these were set out in the report with the capital schemes being subject to public consultation. The initial focus of work had been on developing a multi-operator fares discount ticketing scheme, preparing designs for the next phase of works for the South Reading MRT scheme, working with the Royal Berkshire Hospital on improvements to their shuttle services running from Mereoak and Thames Valley Park and Ride sites, and preparing the procurement documentation to appoint an operator for the continued provision of contracted Route 9 services in south Reading. Detailed work had also been carried out with the local operators through the EP arrangements to develop and agree the fares discount scheme which had been launched on 13 March 2023.

Construction works for Reading Green Park Station and multi-modal interchange were substantially complete and, therefore, supported by partners from the railway industry, the project had entered a period of thorough testing and authorisation prior to its official opening. The Council was working with Network Rail and GWR to ensure that the station was open as soon as possible and a further announcement was expected shortly to confirm details, however, this was subject to the final approvals being secured and GWR's fit out of the station building being completed. The upgrade of Reading West Station had seen GWR take possession of the southern footway of the Oxford Road entrance. Construction works for the new passenger building on the Oxford Road and works to deliver a new entrance and gateline at the Tilehurst Road entrance were progressing well. The overall project was currently projected to be completed by late spring 2023.

Delivery of the Shinfield Road cycle lane scheme, being carried out as part of the Tranche 2 Active Trave Fund Programme, was progressing well on-site, with the initial construction works having started at the University/Christchurch Green end of the route. The work was being carried out predominately by the Council's in-house Highways delivery team, however, due to resource limitations, a degree of sub-contracting had been required, this was being reviewed on an on-going basis. An indicative timeline for delivery was set out in the report and a timeline had also been included in respect of the Bath Road scheme.

Finally, the report explained that the Council had been awarded a further £124,250 from the Active Travel Capability Fund in 2022/23 and that this, and the previous

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award of £249,454, were the full indicative funding award available to Reading subject to a successful funding proposal. This was revenue grant funding to enable a programme of schemes and initiatives to be developed and delivered that were aimed at supported a shift in travel behaviour to active travel, to complement the segregated route facilities that were being delivered through the Active Travel Fund capital grant funding. In addition, the funding had been extended to support the Innovation Valley Rewards App which encouraged the use of sustainable travel through earning points for walking, running, cycling, bus or train travel. Once users started earning points they could be redeemed for vouchers at high street stores, restaurants and supermarkets, or donating to charity.

Resolved:

(1)   **That the progress made on the delivery of the current programme of strategic transport schemes as outlined in the report be noted;**

(2)   **That confirmation had been secured from the Department for Transport for the full allocation of £26.263m grant funding for the Bus Service Improvement Plan and that this represented the third highest funding award (by head of population) in the country, be noted;**

(3)   **That the funding award of £124,250 from the Active Travel Capability Fund 2022/23, which would enable the continuation of the Council's programme of revenue initiatives to encourage walking and cycling as set out in the report, be noted.**

34.   TRANSPORT FOR THE SOUTH EAST – STRATEGIC INVESTMENT PLAN

The Executive Director of Economic Growth and Neighbourhood Services submitted a report that provided the Committee with an update on progress with development of Transport for the South East's (TfSE) Strategic Investment Plan (SIP) and sought endorsement of the final plan that would form the final part of TfSE's Transport Strategy. A copy of the Strategic Investment Plan for the South East was attached to the report.

The report explained that the formal public consultation period on the draft SIP had run from 20 June to 12 September 2022, with over 600 responses being received from a range of stakeholders. TfSE had reviewed the feedback and had amended the plan and was now seeking the agreement of its constituent authorities prior to submitting the final SIP to Government in spring 2023.

The schemes that were most relevant to Reading had been included in the Wessex Thames packages of interventions, which covered the area including Berkshire, North Hampshire and West Surrey and were set out in the report. The Plan also included a list of Global Policy Interventions that would help deliver the investment priorities of the South East.

Resolved –   That the report be noted and the decision of the Council to agree that Transport for the South East submit the Strategic Investment Plan to Government endorsed.

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(Councillor Page declared an interest in the above item on the grounds that he was Vice-Chair of Transport for the South East)

35. RIGHTS OF WAY IMPROVEMENT PLAN – FINAL FOR ADOPTION

Further to Minute 24 of the previous meeting, the Executive Director of Economic Growth and Neighbourhood Services submitted a report that sought approval from the Committee for the Council to adopt the final version of the Rights of Way Improvement Plan (RoWIP) for Reading. A copy of the Rights of Way Improvement Plan 2023-33 – Final for Adoption was attached to the report at Appendix A.

The report explained that the 12 week statutory consultation on the draft RoWIP had been carried out from 23 November 2022 to 19 February 2023. This had included a public survey and engagement with statutory consultees. The responses to the consultation had been analysed and the main themes of feedback were set out in the report; the RoWIP Strategy had been updated following the consultation. Individual responses had also been received from statutory consultees and neighbouring local authorities; a summary of the responses was set out in the report.

Following the consultation a number of updates had been made to the RoWIP to capture additional feedback as well as providing details on the responsibilities of the Council, the main updates were set out in the report. The RoWIP was a live document and further updates might be required in the future and any major amendments would be submitted to a future meeting for approval.

The Committee discussed the report and acknowledged that in monitoring Rights of Way in the Borough the Council was reliant on members of the public informing them of any concerns or issues they might have about a right of way. This could be done by contacting the Planning, Transport and Public Protection Team or through Ward Councillors.

Resolved –   **That the progress outlined in the report be noted and the formal adoption by the Council of the final version of the Public Rights of Way Improvement Plan 2023-33 be approved.**

36. LOCAL PLAN REVIEW AND LOCAL DEVELOPMENT SCHEME

The Executive Director of Economic Growth and Neighbourhood Services submitted a report asking the Committee to note the Local Plan Review and agree that officers carried out a partial update of the Plan.

The report had appended:

Appendix 1	Equality impact assessment
Appendix 2	Outcome of Local Plan Review for individual policies
Appendix 3	Local Plan Review [to be added]
Appendix 4	Local Development Scheme
Appendix 5	Climate assessment tool [to be added]

The report explained that the Reading Borough Local Plan had been adopted in November 2019 and there was a statutory five-year period for carrying out a review of a local plan to determine whether an update was required. A Local Plan Review had been carried out which had determined that there was a need for a partial update of

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the Local Plan, in particular to take account of the new methodology for determining housing needs.

The Council was required to produce and maintain a Local Development Scheme (LDS) which set out which documents would be produced and the timetable for production. A LDS had been produced which, alongside other documents set out the timetable for carrying out the partial update of the Local Plan, which aimed for submission of the update to the Secretary of State by the end of the five-year review date in November 2024.

The Committee discussed the report and agreed that all Councillors should be allowed to provide feedback on the partial update, this would be considered by a Steering Group and then put forward to officers for possible inclusion in the Plan.

Resolved –

    (1)   **That the results of the Local Plan Review be noted;**

    (2)   **That a partial update of the Local Plan be undertaken be agreed;**

    (3)   **That the Assistant Director for Planning, Transport and Regulatory Services be granted authority to include additional policies within the scope of the partial update in consultation with the Lead Councillor for Planning and Assets and other relevant Lead Councillors and members as required;**

    (4)   **That the Local Development Scheme which set out the timetable for production of planning policy including the partial update of the Local Plan be agreed.**

37.   ADOPTION OF THE RESIDENTIAL CONVERSIONS SUPPLEMENTARY PLANNING DOCUMENT

The Executive Director of Economic Growth and Neighbourhood Services submitted a report asking the Committee to formally adopt the Residential Conversions Supplementary Planning Document (SPD) as part of the Council's planning policy for determining planning applications.

The report had appended:

Appendix 1	Equality Impact Assessment
Appendix 2	Statement of Consultation on the Draft Residential Conversions SPD
Appendix 3	Proposed adoption version of the Residential Conversions SPD (with changes tracked following consultation)

The report explained that the SPD gave further detail to supplement the policies in the Reading Borough Local Plan, that had been adopted in November 2019, to deal with proposals for conversions of houses to flats and houses in multiple occupation (HMOs). A Draft Residential Conversions SPD had been approved for consultation by Policy Committee on 15 December 2022 (Minute 41 refers). Consultation had taken place between December 2022 and February 2023, and a total of 12 responses had been received, albeit five were to state there were no comments and a revised version of the SPD had been prepared, taking account of the responses that had been received.

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Resolved –

(1)   That the results of the consultation on the Draft Residential Conversions Supplementary Planning Document, undertaken between December 2022 and February 2023, as set out in the Consultation Statement at Appendix 2 attached to the report, be noted;

(2)   That the Residential Conversions SPD, as set out in Appendix 3 attached to the report, be adopted as a Supplementary Planning Document.

38.   EXTERNAL FUNDING APPLICATIONS FOR LOW CARBON PROJECTS

The Executive Director of Economic Growth and Neighbourhood Services submitted a report informing the Committee about a bid to the Public Sector Decarbonisation Scheme to enable decarbonisation of the Hexagon Theatre and providing details of a similar funding application for further development of a heat network project for Reading, a strategic investment to decarbonise town centre heating which was at the early stages of development.

The report stated that the Council sought opportunities to apply for external funding to enhance its ability to deliver the objectives of the Reading Climate Emergency Strategy and Corporate Carbon Plan. An external funding bid had been submitted under delegated authority in October 2022 with the submission of a bid to the Public Sector Decarbonisation Scheme to enable decarbonisation of the Hexagon Theatre. The bid had been for a grant of £1.88m generating a match funding requirement for the Council of £725,000 to be met from within approved capital budgets. A successful bid would enable installation of ground source heat pumps to replace gas boilers, insultation and lighting upgrades.

The report also explained that a successful application had been made in the past for successive rounds of funding from the Government's Heat Network Delivery Unit (HNDU) for funding to help develop a heat network for Reading. This funding had enabled feasibility work to be conducted which had identified a cluster of developments north of the station as offering the best prospects for a viable scheme, tapping into heat from the River Thames to provide a low carbon power source for a heat network. The next stage, known as 'Detailed Project Development', would build on the recently completed feasibility study and develop the proposal into an 'investment ready' proposition. An application had therefore been submitted to Round 12 of the HNDU fund for £168,000 in December 2022, for which match funding of £50,000 was required and would come from the Climate Change Reserve.

Peter Moore, Head of Climate Strategy, reported that the bid for ground heat pumps to enable decarbonization of the Hexagon Theatre had not been successful and had not been included on the list of funded projects. Bids had been subject to technical checks, but had been accepted on a 'first-come first served' basis and the allocation had been completed in ten minutes. However, funding was available from within the Council's approved capital budgets. The bid for funding from the Government's HNDU had been successful and a grant of £150k had been awarded, as had a grant for £825k from the Thames Valley Local Enterprise Partnership that would be used to replace gas

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heating in the Civic Offices with heat pumps, therefore providing a low carbon heating system.

Resolved –

    (1)   **That the submission of bids to the Public Sector Decarbonisation Scheme and the Heat Network Delivery Unit be noted;**

    (2)   **That the Director for Economic Growth and Neighbourhood Services, in consultation with the Director of Finance and the Lead Councillor for Climate Strategy and Transport, be granted authority to agree and accept any grant offers arising from the bids.**

(The meeting started at 6.30pm and closed at 8.00pm)

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Present: Councillor Cross (Chair);
Councillors Ballsdon, Ennis, Griffith, Hornsby-Smith, Juthani, Keeping, Lanzoni, Leng, Magon, McElroy, Moore, Page, Singh and Terry.

1.   ESTABLISHMENT, MEMBERSHIP AND TERMS OF REFERENCE OF TRAFFIC MANAGEMENT SUB-COMMITTEE

Resolved –

(1)   That, under the provisions of Sections 101 and 102 of the Local Government Act 1972, a Traffic Management Sub-Committee be established for the Municipal Year 2022/23 and the following Councillors be appointed to serve on the Sub-Committee:

Traffic Management Sub-Committee (11:2:1:2:1)

Labour Councillors	Conservative Councillors	*Liberal Democrat Councillor*	Green Councillor	Independent Councillor
Ayub	Goss	Moore	McCann	Hacker
Barnett-Ward	Singh		White	
Cross				
Ennis				
Gittings				
Griffith				
Hornsby-Smith				
Keeping				
Kitchingham				
Lanzoni				
Page				

(2)   That the following Councillors be appointed as Chair/Vice-Chair of the Traffic Management Sub-Committee for the Municipal Year 2023/24:

Chair	Vice-Chair
Councillor Ayub	Councillor Lanzoni

(3)   That the Terms of Reference of the Sub-Committee be as set out in Appendix A to the Monitoring Officer's report to Council of 24 May 2023 on the Constitution, Powers and Duties of the Council and Committees etc.

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Present: Councillors Ayub (Chair), Yeo (Vice Chair), Barnett-Ward, Carnell, Ennis, Gittings, Hacker, Hornsby-Smith, Keeping, Leng, Mitchell, Page and White.

Apologies   Councillors Hoskin and Moore.

45.   MINUTES

The Minutes of the meeting of 12 January 2023 were confirmed as a correct record and signed by the Chair.

46.   QUESTIONS

A question on the following matter was submitted, and answered by the Lead Councillor for Climate Strategy and Transport on behalf of the Chair:

Questioner	Subject
Councillor White	London Road Traffic Lights Outage

(The full text of the question and reply was made available on the Reading Borough Council website).

47.   PETITIONS

(a)   Petition for Traffic Calming Measures on Rotherfield Way

The Executive Director for Economic Growth and Neighbourhood Services submitted a report on the receipt of a petition, asking the Council to consider providing traffic calming measure on Rotherfield Way.

The report stated that on 22 February 2023 a petition had been submitted to the Council that had contained 157 signatures, 49 from paper forms and 108 from an electronic form. The petition read as follows:

"Rotherfield Way is a steep residential road, which is used as a through way by drivers travelling into Reading. There is a crossroads towards the top with Surley Row, just after a blind corner. Because drivers regularly speed down the hill, it is hazardous to cross any part of the road on foot, or to pull out from driveways, as well as from Surley Row (particularly the small narrow part). A major walking route to local schools crosses Rotherfield Way. There is a refuge right at the top of the road which actually exacerbates the problem, because drivers often speed away from it, ignoring the crossroads ahead.

We ask the Council to provide effective traffic calming measures on Rotherfield Way."

The report explained that speed enforcement could only be undertaken by the Police and the issue of speeding motorists was challenging for a Local Authority. With funding and resource limitations, alongside other policing priorities, enforcement could not be relied upon to provide a sustained method in which to deter speeding. The Council had been and continued to lobby the government and Police for an increase in civil powers of enforcement

against speeding motorists. Local authorities had limited tools in which to address speeding, which were limited to the implementation of physical speed calming 'features' such as speed humps. It was understandable that these would not be welcomed by many as they were indiscriminate and had an impact on the surrounding environment. Consideration also needed to be given to the potential implications of some features to public transport vehicles, emergency service vehicles, active travel modes, and the feasibility in the context of the highway layout. For a Local Authority a scheme of features could also be resource-intensive and costly to design, install and maintain. It was noted that until mooted mandatory technologies were in place to override motorist inputs and limit vehicle speeds, and/or autonomously impose fines on the offending motorist, there appeared to be no alternative to these physical measures.

Many of the comments had requested additional pedestrian crossing facilities. The Council had previously received such requests and the Sub-Committee had agreed to add this to the Requests for Traffic Management Measures list. There was no allocated funding for the development and delivery of the requested changes. It was noted that the existing entry on the Requests for Traffic Management Measures had been adjusted to reflect the receipt of the petition and expanded to include the request for traffic calming. The entry would also be updated to reflect the latest road casualty data for the road supplied by the Police. It was suggested that both elements should be considered for funding and developed as a single scheme.

At the invitation of the Chair the petition organiser, Leslie Wilson, addressed the Sub-Committee on behalf of the petitioners.

Resolved –

    (1)   That the report be noted;

    (2)   That the existing request for a pedestrian crossing on Rotherfield Way contained within the regularly-reported 'Requests for Traffic Management Measures' be updated to reflect the receipt of this petition and the request for traffic calming. This would be a proposed amendment to the existing entry of that part of the updated report;

    (3)   That the lead petitioner be informed of the decisions of the Sub-Committee, following publication of the agreed minutes of the meeting;

    (4)   That no public inquiry be held into the proposals.

48. READING GREEN PARK STATION

The Executive Director for Economic Growth and Neighbourhood Services submitted a report that sought approval to undertake a statutory consultation of the implementation of traffic restrictions in the form of double yellow lines, bus gate, bus stops, pay and display car parks, taxi rank, disabled parking bays and motorcycle bays at Reading Green Park Station.

The report explained that Reading Green Park Station was a new railway station on the Reading to Basingstoke line that had been progressed in partnership with Network Rail and GWR. The station and multi-modal interchange would improve accessibility and connectivity to south Reading which had undergone large scale development. It was noted that

construction works had been completed and were currently undergoing testing and authorisation prior to official opening and public use. Work was being undertaken with Network Rail to ensure the opening of the station which was scheduled for Spring 2023.

Following a query, it was noted that discussion with Green Park was currently taking place regarding cycle routes.

The Sub-Committee discussed the report and it was suggested that the Implementation of No Stopping Except for Disabled (Blue) Badge Holders be increased to a maximum stay of 24 hours. Officers would investigate this option and if viable the consultation would be amended to include this increase.

Resolved –

      (1)   **That the report be noted;**

      (2)   **That the Statutory Consultation be approved;**

      (3)   **That subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order(s);**

      (4)   **That any objection(s) received following the statutory advertisement be reported to a future meeting of the Sub-Committee.**

49.   ACTIVE TRAVEL FUND TRANCHE 3 – CASTLE HILL AND BATH ROAD – TRAFFIC RESTRICTION PROPOSAL - STATUTORY CONSULTATION RESULTS

The Executive Director for Economic Growth and Neighbourhood Services submitted a report that sought approval to implement new traffic restrictions on Castle Hill/Bath Road in the form of double yellow lines, removal of the tidal flow lane and reduction of the length of the existing bus lane. The report also provided the objections and other feedback that had been received during the statutory consultation.

As of 24 February 2023, 148 responses to the consultation had been received, of which 79.73% were in support of the implementation of traffic restrictions in the form of double yellow lines along Castle Hill between its junction with Russell Street and with Jesse Terrace. Also, 75% were in support to alter the length of the existing eastbound bus lane on Bath Road, and 70.95% were in support to remove the Tidal Flow on Castle Hill. Common themes of objections were:

- Strong objection to the removal of the tidal flow as it would result in a significant backlog of traffic which would impact negatively on air quality in the local area. It works as it was;

- Cycle infrastructure design LTN 1/20 did not increase the number of cyclists but just increased traffic congestion affecting air quality.

A summary of the consultation responses was available in Appendix 1 attached to the report.

Resolved –

      (1)   **That the report be noted;**

(2) That the Assistant Director of Legal and Democratic Services be authorised to approve the proposed traffic restrictions on Castle Hill/Bath Road in accordance with Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996;

(3) That the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order and no public inquiry be held into the proposal.

50. RESULTS OF STATUTORY CONSULTATION – PROPOSAL TO REMOVE CYCLING PROHIBITION, READING RAIL STATION SUBWAY

Further to Minute 14 of the meeting held on 14 September 2022, the Executive Director for Economic Growth and Neighbourhood Services submitted a report for the Sub-Committee to consider results of the statutory consultation and to consider the revocation of the Traffic Regulation Order that currently prohibited cycling along the subway.

At the September 2022 meeting, it had been agreed that officers carry out a statutory consultation, this was conducted between 2 and 23 February 2023. A total of 554 responses had been received, of which 72.56% were in support and 27.44% objected. The three common themes of objections were:

- Cyclists already used the underpass and often at speeds which were hazardous to pedestrians;
- The space was too narrow to be a shared space;
- Pedestrians should have priority through the underpass.

A summary of the consultation responses was available in Appendix 2 attached to the report.

Resolved –

(1) That the report be noted;

(2) That the objections noted in Appendix 2 attached to the report be considered and that the revocation of the Traffic Regulation Order that currently prohibits cycling along the subway be agreed;

(3) That the Assistant Director of Legal and Democratic Services be authorised to make the legal revocation and that no public inquiry be held into the proposal;

(4) That the respondents to the statutory consultation be informed of the decision of the Sub-Committee following publication of the minutes of the meeting.

51. STATION HILL – ALTERATIONS TO EXISTING RESTRCTIONS ON FRIAR STREET AND GARRARD STREET

The Executive Director for Economic Growth and Neighbourhood Services submitted a report that sought approval for officers to carry out a Statutory Consultation on changes to the waiting restrictions, pay and display bays, loading bays and taxi ranks along the Friar Street

and Garrard Street frontages. Appendices 1 to 3 to the report illustrated the proposals surrounding the development and the exact line markings proposed. The proposals aimed at improving the public realm on both Friar Street and Garrard Street.

Resolved –

    (1)   **That the report be noted;**

    (2)   **That the Assistant Director of Legal and Democratic Services be authorised to undertake a statutory consultation in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996, for the proposals contained within Appendix 1 attached to the report;**

    (3)   **That subject to no objections being received, the Assistant Director of Legal and Democratic Services be authorised to make the Traffic Regulation Order for the proposed scheme;**

    (4)   **That any objection(s) received following the statutory advertisement be reported to a future meeting of the Sub-Committee;**

    (5)   **That the Head of Transport (or appropriate officer) in consultation with the appropriate Lead Councillor be authorised to make minor changes to the proposals;**

    (6)   **That no public inquiry be held into the proposals.**

52.   **WAITING RESTRICTION REVIEW – 2022B PROGRAMME UPDATE & 2023A PROGRAMME NEW REQUESTS**

The Executive Director for Economic Growth and Neighbourhood Services submitted a report providing the Sub-Committee with an update on progress of the 2022B Programme and new requests for the potential inclusion in the 2023A Waiting Restriction Review Programme.

The report stated that following approval by the Sub-Committee in September 2022 to carry out investigations at various locations, a recommendation for each scheme had been submitted to the January 2023 Sub-Committee meeting for approval for officers to undertake a statutory consultation for the recommended schemes. There had not been sufficient time between the January 2023 Sub-Committee meeting and the meeting in March 2023 to conduct and feedback the results of the statutory consultation and therefore, the results would be submitted to the Sub-Committee meeting in June 2023 so that a decision could be made regarding the delivery of the schemes within the programme.

The Sub-Committee considered Appendix 1 to the report that provided a list of requests that had been received for potential consideration in the 2023A programme. If approved the next stage of programme development would be to report to the Sub-Committee the recommended schemes for approval for officers to undertake the statutory consultation.

Resolved –

    (1)   **That the report be noted;**

(2) That the requests made for waiting restriction changes in Appendix 1 attached to the report be investigated by officers as part of the 2023A review programme be agreed;

(3) That the officer recommendations, following investigations of the new requests, be shared with Ward Councillors, providing opportunity for local consultation (informal) and for their comments to be included in the next report to the Sub-Committee;

(4) That, should funding permit, a further report be submitted to the Sub-Committee seeking agreement to conduct the Statutory Consultation on the recommended schemes for the 2023A programme.

53. CIL LOCALLY FUNDED SCHEMES UPDATE – PROPOSALS FOR STATUTORY CONSULTATION

The Executive Director for Economic Growth and Neighbourhood Services submitted a report that sought approval for officers to undertake a statutory consultation/notice processes to progress two scheme designs. These were for zebra crossings on Imperial Way and Whitley Wood Lane and to implement traffic calming measures on Shaw Road and Boston Avenue. The proposals were set out in Appendix 1 and Appendix 2 attached to the report.

The Sub-Committee discussed the report, and it was suggested that officers investigate the profile of speed humps so that these could be more friendly to cyclists.

Resolved –

(1) That the report be noted;

(2) That the Assistant Director of Legal and Democratic Services be authorised to undertake statutory consultation/notification processes for the proposed zebra crossing designs on Imperial Way and Whitley Wood Lane, and for the proposed traffic calming measures on Shaw Road and Boston Avenue, in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996;

(3) That the Highways and Traffic Services Manager, in agreement with the Lead Councillor for Climate Strategy and Transport, be able to make minor alterations to the agreed proposals;

(4) That subject to no objections being received each scheme, the scheme(s) be considered as agreed for implementation enabling delivery planning to commence;

(5) That should a scheme receive objection(s) during the statutory consultation period, that these be reported to a future meeting of the Sub-Committee for consideration and decision regarding scheme implementation;

(6) That no public inquiry be held into the proposals.

54. REQUESTS FOR TRAFFIC MANAGEMENT MEASURES UPDATE

The Executive Director of Economic Growth and Neighbourhood Services submitted a report informing the Sub-Committee of requests for traffic management measures that had been raised by members of the public, other organisations/representatives, and Councillors. These were measures, that had either been previously reported, or those that would not typically be addressed in other programmes where funding was yet to be identified. The following Appendices were attached to the report:

Appendix 1   List of requests that were new to the update report with initial officer comments and recommendations;

Appendix 2   List of requests that had been reported previously, where significant amendments were proposed, with officer comments and recommendations;

Appendix 3   The principal list of requests, as updated following the previous report to the Sub-Committee in November 2022. It also contained the prioritised list of cycling and walking measures from the LCWIP.

Resolved –

(1)   That the report be noted;

(2)   That having considered the officer recommendation for each request set out in Appendix 1 attached to the report, the entries be retained on the primary list of requests, as set out in Appendix 3 attached to the report, be agreed;

(3)   That having considered the officer recommendation for amendments to each request set out in Appendix 2 attached to the report, the amended entries be retained on the primary list of requests, set out in Appendix 3 attached to the report, be agreed.

55. EXCLUSION OF PRESS AND PUBLIC

Resolved -

That, pursuant to Section 100A of the Local Government Act 1972 (as amended) members of the press and public be excluded during consideration of item 44 below, as it was likely that there would be disclosure of exempt information as defined in Paragraphs 1 and 2 of Part 1 of Schedule 12A of that Act.

56. APPLICATIONS FOR DISCRETIONARY PARKING PERMITS

The Executive Director for Economic Growth and Neighbourhood Services submitted a report giving details of the background to the decisions to refuse applications for Discretionary Parking Permits from seventeen applicants, who had subsequently appealed against these decisions.

Resolved –

(1)   That, with regard to applications 1, 10, and 13, a first discretionary permit be issued, personal to the applicants; 10 and 13 subject to the applicants submitting all the required documentation;

(2)   That, with regard to application 4, a second discretionary permit be issued, personal to the applicant and subject to the applicant submitting all the required proofs;

(3)   That, with regard to application 9, discretionary visitor books be issued, subject to the standard scheme limits for the number of books that can be issued each year;

(4)   That, with regard to application 12, a third discretionary permit be issued, personal to the applicant;

(5)   That the Executive Director for Economic Growth and Neighbourhood Services' decision to refuse applications 2, 3, 5, 6, 7, 8, 14, 15, 16, and 17 be upheld.

(6)   That the Executive Director for Economic Growth and Neighbourhood Services' decision to refuse application 11 be upheld and that officers investigate the enforcement of parking at the designated car park for the address.

(Exempt information as defined in Paragraphs 1 and 2).

(The meeting started at 6.30 pm and finished at 7.47 pm).

Classification: OFFICIAL

JOINT WASTE DISPOSAL BOARD
2 MARCH 2023
(9.30 - 11.05 am)

Present: Bracknell Forest Borough Council
                Councillor Mrs Dorothy Hayes MBE

                Reading Borough Council
                Councillor Tony Page
                Councillor Karen Rowland

                Wokingham District Council
                Councillor Clive Jones
                Councillor Ian Shenton

Officers   Oliver Burt, re3 Strategic Waste Manager
                Jayne Rowley, re3 Principal Finance Officer
                Sarah Innes, re3 Performance Officer
                Monika Bulmer, re3 Communication Officer
                Damian James, Bracknell Forest Council
                Claire Pike, Bracknell Forest Council
                Andrew Edwards, Reading Borough Council

Apologies for absence were received from:
                Councillor John Harrison, Bracknell Forest Council

20.   **Declarations of Interest**

       There were no declarations of interest.

21.   **Minutes of the Meeting of the Joint Waste Disposal Board**

       The spelling of Francesca Hobson would be amended within the minutes.

       RESOLVED that subject to the amendments, the minutes of the meeting of the Joint
       Waste Disposal Board held on the 9 January 2023, be approved as a correct
       record.

22.   **Urgent Items of Business**

       There were no urgent items of business.

23.   **Progress Report**

       The Board received a report briefing them on progress in the delivery of the re3 Joint
       Waste PFI Contract.

       The report covered:

       • re3 and Council Performance Statistics
       • Waste Tracking
       • WEEE (Waste Electrical and Electronic Equipment) Banks
       • Recycling of Flexible Plastic Packaging
       • Booking System Translations

- Links Between Booking Systems and Fly-tipping
- HWRC (Household Waste Recycling Centre) Reuse Options
- Review of HWRC Charges
- Actions from the HWRC User Satisfaction Survey
- Community Compost Scheme
- Agenda Setting

Sarah Innes reported the provisional recycling rates for April 2022 – January 2023 were detailed within the report alongside a comparison of the full year of 2021/22. Graphs setting out the quarterly performance had also been included which showed that the recycling rates for all three Councils were slightly below the figures for last year. A full year of data would be available at the next meeting in June, Sarah would provide a full breakdown of the data at this meeting however it was already clear that the compostable tonnage, food waste and garden waste, was already below previous year's figures. It was suggested that the cost of living could have had an impact on the amount of food waste collected as people were not wasting as much food.

Since 2004, Local Authorities had to report their waste data to Government via the Waste Data Flow System. This included the tonnages of waste collected and details of how and where each tonne is treated. Later in 2023, or in 2024, these systems were due to be replaced by a digital waste tracking service. Defra was building the system up gradually and it is understood that they would work on plans for local authority usage and provision of data in the first half of 2023. It was currently unclear what the implications of this were. Officers would seek to be part of the discussions so that the implications for data entry and monitoring could better be understood.

At the January meeting of the Joint Waste Disposal Board, Members had instructed Officers to investigate the idea of using a network of recycling banks to collect small electrical appliances. Officers had spoken to three local authorities who currently use banks to collect these items and investigated how re3 could provide a similar service. As a result, an expression of interest in relation to the Material Focus WEEE fund had been submitted, which had been successful to get to the next stage of funding. Sarah asked for feedback from Members in regard to where the banks should be situated. If the bid was approved there would be 30 banks, 10 banks per authority which would allow each Council to look at a cross section of sites borough wide.

At the January Meeting of the Joint Waste Disposal Board, Members asked Officers to investigate options for recycling flexible plastic packaging and as a result Sarah had been talking to the Flexible Plastic Fund 'FlexCollect' Project which a small number of Councils were currently trialling. The FlexCollect team were currently looking for more Councils to take part in the trial and Officers have expressed an interest on behalf of the re3 Partnership. A meeting has taken place so that the Delivery Manager for the project could visit the MRF (Material Recycling Facility) and a discussion could take place about the practicalities of sorting, storing and reprocessing the waste. These tests would be undertaken in the coming weeks and subject to the outcomes of testing in the MRF further discussions would take place with the waste collection teams to identify a potential trial location. If the trial were to proceed, then the packaging would be collected in the Councils current kerbside recycling provision.

At the January 2023 meeting, Members agreed to retain the booking system at the Recycling Centres. A variety of ways to supplement the booking system were discussed at this time such as translation. As a result, translation went live in February 2023. An example of this was provided to the board. Concerns were raised

that google translated wasn't always accurate however the benefit was that many languages could be provided, and if internal Council translation facilities had been used, then there was only a total of 6 languages that would have been provided. An FAQ had been provided on the re3 website stating that there may be some errors. Contributors would look at some of the translations of key languages within the Borough.

In 2022, DEFRA funded a project to examine whether there was a link between a national increase in fly-tipping and the use of booking systems at recycling centres, which was also something that had been discussed by re3. An external company conducted surveys and interviews with local authorities and re3 Officers contributed information about the experience of the partnership through these routes. Fly-tipping statistics were also examined in detail for six local authority areas. A report was published in January 2023 setting out the findings and conclusions from the project. The report noted that no academic literature was found which provided evidence of a link between fly-tipping and booking systems. The report would be circulated to the Board.

Following on from the presentation from the re3 Contractor and discussions at the January Board meeting about the current reuse activities undertaken at the re3 facilities and the potential for future expansion to divert items from the waste stream. Members were presented with a list of options to be explored further:

• Repair workshops
• Upcycling
• 'Libraries' (Through which a range of items could be borrowed).
• Permanent reuse shops (for instance at an offsite location)
• Online reuse shops

Currently all Councils had a repair café which was a good position to be in. Monika Bulmer was keen for there to be a repair strategy and work collaboratively and promote the repair cafés.

As a result of increased costs, Officers had reviewed the prices being charged for disposal of non-household waste at the re3 recycling centres. Current prices were designed to recover the cost of handling and disposing of nonhousehold waste and were non-profit making. A table with the proposed price increases was included within the report which included an increase of soil and rubble to £3 per 35L bag for all users. Any agreed changes to the charges would be implemented from 1 April 2023. Changes to the prices would be updated on the re3 website, site signage and the booking webform.

Toilets and sinks would fall under the charge for rubble, Officers were unsure on the collection of these and would look into these.

Councillor Jones stated that he didn't want to increase the cost of soil and rubble for residents and wished to remove it all together in time. However, there were concerns that the cost would then be picked up by others. It was suggested that a report be brought back to the Board regarding the implications of the charges and what the impact of the removal of the charges would be. It was agreed by the Board that Soil and Rubble would not increase to £3 for residents, and a report would be brought back to the board.

The statistical results of the Annual HWRC User Satisfaction Survey had been presented to the meeting of the Joint Waste Disposal Board in January 2023. Since

then, the comments had been analysed. A summary of these were included in the annex to the report. Alongside the comments a list of actions had been complied, a number of which has already been completed or underway.

Members had previously agreed to relaunch the community compost scheme with the bags of re3Grow left over from the 2022 project in Spring 2023. It was proposed that the bags this year be allocated on a first come first basis relaunches, Officers recommend that this year the compost be allocated on a first come-first serve basis, subject to the applicants meeting the advertised criteria.

Members and Officers discussed the agenda setting requirement that had been proposed as part of the Audit completed in 2022. It was proposed that one member from each Local Authority be nominated to attend the agenda setting meeting and for this to be an online meeting. It was suggested that this be held closer to the meeting date to ensure that everything was dealt with at a meeting closer to the next board meeting.

RESOLVED that

  i. Members indicated how they would like Officers to proceed in relation to the potential introduction of banks for the collection of small electrical appliances, as described at 5.15.

  ii. Members indicated which of the reuse options, listed at 5.33, they would like Officers to explore further, with the intention of returning to a subsequent re3 Board meeting with proposals.

  iii. Members reviewed the proposed revisions to charges for non-household waste, shown at 5.37, and confirm that these should be implemented to deliver full cost recovery apart from the increase to residents for soil and rubble, where a report would be brought back to the board.

  iv. Members instructed Officers to allocate compost under the relaunched community scheme, on a first-come, first-served basis, subject to appropriate allocation between the councils and the fulfilment of the agreed criteria.

  v. Members agreed a date for a first agenda setting meeting as described at 5.50 to be set before the next meeting.

24. **Communications Report**

The Board received a report briefing them on the Partnership's communications activities.

The report covered:

- re3Grow Community Compost scheme
- Contamination awareness
- Vapes recycling
- Recycling Centres inclusion campaign
- Safety at HWRCs campaign
- Anti-litter campaign

Monika Bulmer, e3 Communications and Marketing Officer, detailed the re3grow community compost scheme which was directed at local organisations and

schools. The scheme would be promoted to the public via local news outlets, social media, newsletters, and directly to potential beneficiaries. The press release and social media assets were currently being prepared and would be available to use by the councils' communications officers. There had been 69 beneficiaries last year, with over 160 bags distributed.

Re3Grow compost had commenced at the end of February, which was now in its fifth year. A new poster, promoting its features had been produced and would be displayed at both sites. It was reported that bags had already been sold.

A set of infographics, presenting the current contamination level in each Councils' recycling bins had been produced. It included environmental impacts and costs, and the infographic for each council. These were included in appendix 1 of the report. Across re3, £487k could have been saved last year, if all items were sorted correctly and it was important to talk about this with residents. Officers would be receiving regular infographics.

Vape recycling had been discussed at the previous meeting and was proving to be a difficult challenge. It has been established that the majority of local vape retailers have not set up the take back schemes. Trading Standards believe this is due to lack of information in relation to their legal obligations. Suggested guidance to residents was to recycle vape pens at the Recycling Centres and not placed in rubbish bins. Monika had spoken to OPSS to seek further guidance and Trading Standards had advised it might be helpful for re3 to support retailers by contacting them and providing guidance on how to set up the take back scheme.

The online booking system webform had be enhanced by integrating translation services for over 100 languages. This new feature would aim at improving accessibility and clarity for residents whose first language is not English. The new feature would be advertised using social media advertising, aiming at multicultural audiences living locally. Further research and analysis would be done to map areas of low usage and to advertise the service in those areas. Target groups who were under consideration were residents who:

- had recently moved to the area.
- lived in rented and shared accommodation.
- had low literacy levels.
- had low technical skills.
- had a disability or impairment.
- lived in a deprived area.

re3 was taking part in the trial safety campaign launched by the FCC Environment across their four contracts. The campaign aims at reducing the number of accidents on site.

The re3 Marketing and Communications Officer presented details of an anti-litter campaign that utilised an existing national app called LitterLotto. These incentivise residents to pick up and dispose of litter correctly. The full scope of the campaign had not gained approval from all partnering councils, however re3 would support any council keen to trial the tool.

RESOLVED that Members note the contents of this report.

25.   **Legislation Report**

The Board received a report briefing Members in relation to the emerging detail from the Environment Act 2021, as it related to waste management.

There had been two rounds of public consultations (2020 and 2021), in which Government sought input on how the three main limbs of the strategy (Extended Producer Responsibility (EPR), Deposit Return Scheme (DRS). The consultation documents had been released on these two areas, but the documents on Waste Collection Consistency were still awaiting release.

Extended Producer Responsibility – The Government wishes producers of packaging to pay the full net cost of collection and treatment associated with the packaging placed into circulation. This is to encourage better overall design of packaging. Under EPR, producers will pay modulated fees, set according to the assessed environmental impact and/or treatment cost of the packaging they put into circulation. Councils would be assessed according to the relative 'Efficiency' and 'Effectiveness' of their service. Councils would be placed within a performance cohort, wherein their costs and their performance will be benchmarked against a 'best in class' council. Cohorts would be drawn from councils that shared some similarities.

Individual councils deemed to be sub-optimally 'efficient' and/or 'effective' may be presented with an Improvement Notice. When an Improvement Notice is issued, it would also identify future year funding reductions.

Deposit Return Scheme (DRS) - A deposit, an additional sum on top of the normal sale price, would be added to in-scope packaging, at the point of sale. It was noted that these were drink containers, bottles and cans specifically, but not all bottles and cans! The deposit would most likely be a sum such as 20p per item which was a sum that had been widely referred-to throughout the consultations. This would apply to both single and multi-pack items.

Waste Collection Consistency – Even though the report was yet to be published, it was already known that Councils would be mandated to collect newspapers and magazines, cardboard, glass bottles, plastic bottles, plastic pots/tubs/trays and steel and aluminium cans or tins. Plastic film, aerosols, cartons and foil would be added to the list of mandated materials, most likely in 2027.

Glass collection and plastic film collection and processing would need to be added to re3's current services to achieve compliance.

It was important to note some of the potential outputs and issues that could arise. It was likely that there could be a financial squeeze from producers. The elderly and disabled hadn't been factored into DEFRAs impact assessment, which was still an issue. The cost of living was a big factor, for example the three SNP candidates had recently stated that they would pause their DRS, which was ahead of the one in England, due to the cost issues involved. There were repercussive contract costs as there were certain things within the contract that may need to be changed due to the change in legislation. There was also the issue of possible changes in packaging changes and packaging being phased out which could affect what was contracted to be collected which may complicate things.

Arising from the Members comments and questions, the following points were made:

- Detailed clarity was still being awaited for glass collection. It was unsure when this would be announced, or what the precise requirements would be.
- There would be some support financially provided by the Government, this would be based again on cohorts and a formula.

- Re3 Councils could be based in different cohorts.
- The formula would be based on conditions that took into account demographics.
- The effective and efficiency calculation would drive down costs.
- It was felt best in class could be cause negativity and was a negative approach. It was suggested that a letter be drafted to DEFRA from the Board in regards to this.

RESOLVED that Members note the contents of the report.

26. **Exclusion of Public and Press**

RESOLVED that pursuant to Regulation 21 of the Local Authorities (Executive Arrangements) (Access to Information) Regulations 2000 and having regard to the public interest, members of the public and press be excluded from the meeting for the consideration of items 9 & 10 which involves the likely disclosure of exempt information under the following category of Schedule 12A of the Local Government Act 1972:

(3) Information relating to the financial or business affairs of any particular person.

27. **Financial Management Report**

The Board received the Finance Report which briefed the re3 Joint Waste Disposal Board on the Partnership's current financial position.

RESOLVED that Members note the Partnership's financial position for the current year.

28. **Contract Transition Report**

The Board received a report briefing Members on steps that would be required as the three Councils considered, planned and then delivered the transition of the contract.

RESOLVED that

i. Members note the contents of the report.

ii. Members endorse the contents of the draft Transition Plan and the proposal for indicative costs and timelines to be presented to the re3 Board (as at paragraphs 5.21 to 5.23).

iii. Members incorporate future reports on Transition, in its agenda for future meetings of the re3 Board.

29. **Date of the Next Board Meeting**

Thursday 15 June 2023 at Reading Borough Council.

CHAIRMAN

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Minutes of the 107th AWE Local Liaison Committee Meeting
Tuesday 25th April 2023
AWE, Recreational Society, Aldermaston

Present:

Janine Mantle	Chair
Cllr Philip Bassil	Brimpton Parish Council
Cllr Graham Bridgman	West Berkshire Council
Cllr Avril Burdett	Tadley Town Council
Cllr John Chapman	Purley-on-Thames Parish Council
Cllr Jonathan Chishick	Tidmarsh with Sulham Parish
Cllr Sophie Crawford	Aldermaston Parish Council
Cllr Robert Jones	Padworth Parish Council
Cllr Mark Keeping	Reading Borough Council
Cllr David Leeks	Tadley Town Council
Cllr Clive Littlewood	Holybrook Parish Council
Cllr Mollie Lock	Stratfield Mortimer Parish Council
Cllr George McGarvie	Pamber Parish Council
Cllr Clarence Mitchell	Reading Borough Council
Cllr Ian Montgomery	Shinfield Parish Council
Cllr Susan Mullan	Tadley Town Council
Cllr Carolyn Richardson	West Berkshire Council
Cllr David Shirt	Aldermaston Parish Council
Cllr Jo Slimin	Basingstoke & Deane Borough Council
Cllr Jim Thompson	Wokefield Parish Council
Ian Beveridge	AWE
Nick Bolton	AWE
Suzanne Chenery	AWE
Chris Daniels	AWE
Scott Davies-Hearn	AWE
Toni Lilly	AWE
Claire Lockwood	AWE
Helen Maclean	AWE
James Platt	AWE
John Steele	AWE
Jo Walker	AWE

Regulators:

Ian Rogers	Office for Nuclear Regulation
Gareth Lock	Office for Nuclear Regulation
Rob Green	Environment Agency

Apologies

Apologies were received from Councillors: Mark Binns, Dominic Boeck, Penee Chopping, Stuart Coker, Kevin Cross, John Durrant, Suzie Ferguson, Stuart Frost, Chris Johnson, Malcolm Large, Royce Longton, Tim Whitaker, Paul Woodley and Jonah Maddox (Emergency Planning WBDC).

Actions from previous meetings

- **Action 106/01:** Meeting to be arranged with Cllr Slimin to discuss AWE's relationship with Basingstoke & Deane Borough Council. *(John Steele)*
  Response: John and Cllr Slimin to get in touch. Ongoing.

- **Action 106/02:** Cllr Bridgman asked why there is a chunk of waste incinerated for energy recovery rather than being recycled/reused? *(Nick Bolton)*
  Response: Nick to provide a breakdown of this waste and where it goes. Actioned

- **Action 106/03:** Discharges to be added as an agenda item at the next LLC Meeting. *(Suzanne Chenery)*
  Response: Actioned.

- **Action 106/04:** Details to be provided on how schools are contacted regarding updates to the emergency plan. (Carolyn Richardson, WBC)
  Response: There is a schools guide provided normally on an annual basis, but more frequently if needed due to changes. This provides background information and guidance in relation to their own on-site plans. Until the COVID19 pandemic, annual meetings were also held with the schools in Feb/Mar of each year. This is being resurrected in 2023 with meetings being looked into for June 23 and/or Sept/Oct 23 depending on school availability. Within the AWE Off-Site Emergency Plan itself there is a cascade notification chain for all the schools to be contacted directly by their respective Councils. Actioned

- **Action 106/05:** Details to be provided of emergency plans for school children who walk to school within the DEPZ in the event of an emergency. (Carolyn Richardson, WBC)
  Response: In the event of a radiation emergency when a child, or indeed anyone else is outside at the time, then unlike those in dwellings who would get the landline notification then the warning would be via media outlets. In addition, it would be considered appropriate that the child's parent/guardian would be contacting them and informing them to go to the school or come home, whichever is the nearest, immediately.

  The landline notification has been recognised as a gap in the alerting process as people are no longer so likely to have a landline. As a result, in the future everyone, including children with mobile phones, will be actively encouraged to register with the new notification system which is being put in place. There is also a National Cell Broadcasting system planned and the deadline for that is still TBC but this too will support the notification of anyone in the vicinity to be alerted.

  Update to be provided at the 108th LLC meeting

- **Action 106/06:** Details to be provided of the WBC team dealing with the emergency plan. (Carolyn Richardson, WBC)
  Response: The lead officer in West Berkshire Council is Jonah Maddocks, however other members of the team can pick up queries. It is recommended that all communications be sent to emergencyplanning@westberks.gov.uk.

  The lead officer in Hampshire County Council & Basingstoke and Deane BC is Penny Lewendon emergency.planningteam@hants.gov.uk.

  The lead officer in Reading BC is Justin Patient Justin.Patient@reading.gov.uk

  The lead officer in Wokingham BC is Harry Williamson Harry.williamson@wokingham.gov.uk. Actioned.

- **Action 106/07:** DEPZ to be made an agenda item for the next meeting (Suzanne Chenery / Scott Davies-Hearn)
  Response: Actioned.

- **Action 106/08:** Future planning to be added as an agenda item at the next LLC Meeting (Suzanne Chenery / John Steele)
  Response: Actioned.

- **Action 106/09:** A visit to the Educational Collection will be arranged for LLC members in 2023. (Chris Daniels / Claire Lockwood / Suzanne Chenery)
  Response: We hope to arrange for LLC members to visit the Educational Collection in October.

- **Action 106/10:** Discuss arrangements for a visit to the Educational Collection for members of the general public. (Chris Daniels / Claire Lockwood / Suzanne Chenery)
  Response: Chris and Claire are looking into whether this will be possible as clearance is required from the MOD regarding visits to the Educational Collection by members of the public.

Approval of the 106th meeting minutes

Questions arising from 106th meeting minutes:

It was noted that on pages 8 and 9 of the 106th minutes it should read that Cllr Slimin asked the questions listed and not Cllr Burdett.

Cllr Shirt commented that the survey results were not mentioned in the minutes and that he would prefer more frequent and less lengthy meetings in future. He feels that the importance of the LLC has been reduced.

Cllr McGarvie asked that there should be a vote from the full committee before making decisions on the format of the meeting and suggested maybe two long meetings and two short meetings during the year would be appropriate.

Action 107/01: Check that the feedback from the survey was shown and sent separately from the minutes. (Claire Lockwood)

Introduction

Janine Mantle who is the Corporate Affairs Director chaired the meeting and Chris Daniels who is Senior Manager, Environmental, Social Governance Corporate Affairs welcomed members to the 107th meeting.

Chairman's update

Membership Changes

AWE would like to welcome one new LLC member:

- John Durrant replaces David Livingstone on behalf of Silchester Parish Council
- Peter Markwick has resigned from Baughurst Parish Council and a new councillor will be named shortly

Organisation update including site operations

After 18 years at AWE, and the last three as CEO, Alison Atkinson will formally leave the organisation next month as CEO. The process to find her successor is underway and will be led by AWE Chair, Sir John Manzoni. Whilst this process is ongoing Iain Stevenson will act as Interim CEO until the process concludes. Iain will be sending a letter to all LLC members in the next couple of weeks to introduce himself and will hopefully be joining us at the next meeting in October.

AWE continues to take all actions necessary to keep the sites secure during this period of escalated tension in Europe. Action like this brings with it an increased threat of cyber or other security issues and the Security team has been monitoring the situation, ensuring preparations to protect AWE are robust.

AWE's annual report was published in January and is available on the AWE website. The next edition of Connect will be circulated in May/June time. Following feedback from some LLC members, AWE will be reviewing the mail out recipients for Connect and the areas it is sent to.

Environment, Safety and Health Update

Nick Bolton

ESH&Q Service Delivery Lead

Nick gave an overview of performance in personal and process safety during the period, advising members that the OSHA TRI rate to the end of February 2023 was 0.243. Our estimated OSHA rate remains better than the World Class Benchmark of 0.350.

There was a total of 19 Recordable Injury Events that occurred in the 12 months to the end of February 2023. In the same period to end of February 2022 there were 16 OSHA Events recorded at 0.205.

Since the last LLC meeting in November 2022, there have been no Process Safety events raised during the period. Process safety training for supervisors remains an ongoing focus, increasing Process Safety knowledge across the organisation, supporting supervisors who supervise in high hazard environments.

The Leadership Process Safety training in partnership with Cogent Skills is now being delivered to leaders at AWE with an initial focus on Operations. The intention remains for this course to become a key course for all senior leaders at AWE.

The Process Safety Team are also continuing to develop virtual reality training that can be used to raise hazard awareness amongst staff at all levels of the organisation. The training encourages the organisation to think differently about each activity and details things that should be noted as early warning signals.

With regards to Waste Management, the controlled waste disposal for the financial year to end February 2023 target from the Environmental management System (EMS) is 99% for the financial year 22/23. The total waste diverted from landfill is 98.7% and disposal is 1.3%.

The Atmosphere & Trade Effluent Public Dose Assessment for Aldermaston Stream for the period January 2022 to December 2022 had calculated doses representing minute fractions of the dose constraint set by the Environment Agency of 500 µSv (0.5 mSv) per year for a nuclear site and concludes that there is no hazard to members of the public.

For the nuclear worker during the period 1st April 2022 to 31st December 2022, the maximum individual dose recorded by any worker at AWE is tracked throughout the year and the maximum value recorded was 1.51 mSv.

Questions arising:

Cllr McGarvie: Your numbers are relatively small, internally do you have a filter that removes the bottom or top 10%? Do we only see the trend in the middle?
Nick Bolton: The trend as a whole is reported on. AWE looks into what kind of accidents happen, these are mostly lack of spacial awareness incidents due to distractions.

Cllr Mullan: Are mobile phones a big cause of accidents?
Nick Bolton: Its not been a direct cause of incidents that we are aware of.

Cllr Chishick: Is the increasing trend due to there being more activity on site?
Nick Bolton: No, it's because we have more awareness now to report incidents more often and in more detail than we did before. We also report on more areas of the business and all events are reported through out internal system from which we triage and report.

Cllr Bridgman: Regarding the waste figures, how much waste do you actually divert to energy recovery?
Nick Bolton: From the 98.7% of waste diverted from landfill, 0.4% is used for energy recovery. 96.6% is recycled and 1.7% is reused and 1.3% is disposed of.

Overview of Aqueous Discharges at AWE

Helen Maclean
Senior Environment Specialist

A plan showing the surface water network at AWE Aldermaston was presented showing the locations of the various outfalls around the site boundary.

Surface water outfalls from AWE Aldermaston and Burghfield Sites are sampled monthly for a suite of chemical parameters and the EA also attend and take samples at the same time.

There is also an RA environmental monitoring programme whereby outfalls and the watercourse into which they flow are sampled. The outfalls are sampled monthly and external watercourses are sampled quarterly. Sediments at various locations are also sampled periodically (either quarterly, bi-annually or annually). Water and sediment samples are collected for use in the ERICA Assessment Tool to enable assessment of the radiological risk to freshwater biota. With regards to discharges to public sewer, environmental monitoring takes place on-site at South Road Sewer (SRS) prior to discharge into public sewer, and also at Silchester Sewage Works.

The non-RA (trade effluent) discharges from A Site from the surface water networks site are permitted by the Environment Agency. At A Site, there were separate permits for each of the outfalls and there was an improvement activity in 2017 where the permits were consolidated into one single permit under the new style regulations - the Environmental Permitting Regulations (EPR). There is a plan to consolidate the permits at B Site into a single permit under EPR.

At A Site, specific areas that are monitored are North Ponds which was constructed in 1995, where the outfall discharges into Aldermaston Stream, A4 Fish Pond which is located near the water abstraction boreholes in Aldermaston and was an historic dump for munitions. The A5 Stock Pond which is adjacent to the boundary fence near F28.4 in Aldermaston is also monitored and also discharges to a tributary of the Fishermans' Brook. The A7 Decoy Pond also located in Aldermaston covers the eastern area of the site where there are several water discharges into a large pond called Decoy Pond. The A6 Circus Farm located south of E2.1 Aldermaston covers a large area of the main section of the site, the outfall of which discharges into Circus Farm Ditch located in a neighbour's property opposite the A Site. The A2 Falcon Fields also located in Aldermaston discharges to Upper Moor's Gully. Due to the historical use of the area for cleaning Spitfires with Trichloroethane (TCA) there have been elevated TCA readings in the discharge. As a result two carbon filters were installed to intercept the surface water from the hanger hard standing area. These have since been taken out of service as the TCA levels per filter had dropped to levels that were no longer a concern however there is still an inspection manhole in place at this outfall.

A plan showing the foul waste network at Aldermaston was shown. AWE Aldermaston is consented by Thames Water to discharge certain types of Trade Effluent via the Foul and Trade Drainage network into public sewer and ultimately to Silchester Sewage Works. Monitoring is carried out at the on-site Trade Effluent Treatment Plant (TETP) and at South Road Sewer. Monthly returns (pertaining to discharges from the TETP) are made to Thames Water reporting 26 chemical determinands.

RA Aqueous Waste discharges from Aldermaston and Burghfield Sites - the Environment Agency has issued Permits covering RA Aqueous Waste discharges from A and B Sites, with AWE providing 6 monthly and/or annual reports to the EA to demonstrate that discharges are within specified permit limits.

A plan showing the surface water network at B Site was presented showing the locations of the various outfalls around the site boundary. Various slide photos were shown covering each of the surface water outfalls and a brief description of each. Photos of the Brook and the on-site sewage treatment works were also shown. The outfalls along the western and southern boundary of site discharge into the Burghfield Brook. 2 outfalls on the northern boundary discharge into the ditch to the north of site.

The non-RA (trade effluent) discharges from B Site from the surface water networks and from the on-site sewage treatment works are permitted by the Environment Agency.

Automatic/proportional samplers located in the Brook as it enters and leaves the site collect a composite sample over a monthly period. This forms part of the RA Environmental Monitoring Programme.

Treated sewage from Burghfield Sewage Treatment Works is discharged to Burghfield Brook which leads to the Foudry Brook that ultimately flows into the River Kennet. A continuous flow meter and recording system reports the daily volume of which shall not exceed 2000 cubic metres per day.

Questions arising:

Cllr McGarvie: Does the dump for munitions in the A4 Fish Pond affect the readings eg nitrates leaking in?
Helen Maclean: No there has not been any evidence of this.

Action 107/02: Cllr Keeping asked if sediment is sampled at South Road Sewer? Helen to provide an answer for the next meeting (Helen Maclean)

Cllr Slimin: How often do you sample?
Helen Maclean: The chemical is a monthly grab sample, for the RA we have auto samplers which are constantly taking a sample over a monthly period but that's in the brook and at the outfalls at B Site we do a grab sample.

Cllr Mullins: Do you do your testing in-house?
Helen Maclean: The RA monitoring is in-house but there are also labs with which AWE outsource testing. Chemicals are tested both on and offsite. If we wanted to achieve lower detection levels, AWE would send samples to an off-site lab (e.g. Wessex Water) if there is a specific issue that we were investigating.

Cllr Mullins: How often does the auto sampling equipment get checked.
Helen Maclean: As the auto-sampling equipment obtains a monthly composite sample, if there is an issue, then a maintenance request would be raised and it would be noted in the regulatory report. In terms of calibration, AWE follows industry best practice. All of our monitoring equipment is deemed as Environmentally Critical Equipment (ECE) so it is subject to testing and maintenance.

Cllr Slimin: Does the brook flow into the River Kennet?
Helen Maclean: Yes, eventually it does.

Action 107/03: Cllr Thompson stated that some parishioners live near the Burghfield Brook and they have expressed concerns to where it enters as the brook is choked with vegetation and immature trees, they are concerned that this will slow the flow which could cause flooding to their properties. They have made representation and were told that it would be looked at in September. It looks like the brook is between two levies and has the capability to rise considerably before it overflows but the impact upstream is unknown. Helen to find a response to the question from the Flood Litigation team. (Helen Maclean)

Cllr Thompson: We never see any water in the brook. It is working?

Helen Maclean: I have been told that it is very successful so I presume it is working. My area however is not flood risk.

Action 107/04: Helen to speak with David Ashworth regarding the working state of Burghfield Brook and report back at the next LLC meeting (Helen Maclean)

Action 107/05: Include Flood Risk as an agenda item at the next LLC Meeting (Suzanne Chenery)

Cllr Chishick: You state that the volume of discharge shall not exceed 2000 cubic metres. Have you ever been close to exceeding that limit?

Helen Maclean: We have come close but we haven't exceeded it in the past 3 years and it would be very unusual to exceed that.

Cllr Shirt: Will the fact that there are a lot of contractors working on the MENSA building make a difference to the figures?

Helen Maclean: Yes, the more people on-site, the higher the figures when using domestic systems.

Regulators Update

Ian Rogers, Lead Site Inspector
Office for Nuclear Regulation

The ONR report was circulated prior to the meeting for the period 1st October 2022 to 31st January 2023.

Inspections

During this period ONR visited the site on ten separate occassions for the purposes of conducting a broad range of inspection activities.

It is worth noting that nothing should be inferred by the number of separate visits undertaken by ONR inspectors, this is more a function of the approach being applied currently to the scheduling of ONR's activities by AWE. ONR are now working with AWE to encourage a more consolidated approach utilising the scheduled monthly site inspection weeks more effectively to reduce the burden to the ONR inspection teams.

Routine Inspections

During this period the routine inspection activities covered a broad range of topics including: examination, maintenance, inspection and testing, staff training, qualifications and experience, emergency preparedness, radioactive waste management, decommissioning, assurance and governance, management of modifications to existing plant.

ONR inspectors attended site to assess the Level 1 Site Safety Demonstration Exercises at the Aldermaston Site [12 Oct] and Burghfield Site [7 Dec]. Both exercises were based on challenging scenarios, particularly with regards casualty management and recovery, and provided the opportunity to stretch AWE's emergency response arrangements. Both exercises were assessed as meeting the regulatory requirements of LC11(5) [Emergency arrangements] and Regulation 12 of the Radiation (Emergency Preparedness and Public Information) Regulations 2019.

ONR continues to seek assurance that the Aldermaston Site's response to the shortfalls in confined space arrangements, resulting in the Prohibition Notice reported at the last LLC, are progressing in a manner that will deliver the required regulatory requirements.

ONR continues to assess AWE's progress in delivering the safety improvements necessary to support the Aldermaston site moving to a routine level of regulatory attention. The outcomes from those activities have been encouraging with the site having made significant improvements over the last 12 months. As a result, ONR has closed out the associated Level 1 Regulatory Issue and is content that AWE remains on track to return to a routine level of regulatory attention.

In addition, ONR continues to undertake a series of activities in support of the oversight and permissioning of significant programmes of work.

Update on Non-Routine Matters and Events

There was only one event of particular note during the period:

- On the 25 Oct, AWE notified ONR that the Nitrogen supply to one of the operational glovebox lines within the Plutonium Technology Centre had been isolated for an extended period potentially exposing the interior of the glovebox to atmosphere. This has been rated as a Level 1 event on the International Nuclear Event Scale (INES) due to the failure of a principal line of defence. There was no challenge to primary containment which has been maintained at all times by the ventilation system in that area. In addition, all bulk material remains within containers within the gloveboxes. ONR is satisfied that AWE's response to the incident has been conducted in accordance with its arrangements. AWE is conducting its own investigation into the event, which is still ongoing to date; ONR will await the outcome from this investigation but findings to date have identified that the Nitrogen overblanket is there as a principal means of product quality control, rather than to perform a safety function.

Formal Regulatory Activity

No LIs, Enforcement Notices or Enforcement letters were issued during this period.

In December 2021, ONR issued AWE with an Enforcement Letter, ONR-EL-21-033 in response to the inadequate management of radioactive waste. The actions resulting from that Enforcement Letter were progressed via a Level 3 Regulatory Issue RI-10469. AWE have addressed the actions associated with this Regulatory Issue which has been closed via ONR's formal governance arrangements. Correspondingly, Enforcement Letter ONR-EL-21-033 has also been closed out.

News from ONR

For the latest news and information from ONR please visit the website Local Liaison Committee / Site Stakeholder group reports (onr.org.uk)

Questions arising:

Cllr Slimin: Was the incident on 25ᵗʰ October an equipment or procedural failure?
Ian Rogers: It was a procedural failure resulting in a technical breach of an operating condition. Subsequent investigations have identified that there was no safety significance associated with the failure, instead it was part of the corrosion protection arrangements for the equipment involved.

Cllr Bridgman: Are there any other live enforcement issues to be closed?
Ian Rogers: There is one prohibition notice and one regarding organisational capability.

Cllr Keeping: Regarding the Nitrogen incident. What if it hadn't been containerised?
Ian Rogers: If Nitrogen was there to provide the safety function, then we would have taken correct

action. The Nitrogen in question was only there to prevent corrosion to the product itself and the material is not dangerous when introduced to air.

Cllr Slimin: We know that ONR are involved in determining exclusion zones. How many other sites have exclusion zones?

Ian Rogers: There are 37 nuclear sites and 10 defence sites. All have on-site emergency plans and all have outline planning zones. Where REPPIR 2019 requires they have exclusion zones (referred to as Detailed Emergency Planning Zones (DEPZ). AWE is carrying out the 3 yearly review of their hazard evaluation and consequence assessment at present. This is part of the wider 3 year review under REPPIR 2019.

Cllr Slimin: With very limited development in our area, it would be interesting to know what other local authorities are experiencing.

Ian Rogers: There are two forums that deal with this. There is the Nuclear Emergency Arrangements forum, which includes operators and local authorities who specifically talk about nuclear arrangements. There is also a local authorities working group and ONR represent in each meeting. ONR no longer determines the detailed emergency planning zone. When the new REPPIR came into force in 2019, the determining of the DEPZ moved to the local authority.

Rob Green
Environment Agency

The Environment Agency report was circulated prior to the meeting for the period 11th November 2022 to 14th April 2023.

The Environment Agency issued its 2023-24 Site Environmental Review (SER) for AWE sites. The SER draws together the evidence and information used to support the Environment Agency's regulatory priorities and outcomes for 2023-24, as well as providing the organisation's view on AWE's regulatory environmental and compliance performance for financial year 2022-23. The SER can be made available upon request. For financial year 2023-24, the Environment Agency's priorities include AWE's Higher Activity Waste programme and the management of ageing assets. In addition, monitoring AWE's progress on its HEPA filter and ventilation management improvement programme and holding AWE to account against commitments it has made previously in this area remains a priority. As a reminder: these improvements are being sought by the Office for Nuclear Regulation and the Environment Agency as part of a joint intervention in response to shortfalls that were identified 3 years ago. AWE has, so far, made good progress on its improvement programme and hopes to complete this by the end of the year.

Rob explained that although he represents the organisation's Nuclear Regulation function, which regulates the disposal of radioactive waste at nuclear licensed sites, the Environment Agency has a number of broader regulatory duties and interests. These include sustainability and climate change mitigation arrangements and the Environment Agency has been working with AWE to monitor AWE's progress in this area also. This remains something of interest to EA and will continue to monitor this moving forward.

There were six site-based regulatory (permit) compliance inspections completed during the period, covering both a mixture of facility inspections and thematic compliance assessment activities. There were no permit non-compliances identified during these inspections but regulatory observations and recommendations on areas for improvement were identified to AWE and will be monitored as part of the Environment Agency's routine regulatory business.

AWE is required to provide the EA with information and data concerning radiological environmental monitoring that it is obligated to undertake, as well as data from the analysis of samples of gaseous and liquid radioactive waste discharges into the environment. The Environment Agency scrutinises

these data on a periodic basis and completed a compliance assessment activity covering this area during the period.

AWE operates under a number of other permits, in addition to its radioactive waste disposal permits, that the Environment Agency has issued for certain industrial activities. This includes the combustion activity permit, which the Environment Agency assessed during a compliance inspection in September 2022. Two minor non-compliances were identified in relation to the inappropriate storage of potentially polluting liquid. The issue was corrected by AWE relatively quickly and EA are still working with AWE to satisfy itself that AWE has put in place appropriate improvements to its management arrangements to ensure that this issue doesn't arise again.

In addition to the routine compliance assessment activities Rob previously described, he drew attention to a non-routine matter concerning the disposal of a non-conforming waste package from AWE to Sellafield. AWE notified the Environment Agency that a radioactive waste drum found to be containing a small amount of liquid had been sent to Sellafield in error, since Sellafield's Waste Acceptance Criteria did not allow for the receipt of liquid within radioactive waste drums. The presence of the liquid was not picked up by AWE's radiography equipment but it was detected by Sellafield's radiography system before being accepted into its waste treatment facility. The drum was subsequently quarantined at Sellafield. The Environment Agency identified two minor non-compliances with AWE's environmental permit and is currently in discussions with AWE as to what improvements might be made to prevent a similar incident reoccurring.

Questions arising

Cllr McGarvie: I take it that the licence of that drum from AWE to Sellafield does not include a return journey on an empty lorry?
Rob Green: AWE's environmental permit at Aldermaston Site allows for the receipt or return of radioactive waste. However, in this case the ownership of the waste has been transferred from MoD to the Nuclear Decommissioning Authority, under established arrangements, and the waste will remain at Sellafield.

Estate Services Update

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Johann Walker
Head of Estate Services

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Protestor activity continues with the 'Womens Peace Camp' on the second weekend of each month. There is no other planned activity scheduled at this time.

Concern was reported for an imminent planning application for four buildings being proposed external to AWE. This was a non AWE issue and the caller was advised to contact West Berkshire Planning authority.

The Community Concerns line received a call to advise AWE that there were private works taking place on a property near Blacknest, this was for AWE information only.

Finally an individual contacted the Community Concerns line with regards to a restricted covenant on their property. An Estate Surveyor in the Defence Infrastructure Organisation contacted them to confirm correct route for the query and contact details.

AWE has a target to be Net Zero for direct carbon emissions by 2040 and one of the many activities in support of this target is to accelerate the decarbonisation of AWEs' electricity supply by developing low carbon power generation sources such as solar. Several of the new facilities such as The Hub will have solar roof panels, however despite the size of the site, AWE only has very limited space available

for further solar installation. To meet the Net Zero targets, AWE is engaging with potential supply chain partners to develop offsite solar farms for both AWE Aldermaston and Burghfield sites.

AWE's site strategy is to remove redundant facilities to both reduce the nuclear liability but also eliminate the costs of maintaining these facilities in a safe condition. Decommissioning is now being delivered in a holistic manor which provides AWE with both efficient hazard reduction, predictable performance and flexibility to address changing requirements or discoveries.

Works are currently underway in a cluster of former production facilities and the Sites' former liquid waste treatment plant. Preparation is underway to bring all of the remaining redundant nuclear facilities into decommissioning as they transit through the Post Operative Clean Out (POCO) phase of their lifecycle.

Questions arising:

Cllr Keeping: Is there still an objection to wind power?
Chris Daniels: Because of the safety regulations, we would only be allowed a total of three turbines on the site so it would not be a valuable addition.

Action 107/06: Jo to provide Cllr Keeping with more information regarding the rumour of an issue with Green Park disturbing the AWE monitoring system due to vibrations from this source. (Jo Walker)

Cllr Bridgman: Bloomfield Hatch, which is a solar farm being developed by WBC was put forward for a commercial opportunity to the Exec for two reasons. Firstly, it was a commercial sale into the market and secondly selling the power to AWE. What percentage of AWE's requirement of a site of that size is it going to provide. How much solar would AWE need?
Jo Walker: The figures for this are still being worked on but we will update you at the next LLC meeting.

Action 107/07: Jo to provide details on how much solar energy AWE require to run the selected operations on site. (Jo Walker)

Action 107/08: At the request of Cllr Shirt, Jo to update LLC members on what external sites AWE are considering to use as solar power areas. (Jo Walker)

Cllr Mullins: What does happen to liquid waste?
Jo Walker: AWE does have a plant on-site that manages any potential radio active liquid on site and it gets treated and becomes a small bi-product and then it gets moved offsite as radio-active waste.

Estate Development Update

John Steele
Head of Estate, Development & Planning

There are major developments in the centre of the Aldermaston site, which is in an area called the Central Development Area [also to be known as Future Materials Campus], details of which will be broadcast to you as they mature for which we are developing a planning strategy.

This time there may be a strategy which involves more than one building some of which will be in detail and some of which will be in outline. This is called a hybrid application. Further details will be presented when the planning strategy has matured.

AWE may also come forward with an enabling application which will allow for the removal of legacy infrastructure and prepare [enable] the ground for future construction. The application will go through due process and will be sent to WBC for consideration.

Over the next few months we will be submitting a number of prior-approval notifications to WBC. These will be for demolition and clearance as whenever a new building is developed there needs to be clearance to demolish and clear an old building.

Questions arising:

Cllr McGarvie: Green park is downstream and they are putting in requests for thousands of houses. Has the due diligence been done to take in to account the railway station?
John Steele: There are two embankments to the railway both of which will restrict any flooding back to the AWE site. There should therefore be no upstream flooding effects upon AWE B.

Cllr McGarvie: My concept of the regeneration is you will concentrate the whole site into a couple of key buildings and the space where the old explosives buildings used to be will be cleared in time so why can't you put solar in there because it's only going to be there for 25 years?
John Steele: The explosives area is discounted due to the fragmentation of the solar panels under certain accident scenarios. Although AWE needs solar power, it might be better for the business if it was provided off-site.

Action 107/09: Cllr Slimin and Cllr McGarvie requested an update on solar and how this will effect local residents at the next meeting (Andrew Lowe)

Cllr Mcgarvie: I believe that MoD are looking at how they respond to single planning applications around the DEPZ moving forward and the emergency plan for areas around AWE. Is that correct?
John Steele: AWE reviews planning applications in the area as well as local plan allocations and AWE/MoD take any action as required (including occasionally objecting to planning applications).

There is a public enquiry starting on 6th June at West Berkshire District Council's Offices regarding a proposed development called the Hollies at Burghfield Common, which is an application to build 39 houses to which AWE, ONR, MoD are appearing. The evidence which will be presented will all be in the public domain. It will provide a detailed explanation of the AWE/MOD position in respect of proposed developments within the DEPZs.

Cllr Burdett: We find that some building contractors have their own emergency plan in place so there is no need to consult with anyone else. There is an application for April and they are saying that there is an emergency plan in place for that.
John Steele: That application is for a site near Boundary Hall which is unlikely to get consent.

Cllr McGarvie: Would ONR have the right to inspect that emergency plan that private landlords allegedly have in place?
John Steele: My personal view is that emergency plans presented by residential landlord's don't work well given the regulatory framework. It is different if it's a commercial business and then you can resort to health and safety legislation and approach it that way. ONR is the regulator of West Berkshire and the Off-Site Emergency Plan but is not the regulator of private landlords so has no right of inspection.

Cllr Mullan: There is a business pushing for a new development outside the DEPZ. This is also a concern due to illegally placed caravans, this hasn't come up as a planning application but how does this fit in with emergency planning?

John Steele: AWE would have to look at the boundary and where the caravans are concerned, if there is a pre-app in place.

Action 107/10: A3 External Planning to be an agenda item at the next meeting. (Suzanne Chenery)

AWE Emergency Planning & Preparedness

Carolyn Richardson

Service Manager – Joint Emergency Planning Unit

DEPZ

Every three years there is a review under REPPIR 2019. The last 3 year review was completed in January 2023. AWE produced a letter stating that there were no changes to their 2019 consequences report for A and B Site. WBDC went through the whole process of redetermination the DEPZs for A and B Sites. There were two small changes to the DEPZ around AWE Burghfield where properties were not included, so changes had to be made to include them. The next formal review will take place in three years unless WBDC requires there to be a change or AWE require to undertake a review as a result of a material change to operations on site. All the information regarding this is available on the WBDC website.

Off-Site Plan

The AWE Off-Site Emergency Plan was revised in March 2023 mainly due to Aldex 23 taking place in April 2023. The plan was created as a 2-part plan, one being a public version and one a secure plan due to the sensitivity of the information. The plan now needs to be reviewed with the MoD before issuing. However as a result of the Aldex 23 exercise the learning from it will mean the plan will be updated again.

Training sessions on the plan have been taking place with professional partners which is routine and are usually held every 6 months. It is recognised that a LLC session was also due to be put in place.

Action 107/11: Arrange a date for the LLC awareness session. (Jonah Maddocks)

School Guidance

The schools guidance has been revised and issued to all the schools. WBDC are meeting with the schools in June to go through the the guide with them so they have a full understanding and if there is anything that needs to be clarified. When WBDC get notification from AWE that an incident has happened, there is a list of all the school email and phone numbers including personal phone numbers. The format used is to initially email everyone to get as many notifications out as quickly as possible and then to prioritise phone calls into the schools that are in and around the affected area.

Aldex 23

Testing of the plan (Aldex 23) took place on 24th April 2023. There was approximately 180 personnel from 35 agencies involved. It was focused on an AWE Burghfield incident so both Reading and Wokingham Councils were also involved along with emergency services, UK Health & Security Agency,

public health consultants from all of the councils, DLUHC, Network Rail and GWR. A lot of good learning came from the event. A hot debrief started straight after the event and is now moving into the cold debrief via a survey and then physical meetings will take place to discuss the lessons identified. This whole process will take roughly three months to complete. Although the next exercise is not planned for at least another 3 years, there will still be regular workshops in place for areas that we feel need attention.

Incidents
There have not been any incidents relating to AWE that WBDC have had to respond to which is good news.

Resourcing
At the last LLC meeting, there were a few questions relating to resourcing within the WBDC team. At the start there was a team of five, then during COVID19 the team increased to seven. Due to some staff leaving the team was down to four for a period of time. Recent recruiting has meant that within the next few weeks the team will be back up to seven which will create more resilience. Jonah Maddocks has taken on the role that Amy Gower had within the team.

Emergency Alerting Texts
The question of using the national alert system for any AWE Incidents arose. This currently isn't a possibility due to the nature of the business, any nuclear related emergency at AWE requires an instant alert system in place. This is currently a work in progress with the government and the regulators.

Public Information Leaflet
The Public Information Booklet will be delivered in May 2023 and website pages updated.

Off-Site Emergency Planning Group
The Off-site Emergency Planning Groups is now meeting on a more regular basis again after the COVID period. WBDC are also heavily involved with the National Local Authority Nuclear Working Group which is where all of the local authorities who have nuclear licensed sites get together, normally twice a year to discuss new legislation, new issues, new learning and is a good forum to catch up and find out what everyone else is doing and to see how things can be done better.

Questions arising:

Cllr Slimin: How is the relationship with schools over the border in Hampshire?
Carolyn Richardson: We work jointly with the surrounding Councils including Hampshire, Reading and Wokingham.

> **Action 107/12:** Check which schools are registered to take part in the Emergency Plan outside of West Berkshire and provide this information at the next LLC meeting. (Carolyn Richardson)

Cllr Crawford: Is it the responsibility of the schools to educate the parents and children of the emergency plan and do they organise emergency exercises?
Carolyn Richardson: The WBDC do encourage this and also encourage the schools to put the processes on their websites.

Cllr McGarvie: Under development and control, are the local plans covered? Basingstoke & Deane currently does not have a 5 year plan for land and everything outside the DEPZ seems to get planning permission due to the fact that no plans are currently in place.

Carolyn Richardson: They are covered. The WBDC speak with about four planning authorities to make sure the DEPZ and the people inside are protected as far as possible.

Cllr Slimin: What would you classify as a clear break from the DEPZ? We just had a presentation from Beaulieu Homes yesterday at the town council about Skates Lane potentially coming forward.

Carolyn Richardson: There have been long discussions with the planners about this site. There is a buffer to be put in place with a requirement that nothing gets built within that buffer area.

<div align="right">

Scott Davies-Hearn
Manager Emergency Response

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AWE B ran a (Level 1 Demonstration Exercise) which was successfully delivered and assessed by the regulators as an adequate demonstration of the AWE emergency response arrangements.

AWE provided scenario information and general support to the West Berkshire District Council (WBDC) Aldex delivery team for the recent Aldex 23 exercise.

There has been a technical review and update to the public AWE (REPPIR) warning and informing leaflet. The leaflet is in the process of being issued by WBDC.

There have been no activations of the site emergency response arrangements requiring the attendance of external emergency services during this period.

On-going support is being provided to assist WBDC in the preparation and future delivery of the AWE OSEP awareness activities.

External Technical Partnerships

<div align="right">

Dr Toni Lilly
SET Principal Operations Manager

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The Business Plan identified key strategic priorities to enable AWE to be successful which included the need to partner with industrial and academic collaborators to innovate ways of working, accelerate delivery and access additional talent pipelines.

The aim of technical partnerships is to;
- Provide understanding of external research and innovation landscape
- Provide financial leverage
- Provide technical peer review and advice
- Enable workforce development
- Extend external influence
- Extend technical capability
- Enable recruitment opportunities
- Support for studentships

- ~ AWE funds doctoral level studentships through a number of routes including established Centres for Doctoral Training (CDTs) across UK academia.
- Industry Partners
  - ~ These interactions are vital in utilising existing UK facilities effectively, securing investment in future projects and ensuring an integrated approach, to help address the national skills agenda across the nuclear and defence enterprise
- William Penney Fellows
  - ~ An established scheme that creates and fosters a strategic link between the company and selected academics. William Penney Fellows are highly respected leaders in their fields, act as ambassadors for AWE in technical communities.
- Strategic Relationships
  - ~ Mutually beneficial enduring academic, industry and professional collaborations enabling our people to acquire, share and transfer knowledge, promoting a diverse and skilled workforce enabling access to specialised resources and unique facilities.
- Centres of Excellence
  - ~ AWE funds CoEs at universities across the UK, providing strategic long-term research and key services. The centres deliver research and support through academic, postdoctoral and postgraduate activities and engagement in specific disciplines.
- Strategic Alliances
  - ~ Strategic Alliances deliver opportunity for further work in various fields that are of interest to the university, AWE and wider academia.

AWE is currently sponsoring 75 PhD students and 93% of those students are based in science areas, a much smaller number in engineering but AWE are looking to grow that and there is also a small number of staff who wish to do a PhD.

AWE works with around 30 Universities around the UK. AWE also work with a huge range of organisations within the UK. The vast majority of which will be just in a supplier relationship.

The Department of Science, Innovation and Technology funds organisations known as a 'Catapult Centre'. These centres were established to take ideas and grow the applicability to industry, giving industry an opportunity to try these ideas out before bringing them in-house. The one that AWE is involved with most at the moment focuses on high value manufacturing.

AWE is also interested in partnering with industries because due to the current economic climate, it is proven valuable to partner with industries of similar interest.

The current and planned engagements with industry enable:
- Developing technical SQEP
- Upskilling benefits of partnering on engineering challenges
- Owning and placing complex technical requirements on industry
- Key technologies acting as UK technical authority and providing expert peer review
- Obtaining privilieged information through NDA's
- Assistance with horizon scanning
- Keeping up with latest technologies
- On-the-job training and refreshed skills for staff
- The opportunity to bring in expertise when there is insufficient long term deman
- Participating in UK programmes for capability resilience in the nuclear sector.

There are 29 Heads of Profession at AWE and they cover everything from Finance to Engineering. They serve as AWE's senior professional ambassadors and support the staffing development. This runs 2-fold, not only is it training the staff but it's showing the country and the rest of the world about the quality of the staff that AWE has. AWE also goes out to help the professional bodies raise awareness of standards in the wider community.

AWE's development programmes are accredited with the Institute of Physics, IMA, IChemE, BCS The Chartered Institute for IT, Institute of Civil Engineers (ICE), Royal Society of Chemistry, I.M3, IMechE and The Institution of Engineering and Technology (IET).

Finally, there is also an element of inspiring the next generation. AWE recently supported the Henry Royce Institute in a public outreach activity and regularly hold conferences for sponsored Phd students and also provide a prize for the' Best Materials PhD Thesis' every year.

Questions arising:

Cllr McGarvie: Orion has been let out to Universities on occasion for research. Is that part of your programme as well?
Dr Toni Lilly: It's not part of my team specifically. We use the Science and Technologies Council to judge the bids for Orion time. About 15% of Orion's time is dedicated to academic research.

Cllr McGarvie: There was a large partnership that I saw advertised to do with the hydro-dynamic French deal. Is that still on the cards or did that not survive Brexit?
Dr Toni Lilly: That is in operation. We do have facilities in France that are covered by the Technology Centres as that is an operational process.

Community Update

Claire Lockwood
Senior Manager Community Engagement
Corporate Affairs

Orion Visit by St Swithun's School
Winners of the AWE Challenge at TeenTech from St Swithun's School, Winchester were awarded the prize of a visit to the Orion laser facility at AWE Aldermaston. The challenge was to programme robots to move around a maze. The winners were a group of female students which was great as AWE is trying get more females interested in STEM.

Part of the visit included a networking session with some of AWE's female staff members who talked about routes into different careers at AWE. Those involved included one of AWE's HR consultants talking about the Graduate Programme. Another consultant spoke about the apprenticeship route into AWE and a graduate and apprentice spoke about their roles at AWE. Finally Kerry Barker spoke to the students about how she started her career as an apprentice and now she is the Head of the Technology Centre. It was a very inspiring and engaging event to which AWE received some great feedback.

Virtual Careers Information Event
Student's in years 10 – 13 from schools and colleges in Hampshire and West Berkshire, along with their parents, were invited to attend this AWE event to find out about all the apprenticeship and

graduate opportunities that AWE has to offer. It was held in the evening so both students and their parents could attend. It was a great opportunity to speak with parents, guardians and students about the wide range of apprentice and graduate careers that are offered at AWE. The audience was also able to experience what apprenticeships and graduate roles are really like by hearing from some of the apprentices and graduates.

Get Inspired

Get Inspired Basingstoke and Get Inspired Basingstoke & Test Valley are both annual interactive careers events, held at the Apollo Hotel in Basingstoke. Over 50 employers across a wide range of sectors volunteered to showcase the opportunities their businesses offer. AWE attended to showcase the great work and job opportunities at AWE. AWE wanted to give the students the opportunity to gain a real understanding of the broad range of exciting career paths at AWE, especially as the recruitment window for graduate and apprentices was still open at the time of the event.

Time to Give

Staff at AWE continue to utilise the 'Time to Give' programme to share their skills and support with the local communities, either individually or as a team. Each staff member is allocated two full days a year to use as their 'time to give'. Volunteering not only benefits the community but allows staff to use their skills to make a difference and boost their wellbeing. The scheme has proved popular and has already seen staff supporting a wide range of community projects and charities.

Community Communications

Raising AWE's profile with community and other external stakeholders through the effective use of communications is one of our Community Engagement objectives. We use a variety of communications channels to do this including our website, Connect our community magazine, social media, the media and Vimeo for videos.

Questions arising:

Cllr Slimin: We've had the benefit of some of your staff helping us on Tadley Common to clear the gorse. Since then we have actively kept up the good work and really appreciate the help we received and the motivation to carry on with a group that has been formed called 'Friends of the Common' who will hopefully carry this forward after the bird nesting season.

Cllr McGarvie: You say each member of staff gets 16.5 hours in the 'Time to Give'. Do you have an aspirational target corporate wide with people spending that set time?

Chris Daniels: We're at an early stage of launching the programme and want to start boosting the number of people volunteering. Over time, we would like to be able to move to making sure the volunteering we do makes the most of our people's skills.

Cllr Slimin: As an example, if we were looking for people to advise local residents on how to use their energy more efficiently in their own homes, would some of your staff be interested in helping us do that?

Chris Daniels: Please send any specific requests to claire.lockwood@awe.co.uk and chris.daniels@awe.co.uk and we will advertise it to our staff.

Cllr Lock: asked about primary STEM and she and Claire agreed they would discuss this after the meeting ended as it was time to move to the next agenda item.

Any Other Business

We would like to give a fond farewell to John Chapman who is resigning his post on the LLC Committee. AWE and all the other LLC committee members wish him well and thank him for the time that he has dedicated to the committee.

Also, we say farewell to AWE's John Steel who will be retiring soon and thank him for his long time service in supporting the Local Liaison Committee.

Date of Next Meeting

18th October 2023

Reading Climate Change Partnership

Board Meeting Minutes, Thursday 19th of January 2023

MS TEAMS meeting online and recorded, 10 AM-12 PM

Attendees			
Tim Dixon (co-Chair and chaired meeting) Tracey Rawling-Church (co-chair) Tricia Marcouse Alison Foster	Heather Marshall Ben Burfoot Peter Moore Sarah Parker Mike Waddelove	Tony Page Matt Williams Paul Ducker Alison Hilton Dylan Parkes	Chris Maddocks Melanie Porter-Turner Scott Witchalls

Item	Action- Who?
1. Welcome, introductions, and apologies for absence Apologies: Grace Andrews, Rachel Hazel, Rachel Spencer, Shreeya Paudal, and Nick West-Oram. Welcome to new board members Mike Waddelove and Dylan Parkes. Mel has joined from RBH as she is helping on Net Zero and heading up programme delivery for redevelopment.	
2. Staff Changes SP leaving role of Climate Change Partnership Coordinator with last day 17th of February. TD has retired from the University of Reading and not embedded with what is happening at the University due to this. TD is stepping down as the co-chair from the Reading Climate Change Partnership (RCCP) Board. The role of the University of Reading Representative will be taken over by Dylan Parkes. TD will still be attending the next board meeting scheduled on the 20th of April. The departure of Tim will lead to a co-chair vacancy and if anyone would like more information, please speak to TRC or TD.	
3. Minutes of last meeting – approval Minutes were approved by the board and a review of past actions was done.	
4. Presentation from Museums Partnership Reading (MPR) and Our Green Stories by Matt Williams and Alison Hilton MPR is a consortium of Reading's two leading museums: The Museum of English Rural Life and Reading Museum, a unique university and local authority partnership.	

MPR has been an Art Council England National Portfolio Organisation since 2018 and was recently successfully re-awarded NPO funding for 2023-2026.
Since 2018 MPR has developed a wide range of projects and programmes. This included engaging audiences during the pandemic.

Key areas of works have been collections, digital, partnerships, placemaking, volunteering, and engagement with children and young people.

Our Green Stories is a new strand of MPR activity, it is a creative campaign exploring environmental issues through exploring museum collections.

Walking tour between the two museums was successful and there will be a focus on environmental issues you can spot on a new environmental walk.

MPR focusing on UN Sustainable Development Goals and 6 of the goals were picked. Launched consultation during Climate Festival.

Lots of projects: blogs, February half term programme for families, Our Green Stories gallery trail coming soon, working with schools on a project called Create a Buzz with St. Johns School and Alfred Sutton in partnership with Nature Nurture, commissioned an artist to work on a life below water piece, museum on wheels, Green Screen films with local communities, and making the most of programming around GAIA.

More information: https://merl.reading.ac.uk/whats-on/our-green-stories/
https://www.readingmuseum.org.uk/blog/our-green-stories#

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5. **Review of Reading Climate Emergency Strategy 2025-2030 PM**

Presentation and discussion paper by PM (attached). In May 2023 we will be halfway through our current Reading Climate Emergency Strategy. Key issues discussed: scope and content, structure and format, and process for review. 2020-2025 strategy was pretty good but could be improved in the next iteration.

Discussion Key Points

BB: Critical point around Local Area Energy Plan and SSEN who have been finding they have significant limits to what can be added to electrify the grid. Current strategy relies on electrification, and it will continue to be based on this.

Local Area Energy Planning has started to become more of a standardised process and allows mapping out a trajectory of the future for the energy context. This is being done by authorities who are looking to get to Net Zero.

SW: Carbon weighting of actions is key and dashboard for local data is essential.

TM: Carbon weighting on actions is difficult. Is it possible to get resources from the University of Reading? Where will data be coming from?

DP: Lots of research already happening at the University which can help with data. Reservation about the current plan as it is unclear on who is leading on what, ownership, and on outputs. There is a need to identify drivers for the next 5 years of the plan. TP: Skidmore review was helpful and there was an emphasis on local action as well as need for a national framework. The overall delivery depends largely on central government action and wider partnership working. The wider public see climate action as the council's job. As a Council there are very limited resources. Actions identified by the board for the strategy are dependent on council resources. We have good public sector engagement in Reading, but big private companies need to be engaged as these companies can help with their resources. CM: There has been £26 million from central government for busses but that does not include electric busses as this is a different funding stream. While it is great to have funding to make improvements it can't be used for electric busses which is one of the key things that the council wants. This is a specific example of not getting the support from central government. There should be a section to highlight achievements in the new strategy as well. PM: Do the six action themes remain the right ones? HM: Should we look more at an outcome-based approach as to what we want to strategically deliver. It may lend itself better than using themes. DP: Who are we writing the strategy for? Audience identification is key. Comms expertise can be used to create a version of the strategy for the public. There can then be a specific version for the board as well. PM: NESTA/UCL (Net Zero scenario pilot), have offered this pilot to RBC. It is a mini citizens assembly model but doesn't cost as much. More information to come in the next few months. Not designed for very large groups of people. PM: Who would like to be involved in a small subgroup to develop an engagement plan?	**Action for Everyone:** If you would like to be involved in an engagement sub-group, please let PM and SP know.

6. **Finance Update and Resourcing: BB and TRC**
 	
    a. **Financial Review BB-** Budget report for Q3, please see below.
       • Maintenance of the solar panels is a joint maintenance arrangement with the other council solar panels.
       • Software relates to the ReadingCAN website. Email hosting with IONOS and web hosting/maintenance with Orange Grove.
       • Professional fees are mostly related to the Reading Schools Climate Conference £3,950
       • Grants: grants have been given to DraughtBusters for £2,000 but this should be refunded back as other funding has been secured.
       • Little bit over the budget this year.	

- Projected income of £25,900 depends on solar panel income and is an assumption based on everything working. Issue around British Gas seeing all individual meters.

Reading Climate Change Partnership Budget Overview 2023 Q3		To date	projected	Budget
Salaries		11163	15600	19000
Maitenance		1875	2500	2500
Supplies				
	Software	780	1040	
	Professional	4150	4150	
	Grants	2050	2050	
	Other	992	1323	
	Total	7972	8563	6000
Income		-2000	-25,900	
		19010	763	
Reserve		28898		
predicted reserve		28135		
Allowance for redundancy		5840 (8 years at current rate without increments or inflation)		

b. **Seeking alternative funding arrangements or sources of revenue TRC**
- In a position that RCCP can only afford a part time member of staff
- There will be much more focus on delivery in the future
- Need to look at new sources of funding: trust funds, lottery funds, and climate funds.
- Start to look within the board to see if there is scope for CSR resources and secondments.
- Offer Partnership Coordinator at a higher salary with more Comms and Engagement focus as well as extending the hours.

SW: Business funding may be able to feed into the RCCP budget.

PM: Do we crack on with recruitment or pause on recruitment to consider more of a full-time role? TRC: Could we tweak the job role but keep the salary and hours as they are. Could we apply for more hours and salary once the position has been filled? PM: Review of roll could be done in the future.

AF: There will be a gap in recruitment and a lot of activity needs to be done in term of engagement. Do we need an interim replacement?

PM: BB and PM to pick up gap in employment. Climate Steering group to be informed of capacity issues.

7. **AOB**

a. TM: RCAN Stand at Waterfest 10th of June 2023- SP has passed on feedback to Lucy Daniels (RBC) at a Climate Festival Meeting to

Action for Everyone: Please think about how funding can be secured. If you are interested in being a funding sub-group let TRC know.

SW: Update RCCP board if funding is available.

offer a better pitch to RCAN which Lucy has agreed to offer. It has the support of the board. b. PM: Inviting a SSEN Representative on RCCP Board. Although, we don't have a vacancy, can we offer them a position on the board? Board has agreed to include them on the board. c. PM: Climate projects under the Shared Prosperity Fund • DraughtBusters: £10,000 forward funded. BB and TM to liaise with each other on process and reporting. • £20,000 on feasibility work on Kennet Meadows. PM and HM to coordinate on this and setup a meeting. d. Table a formal vote of thanks to SP and TD e. SP: RCCP board to think about if they have IT or Web Team Staff Resources to help with ReadingCAN website.	**Action: PM/SP** to invite SSEN representative to next board meeting. **HM and PM** to setup a meeting to talk about feasibility funding. **BB and TM** to setup a meeting to discuss DraughtBusters Funding. **Everyone:** RCCP board to think about if they have IT or Web Team Staff Resources to help with ReadingCAN website.

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Strategic Environment, Planning and Transport Committee **29 June 2023**	**Reading Borough Council** **Working better with you**

Title	Reading Transport Strategy 2040 – Draft for Consultation
Purpose of the report	To make a decision
Report status	Public report
Report author	Chris Maddocks
Lead councillor	Cllr John Ennis
Corporate priority	Healthy Environment
Recommendations	The Committee is asked to: 1. Note the work which has been undertaken to date to prepare the draft Reading Transport Strategy 2040. 2. Provide approval to undertake a 12-week statutory public consultation on the draft strategy.

1. Executive summary

1.1. The purpose of this report is to provide an overview of the work which has been undertaken to prepare the draft Reading Transport Strategy 2040, the new Local Transport Plan (LTP) for the borough, and to seek approval to undertake a 12-week statutory public consultation on the draft strategy.

2. Policy context

2.1. It is a statutory duty for all Local Transport Authorities to produce and keep under regular review an LTP under the Transport Act 2000, as amended by the Local Transport Act 2008. Reading's existing LTP for the period 2011-26 was adopted by Council in March 2011. Significant progress has been made with delivery of the currently LTP and the majority of schemes and initiatives within it have now been delivered.

2.2. Preparation of the new LTP, the Reading Transport Strategy 2040, commenced in 2019. This included an initial visioning consultation which was undertaken between July and September 2019 seeking views on the proposed key principles to underpin development of the strategy. Feedback received from the consultation demonstrated strong support for the proposed vision, objectives and key themes for the strategy, which focused on providing attractive alternatives to the private car through the provision of high-quality public transport, walking and cycling facilities.

2.3. Development of the strategy continued in line with the feedback received from the visioning consultation. Despite the onset of the Covid pandemic, the decision was taken to proceed with the statutory consultation which was undertaken between May and August 2020. Alongside the strategy, the statutory consultation included seeking views on the Integrated Impact Assessment (IIA) which focused on the environmental, equalities and health considerations of the strategy.

2.4. The consultation provided valuable feedback on the detailed policies, schemes and initiatives included within the draft strategy. However, the on-going nature of the pandemic and uncertainty regarding the implications for future travel behaviour led to the decision being taken to pause development of the strategy at that time. This

coincided with a period of significant additional requirements and associated funding opportunities emerging from Government for local authorities, principally through the National Bus Strategy – Bus Back Better, and Gear Change - A Bold Vision for Cycling and Walking. Our progress in securing substantial funding and delivering schemes through these workstreams is regularly reported to this Committee through the Strategic Transport Schemes Update reports.

2.5.   The Department for Transport (DfT) is preparing new statutory LTP guidance for local authorities, with the view that compliance with this guidance will be a key factor in future funding decisions made by the Department. The latest indications are that this guidance will be launched in summer 2023. It is envisaged that a new element to the guidance will be a requirement to quantify the carbon reduction benefits resulting from delivery of the LTP, alongside the existing requirement to assess the environmental implications of the strategy more broadly. The DfT has indicated that Government expects all Local Transport Authorities to prepare a new LTP in line with the new guidance 'by the end of the current Parliament'.

2.6.   The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:

- Healthy Environment
- Thriving Communities
- Inclusive Economy

2.7.   These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:

- People first
- Digital transformation
- Building self-reliance
- Getting the best value
- Collaborating with others

2.8.   Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the Council's website. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

3.   The proposal

3.1.   The draft Reading Transport Strategy 2040 sets out an ambitious vision to create healthier, greener and more equal communities through the future provision of travel options in Reading. The strategy is focused on promoting sustainable transport options as a realistic alternative to the private car, setting out how transport facilities and services in Reading will be developed to 2040 to help achieve our wider objectives for the town, including the Reading 2050 Vision and the net zero carbon ambition by 2030.

3.2.   It is acknowledged that it is not possible for every car journey to be replaced by a more sustainable mode, for instance people may need to drive on occasions due to reasons relating to work, family, safety, gender differences or equality issues. Therefore, the strategy includes the objective of a transition to electric vehicles in Reading which have a significantly reduced impact on carbon emissions than diesel and petrol equivalents. However, it is clear that this transition alone will not achieve the overall objectives of the strategy as electric vehicles still produce particulates which lead to poor local air quality, do not reduce traffic congestion nor encourage more active travel with the associated health and wellbeing benefits.

3.3.   A key focus of the strategy is tackling social inequalities in Reading through the provision of affordable transport solutions to enable access to education, training, employment and leisure opportunities for everyone. Further important themes of the strategy relate to carbon reduction and improved air quality, health and wellbeing,

economic growth and making use of the latest technologies to be at the forefront of innovation.

3.4.   The Covid pandemic has had a significant impact on travel behaviours in Reading and the draft strategy has been updated with a view to longer-term behavioural changes which have resulted from the pandemic. In particular, public health messaging regarding the importance of active travel and the greater flexibility for office workers to work from home has created a unique opportunity to improve air quality and promote cycling and walking through the provision of enhanced facilities. The transport strategy has a vital role to play in enabling a 'green recovery' through a model of inclusive, green growth to help create the jobs of the future in environmental technology and other green industries.

Analysis of travel patterns

3.5.   Our latest analysis of travel behavioural changes resulting from the pandemic which have been reflected in the updated draft strategy are set out below:

- Variances in the number of trips undertaken today in comparison to pre-Covid levels, dependent upon trip purpose.

- A reduction in the number of trips undertaken for work and retail purposes, alongside a reduction in travel to major transport hubs such as rail stations.

- An increase in the number of trips undertaken for leisure purposes (particularly visits to parks) and a slight increase in grocery and pharmacy trips.

- Current levels of congestion are lower overall in comparison to 2019, especially during the weekday AM and PM peak periods.

- A flattening out of the AM and PM peak periods, which still exist however the difference between peak and off-peak is less pronounced.

- The PM peak period appears to be more evenly spread and has been brought forward to 3-6pm, in comparison to 2019 which was more severe between 4-7pm.

- A decrease in the overall number of trips to/from Reading town centre, however recent increases in public transport and cycle trips means travel by sustainable modes has over 70% mode share of all trips to and from the town centre (with the cordon of the town centre being the IDR).

Key content

3.6.   The draft strategy for public consultation includes the following main sections:

- Vision & Objectives – this sets out the overall vision to transform sustainable travel options in Reading through the five core themes of: creating a clean and green Reading; supporting healthy lifestyles; enabling sustainable and inclusive growth; connecting people and places; and embracing smart solutions.

- About Reading – this section provides an overview of Reading as a place, describing how the town is a major employment centre and leisure destination with excellent transport connectivity, however also a town which suffers from significant levels of inequality.

- Challenges & Opportunities – sets out the key issues the strategy is seeking to overcome, which include improving air quality; reducing congestion; providing affordable and accessible travel for all; removing barriers to healthy lifestyles; achieving good accessibility to local facilities and employment opportunities; accommodating sustainable development and adapting to the future.

- Our Policies – the strategy includes a suite of policies covering a wide range of topics which add more detail to the key themes of the document. The policies

set the guiding principles for the strategy which should be followed to help ensure the overall vision and objectives are achieved.

- Our Schemes & Initiatives – the individual schemes and initiatives within the strategy have been designed to work together and complement each other, with each adding value to the overall package. The strategy includes a range of measures from localised small-scale enhancements to strategic cross-boundary schemes; with a programme focused on multi-modal, public transport, active travel and network management interventions. In addition, a comprehensive programme of communication, engagement and training initiatives are included in the strategy, focused on key destinations, employment sites and schools throughout the borough.

- The schemes and initiatives contained within the strategy have been developed to ensure they contribute towards wider Council objectives including health and wellbeing, air quality and the climate emergency. The key headline schemes include a package of public transport enhancements and priority measures (both bus and rail) on key corridors linked to mobility hubs on the edge of the urban area; developing a network of segregated cycle routes and enhanced pedestrian facilities to encourage more levels of walking and cycling; more efficient management of the highway network; improving cross river travel options to mitigate the negative impacts resulting from the limited existing river crossings; and a policy to review potential demand management measures. The combination of these interventions will all contribute towards increasing levels of sustainable travel and ultimately help to achieve our overall vision for travel in Reading.

- Funding & Implementation – this section includes a high-level delivery plan with indicative timescales for implementation of each component of the overall strategy (subject to funding availability). Delivery of the strategy will be split between major schemes, packages of smaller measures delivered through neighbourhood area action plans, and on-going revenue initiatives.

- Partnerships & Stakeholders – this section emphasises the importance of effective partnership working and gives a clear commitment to work with all key stakeholders to deliver the strategy. This is vitally important to ensure each individual element of the strategy is delivered, as it is the combination of initiatives which will enable the overall vision to be achieved.

- Monitoring & Review – this final section includes an ambitious set of targets to ensure progress is regularly monitored in order to remain on track towards successfully achieving the overall vision and core objectives of the strategy.

Key updates

3.7.   The draft strategy has been substantially updated since the previous public consultation, however the core vision and underlying principles running through the strategy remain valid and have not been changed. The key updates to the document, which include feedback received through the previous consultation and to reflect changes to longer-term travel patterns and choices resulting from the pandemic, include the following:

- The period of the strategy has been updated to 2023-40 to reflect the latest timescales for finalisation of the strategy and to more closely align with the emerging Local Plan update.

- Updates have been made throughout the strategy to reflect recent progress which has been made including relating to the Bus Service Improvement Plan (BSIP) funding and work programme, work to deliver segregated cycle facilities and development of the infrastructure required to transition to electric vehicles.

- The policies within the document have been updated to reflect the latest developments in technology, including strengthening references to the provision of enhanced sustainable travel options. In addition, a policy regarding UAVs (Unmanned Aerial Vehicles), or drones, has been added to demonstrate its potential for reducing traffic, particularly freight, over the duration of the strategy.

- A number of schemes have been updated, particularly to place greater emphasis on prioritising road space to enable more segregated walking and cycling routes and bus priority measures to be delivered, and to highlight the need to work closely with partners and key stakeholders to overcome the issues resulting from through traffic and the limited number of existing river crossings in Reading.

- A more ambitious set of performance targets have been included to monitor the delivery of the strategy and track progress against achievement of the overall vision and objectives.

- A number of factual updates have been made throughout the document to reflect changes since preparation of the previous version of the strategy, for instance to reflect the latest developments in local and national policies.

3.8.   In addition to the draft strategy itself, a significant amount of work has been undertaken in developing sub-strategies since the previous public consultation. This includes more detailed plans as set out in the Council's Bus Service Improvement Plan, Rights of Way Improvement Plan and draft Electric Vehicle Infrastructure Strategy. These sub-strategies have been prepared to align with and contribute towards delivery of the vision and objectives as set out in the overarching transport strategy.

Statutory consultation

3.9.   A fundamental element of development of the draft strategy to date has been engagement and consultation with a wide range of stakeholders, local interest groups and residents. The overarching vision and key principles underpinning the strategy were overwhelmingly supported in the initial consultation, including radical policies to guide development of the town's transport network such as re-allocating road space for the use of sustainable modes. The subsequent consultation on the draft strategy at the time built upon these strong foundations with valuable feedback and suggestions which have been reflected in the updates to the detailed proposals contained within the draft strategy.

3.10.   It is proposed that the statutory consultation builds on the previous consultation and engagement activities undertaken by providing an opportunity to review the updated document and provide further feedback on the draft strategy. The consultation would be launched with a press release which will form the basis of promotional messages circulated to existing contacts, networks and local user groups. Key promotional activities to be undertaken as part of the consultation will include: a social media campaign; advertising on digital screens including those in Council buildings; engagement with key stakeholders including neighbouring authorities and local user and interest groups; engagement activities with local schools and a consultation webpage including survey. People who wish to provide feedback on the draft strategy will be encouraged to do so via an online survey hosted on the Council's website, however other methods will also be available as required.

3.11.   It is a statutory requirement under the current DfT guidance for the consultation on the draft strategy to be open for 12 weeks. In addition, the statutory Integrated Impact Assessment report which assesses the overall strategy in relation to its environmental, equality and health impacts must also form part of the consultation. This work is being undertaken in parallel through an iterative process to ensure feedback from the initial assessments have been used to develop the main strategy. In addition, there are a number of statutory consultees we will engage through the consultation process, including:

- Transport operators;

- Neighbouring local authorities;

- Natural England;

- Environment Agency; and

- English Heritage.

3.12. It is anticipated that the new LTP guidance will be released by the DfT in summer 2023. The proposed period of public consultation on the draft strategy will enable a review to be undertaken of compliance with the new guidance when it is released, and any updates will be incorporated within the updated strategy alongside the incorporation of feedback from the consultation, such as any amendments required through the updated guidance on carbon quantification assessment.

3.13. In conclusion, the draft Reading Transport Strategy 2040 addresses the key challenges and opportunities facing Reading and will put the town in the best possible position to ensure transport can play its part in achieving wider objectives relating to health and wellbeing, climate change, economic recovery and addressing inequalities. The strategy is building on strong foundations of high levels of public transport, walking and cycling in the town, however significant challenges and opportunities still need to be addressed and the strategy includes a comprehensive programme of policies, schemes and initiatives which are aligned to the overall vision and wider objectives.

3.14. Subject to approval being granted by the Committee to undertake the statutory consultation, the next steps for delivery of the final strategy will be to review all feedback received and update the draft strategy accordingly, alongside any updates required by the new LTP guidance when this is published, prior to bringing the updated strategy back to the Committee to seek adoption by the Council.

4.   Contribution to strategic aims

4.1. The delivery of the Reading Transport Strategy 2040 will help to deliver the three service priorities in the Council's Corporate Plan of Healthy Environment, Thriving Communities and Inclusive Economy as set out in detail in this report.

5.   Environmental and climate implications

5.1. The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in our Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency declared by the Council in February 2019 and to help achieve our target of a carbon neutral Reading by 2030.

5.2. The draft transport strategy, which has been developed to align with the Climate Emergency Strategy, responds to this challenge and is focused on five themes. These themes all encourage a step-change in transport infrastructure and services and a shift towards sustainable and clean modes of transport as attractive alternatives to private vehicles. The transport strategy has been developed alongside the Climate Change strategy, particularly the transport theme, to ensure consistency between the two strategies and to ensure the delivery of each strategy supports the overarching objections of both strategies

5.3. The Climate Impact Assessment tool has been used to assess the proposal as set out within this report, resulting in an overall Net Medium Positive impact. This is due to the draft strategy being focused on encouraging the use of sustainable transport, walking and cycling as attractive alternatives to the private car. This includes managing congestion and therefore reducing carbon emissions and improving air quality by providing a more efficient network and suitable alternatives for vehicular traffic, which

will enable existing highway capacity to be reallocated for the use of sustainable modes. The assessment also acknowledges that there will be negative impacts resulting from construction activities associated with the delivery of schemes as set out within the strategy.

6.   Community engagement

6.1.   As set out within the report, the draft strategy is based on substantial public consultation which has been undertaken to inform development of the strategy to date. Initial consultation on the key principles helping to shape the new strategy was undertaken in summer 2019. The consultation resulted in over 3,000 responses, including over 2,800 online and 750 face-to-face discussions at a range of public drop-in sessions, meetings, workshops, etc.

6.2.   A selection of the headline feedback received from the consultation is set out below:

- 90% of respondents agreed with the five main themes for the new strategy as set out below:
    - Connecting people and places
    - Supporting healthy lifestyles
    - Creating a clean and green Reading
    - Enabling inclusive growth
    - Embracing smart solutions
- 93% thought making public transport journeys faster and more reliable would be effective;
- 83% said a comprehensive park and ride network would be effective to reduce the number of cars on the road;
- 92% thought better connected walking and cycling routes would be effective and 75% supported the reallocation of road space for sustainable modes of transport;
- 90% said dedicated car free spaces would be effective to increase active travel;
- 78% felt limiting cars from sensitive areas (around schools and the town centre) would improve safety, alongside air quality and health benefits for residents;
- 76% said initiatives where roads are free of cars for a limited time would improve safety, air quality and public health;
- 86% thought better facilities would increase the uptake of zero emission vehicles (e.g. electric vehicle charging points); and
- Around 60% said a charging scheme would be effective in reducing the number of private vehicles on the road.

6.3.   In addition, more detailed feedback on the policies and schemes included within the draft strategy was received from the consultation undertaken during summer 2020 and the key themes of feedback have been reflected in the updated draft strategy.

6.4.   Further information regarding the feedback received from the public consultations undertaken on the draft strategy to date is available on the Council's website here – www.reading.gov.uk/transportstrategy.

7.   Equality impact assessment

7.1.   Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7.2.   In order to comply with the Equalities Act 2010, an Integrated Impact Assessment (IIA), which incorporates an Equality Impact Assessment, has been undertaken as an integral part of the development of the Reading Transport Strategy 2040. In addition to equality, the IIA also considers the health and environmental implications of the proposed policies, schemes and initiatives contained within the strategy.

7.3.   The overall vision and key objectives of the strategy relate directly to improving the environment, promoting healthy lifestyles and inclusivity; therefore the benefits resulting from delivery of the strategy in these key areas is reflected in the IIA assessment. This overall focus combined with the IIA approach has ensured that these key areas are fully integrated within the strategy and the positive benefits resulting from delivery of the strategy will be maximised. In addition, the IIA considers that appropriate mitigation measures have been incorporated into the strategy in order to minimise the impact of the proposals.

7.4.   The draft IIA report will be made public as part of the statutory consultation. In addition, sub-strategies and future schemes and initiatives as outlined in the draft strategy will be subject to further Equality Impact Assessments as they are developed.

8.   Other relevant considerations

8.1.   There are none.

9.   Legal implications

9.1.   The Local Transport Plan is a statutory requirement as set out in the Transport Act 2000, as amended by the Local Transport Act 2008. The Strategic Environmental Assessment, Equality Impact Assessment and Health Impact Assessment, considered in the overarching Integrated Impact Assessment, is also a statutory requirement.

9.2.   By producing a new transport strategy in line with Government guidance the Council will be fulfilling its statutory duty to keep the strategy under regular review.

10.   Financial implications

10.1.   The development of the draft transport strategy has been funded by existing transport budgets and a revenue grant of £178,571.43 from the DfT which has been provided specifically for the development of LTPs and associated schemes and initiatives.

10.2.   The development and delivery of schemes as set out in the draft strategy will be subject to future funding being identified and secured, such as grants issued by Central Government and private sector contributions secured through the planning process.

11.   Timetable for implementation

11.1.   The delivery of individual schemes included within the strategy will be subject to future funding being secured.

12.   Background papers

12.1.   There are none.

Appendices

1.   Reading Transport Strategy 2040 – Draft for Consultation (June 2023)

Local Transport Plan 4 (2023-40)

Reading Transport Strategy 2040

Draft for Consultation - June 2023

Reading
Borough Council
Working better with you

Foreword, by Councillor John Ennis

This is the most important Transport Strategy that Reading will ever produce. The Climate Emergency is happening now and it is not something any of us should ignore. Alongside the need to recover and learn lessons from the Covid pandemic, including addressing inequalities in our society. The new strategy is our most radical yet and reflects the fact that the status quo is not an option.

Over the following pages you can read about how our plans will help to combat the poor air quality polluting some parts of our town, and how our policies will contribute towards our objective to create a net zero carbon Reading by 2030. It includes schemes some people may find controversial. I make no apology for that. The only way we can hope to tackle the congestion and pollution which blights some areas of Reading is by doing things differently.

Reading has one of the UK's fastest growing economies, despite the impact of the Covid pandemic and other global factors, and we understand that improved transport options are critical to creating more jobs and opportunities for residents. It is a major centre for employment, leisure and education in the Thames Valley region and home to many national and international companies. Demand for new homes has never been higher. But with that success come serious challenges in terms of pressure on our transport infrastructure, commuter congestion and poor air quality.

The challenge will only intensify in the coming years with many thousands of new homes being built, particularly just outside of Reading. Many of those new residents will commute into Reading for work and must be offered attractive and reliable alternatives to the private car.

Early evidence suggests that a significant proportion of traffic in Reading is through-traffic, particularly on the IDR and the two bridges over the river Thames. It is not acceptable for the many thousands of vehicles and lorries who have no origin, destination or purpose in Reading to continue to use the town as a short cut, causing additional congestion, polluting our air and damaging our health. This document will help tackle that injustice. It is a situation no responsible local authority can ignore.

Our challenge is to successfully absorb the growth in housing, jobs and commuting, whilst protecting the health of residents. Our Transport Strategy to 2040 is a plan to do that. It has been designed following substantial public consultation which produced a record number of responses and showed very strong support for a more sustainable future. Thank you to the over three thousand people who helped shape it previously and we look forward to receiving your feedback on the updated document.

This strategy provides high quality and realistic alternatives to the private car through new and upgraded railway stations, new park and rides and quick, reliable public and affordable transport

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routes. It includes major new schemes to promote and strengthen public transport links, including a fundamental review of options to improve sustainable travel over the River Thames to reduce congestion and improve air quality for residents. It includes new pedestrian and cycle routes, and the infrastructure to support it. It includes demand management schemes, to remove the most polluting vehicles from our streets, particularly those with absolutely no business in Reading. This strategy also outlines how we will work with partners to fund and to help deliver the vision.

We are building on strong foundations. In recent years we have overseen the complete transformation of Reading Station; delivered the new station at Green Park; built Christchurch Bridge, the new pedestrian and cycle bridge over the Thames; created new park & ride sites at Mereoak, Winnersh and Thames Valley Park; built the initial phases of South Reading BRT and delivered the cross-town National Cycle Network 422 route.

In addition, we are nearing completion of the transformational works at Reading West Station, alongside delivering new segregated cycle facilities on key routes at Shinfield Road and Bath Road. Our investment has resulted in significant increases in sustainable travel in Reading. Bus use was the second highest in the whole country outside London pre-pandemic, and sustainable travel, including walking and cycling, now accounts for around 75% of trips to and from the town centre.

As you will see, we want to transform travel options in this period by delivering high-quality and realistic alternatives to the private car. This will bring significant benefits for the environment and climate crisis, the health and wellbeing of residents, enable sustainable economic growth, unlock local job opportunities and deliver new homes to the highest environmental standards.

Future travel in and around Reading must be affordable and accessible to reduce the considerable inequalities in our communities. It must improve residents' health and wellbeing, whilst supporting a growing and inclusive economy. We recognise that difficult choices will need to be made to address the climate crisis and improve air quality for residents. Embracing rapidly changing technology and being responsive to innovation will be fundamental to achieve our vision for the town.

This strategy is currently in draft form and is based on feedback from the extensive consultations we have undertaken to date, alongside updates following the changes in travel patterns resulting from the pandemic. This is a further opportunity for you to help shape the final strategy, to inform the decisions we take and improvements we deliver. This will ensure that together we can achieve a sustainable and prosperous future for everybody in Reading.

We have achieved a great deal, but we have much more to do. This is how we will do it.

Councillor John Ennis
Lead Councillor for Climate Strategy and Transport
Reading Borough Council

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Contents

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Executive Summary

Introduction

The Reading Transport Strategy 2040 is a statutory document that sets the plan for developing our town's transport network to 2040 and beyond. It includes the guiding policies and principles, alongside schemes and initiatives to be delivered, to enable us to achieve our overall vision for a substantial change in modal shift to support sustainable travel choices in Reading.

The strategy is focused primarily on improvements within Reading Borough for local residents. However, due to the compact geography of the Local Authority area, it also includes cross-boundary schemes and initiatives partly within neighbouring local authorities which form part of the wider Reading urban area.

This strategy has been developed in partnership with local residents, businesses and stakeholders through extensive consultation which was undertaken in 2019 and 2020. It has been informed by an integrated impact assessment, which has considered the impacts of the plan on the environment, health, and equalities issues. In addition to satisfying statutory requirements, this has helped to shape the content of the Reading Transport Strategy in order to maximise beneficial effects for local communities and the environment.

This is a draft strategy for consultation to ensure that you have the opportunity to help shape the final strategy before it is adopted.

Our Vision and Objectives

We want Reading to be a great place to live, work, study and play. We have formed a vision for our town, by coming together with local businesses, community groups and Reading University to plan for Reading's future. The result is the Reading 2050 Vision, an ambitious description of what Reading can be; a green tech city, a city of culture and diversity, and a city of rivers and parks.

The Reading 2050 Vision identifies key elements for its delivery, including a number in which transport plays a major part. Transport will be critical to enhancing the connectivity needed to facilitate sustainable economic growth and enable everyone to enjoy the multitude of assets the town has to offer. The way in which we deliver this will be key to low carbon living, and creating the green and healthy spaces to allow our communities to thrive. Technology will support our transport network, facilitating smart and efficient solutions, and maximising the impact that transport can make.

The Reading Local Plan vision, which sets out in more detail a vision for Reading in 2040, and considers the context of the longer-term direction of travel to 2050, is informed by the Reading 2050 Vision.

The Reading 2050 Vision and our Local Plan have informed our approach to delivering the transport elements of this overall vision for Reading.

Key factors include changing travel patterns and future technology, the climate emergency, opportunities to enable healthy lifestyles, promote sustainable economic growth and reduce inequalities by ensuring everyone can benefit from the success of our town.

To help us deliver our overall vision for Reading, we have developed a supporting transport vision for this strategy.

> **"Our vision is to deliver a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing. Future mobility options will enable everyone in Reading to thrive, enjoy an exceptional quality of life and adapt to meet future challenges and opportunities."**

Five objectives underpin our vision, taking into account the future challenges we will face and the opportunities we will embrace:

Creating a Clean and Green Reading

Provide transport options to deliver modal shift, enhance quality of life, reduce emissions and improve air quality to create a carbon neutral town.

Supporting Healthy Lifestyles

Create healthy streets to encourage active travel and lifestyles, improve accessibility to key destinations and increase personal safety.

Enabling Sustainable and Inclusive Growth

Enable sustainable growth and connect communities so that everyone can benefit from Reading's success.

Connecting People and Places

Promote the use of sustainable modes of transport by providing attractive alternatives to the private car, helping to provide a transport network that is fast, affordable, connected and resilient.

Embracing Smart Solutions

Use technology to manage the network efficiently and allow informed travel choices, whilst enabling Reading to become a smart, connected town of the future.

We are building on success through our significant investment in the transport network in recent years. We have provided new and upgraded transport infrastructure to encourage people living, visiting and working in Reading to use sustainable transport including the major redevelopment of Reading Station and associated Cow Lane Bridges scheme, new Park and Ride facilities, Reading Green Park Station, initial phases of the South Reading Bus Rapid Transit corridor, Christchurch Bridge and the National Cycle Network route 422.

About Reading

Reading is an important and strategic location in the South East. The Borough was home to around 174,000 people in 2021, with a further 59,000 in the wider urban area. The population of the area is forecast to grow over this plan period. Reading is also a major centre of employment, with around 121,000 people working in the Borough. There are more jobs in Reading than workers, so people travel in from other areas to work. The centre of Reading is also a major retail and leisure destination, with The Oracle ranked in the top 50 shopping centres in the UK.

The town's location on both the Great Western Main Line and the M4 motorway makes it a major hub for transport movement. Reading Railway Station is one of the busiest railway stations outside London and marks the western terminus of the Elizabeth Line. Reading also has excellent connections to the international transport hubs at Heathrow and Gatwick Airports. In addition, Reading's location on the Kennet & Avon Canal and River Thames and at the meeting point of several national cycle routes, gives it significance for a variety of other modes of travel. Such connectivity is represented by Reading's status as a regional transport hub, international gateway and a major transport interchange.

Due to our success in investing in sustainable travel options, trips to/from central Reading by public transport, walking, and cycling increased significantly between 2008-10 and the Covid-19 pandemic. Whilst Covid-19 resulted in a drastic reduction in town centre trips, total trips are now recovering towards pre-Covid levels, with a relatively strong recovery in the number of trips made by sustainable modes, and a sharp increase in the number of trips made by cycle, with close to a doubling of trips since 2008-10. The increase in car and taxi trips since our emergence from the pandemic appears to be plateauing at levels below those seen pre-Covid, indicating that some sustainable travel patterns adopted during Covid are likely to have become long-term travel behaviours for people.

Challenges and Opportunities

We have identified seven key transport challenges facing us:

Adapting to the Future

We know that we are in the midst of a climate crisis. This, alongside fast changing technological innovation, means the future is uncertain and Reading will need to adapt, through both decarbonisation and accepting the need to travel more sustainably. This will affect the way we travel and transport goods, whilst at the same time provide new and innovative opportunities for society.

Improving Air Quality

As a result of the high levels of car congestion and accompanying air pollution in parts of Reading, an Air Quality Management Area (AQMA) has been declared covering the town centre and key corridors into and out of the town. The negative effects of poor air quality are serious: up to 36,000 people in the UK die as a result of air pollution every year. Technologies are developing that are reducing the level of pollution vehicles emit from exhausts, and the UK is shifting towards electric vehicles. However, around 85% of fine particulate pollution from vehicles does not come from traditional fuel types and exhausts, and so a reduction in vehicle usage is the only measure that will improve air quality further.

Reducing Congestion

Whilst Reading has high levels of bus usage and the main railway station is one of the busiest outside London, a significant proportion of people travelling into or out of the Borough for work travel by car. This makes Reading one of the most congested places in the UK - central Government statistics indicate that Reading has significantly high levels of delays on A roads compared to other local authorities outside of London. Due to a lack of alternative strategic north-south connections there are high levels of through-traffic in Reading, which have no origin or destination within the Borough. This adds to congestion in the town centre, on the bridges over the River Thames and along key corridors.

Providing Affordable and Accessible Travel for All

Despite economic growth, Reading has seen an increase in the number of areas which fall into the UK's most deprived 10%, from zero in 2010, to five today. The availability, accessibility and affordability of public transport and the provision of walking and cycling facilities are critical to ensuring equality of opportunity and connectivity across the Reading area.

Removing Barriers to Healthy Lifestyles

Many of our public spaces and streets require improvements to make them more attractive and welcoming, with better provision to encourage more people to choose to walk and cycle, as well as providing greater independence for those who are mobility impaired. Our local pedestrian and cycle networks are extensive, but there are still gaps that cause disconnect, and parts where the route quality needs improvement and priority given to sustainable travel over private car use to support healthy lifestyles.

Achieving Good Accessibility to Local Facilities and Employment

Within Reading, access to local facilities and employment varies significantly, depending both on the type and the location. It is important that existing local facilities including the Royal Berkshire Hospital and schools are served by high-quality, frequent bus services, in order to reduce car travel, and to enhance access to amenities for people who do not own a car.

Similarly, the availability of sustainable travel options to employment is important to increase access to employment for all users, including vulnerable groups, and to reduce congestion across the network. New developments have the opportunity to deliver facilities that serve both new residents or employees, and existing communities in the local area, contributing towards a shift to sustainable travel and also increasing social cohesion.

Accommodating Development

Economic success and growth in Reading is forecast to continue and substantial house building is planned in both Reading and neighbouring authority areas. Between 2013 and 2036 an additional 2,600 homes are planned to be built each year in the local area and population growth will mean more trips on our network each day. The Reading Transport Strategy (RTS) will help us to deliver our Local Plan as well as those of neighbouring authorities.

Our Policies

Our policies set the guiding principles for our strategy to ensure we will achieve our overall vision and objectives. These policies cover a range of topics including:

- **Multi-modal policies** including sustainable transport, equality and inclusivity, the environment and climate change.

- **Public transport policies** including rail, buses, taxis and private hire vehicles, waterways, mobility as a service, shared autonomous vehicles and travel information.

- **Active travel policies** including healthy streets, public space, walking and cycling, school travel, and public rights of way.

- **Demand management policies** to manage travel demand and improve quality of life for residents.

- **Network management policies** including road safety, parking and enforcement, motorcycles, freight, smart solutions and highway asset management.

- **Communication and engagement policies** including training and education, incentivisation and public engagement.

Our Schemes and Initiatives

We will implement our policies through the delivery of schemes and initiatives to improve transport in the area and meet our aims and objectives. This Local Transport Plan has been developed so that our transport strategy considers the wider environment and is inclusive of all types of transport users.

Our strategy includes a wide range of schemes and initiatives from localised small-scale enhancements to strategic cross-boundary major schemes, including:

- **Multi-Modal schemes**, including major transport corridors, cross-Thames travel, connecting neighbourhoods and enhancements to the Inner Distribution Road (IDR). This will also include investigating demand management schemes

- **Public transport schemes**, including upgrades and enhancements to railway stations, bus rapid transit corridors, Park and Rides, Superbus network, community transport, concessionary travel, Mobility as a Service and demand responsive transport

- **Network management schemes**, including neighbourhood and highway management, parking schemes and management, road safety schemes, intelligent transport systems, electric vehicle charging, car clubs and smart city initiatives

- **Communication and engagement schemes**, including marketing, travel information, training, school travel accreditation programme, progress reporting and public engagement

Funding and Implementation

Our implementation plan sets out our indicative delivery programme for future transport schemes and initiatives to 2040. The schemes and initiatives set out in this strategy are not fully funded, therefore we will continue to seek external funding to enable us to deliver the overall strategy.

Funding sources will include grants and private sector contributions and will be supplemented by both capital and revenue Council funding and services delivered on a commercial basis. The implementation of demand management

Reading Green Park Station

measures may provide an additional revenue stream to invest in and enhance sustainable transport options.

Delivery of the strategy will be split between major schemes, packages of smaller measures delivered through our neighbourhood area action plans, and on-going revenue initiatives.

Christchurch Bridge

Partnerships and Stakeholders

Our Strategy is ambitious, therefore it will be critical to work in partnership with key stakeholders to achieve its successful delivery. This will include, but not be limited to, neighbouring authorities, local communities, education providers, public services and businesses to take account of their diverse needs and aspirations when delivering this strategy.

We participate in a number of key formal and informal partnerships to support a joined up, overarching approach to delivery of our key services and future plans. This enables us to lobby for wider transport improvements and funding (for instance the major redevelopment of Reading Station), therefore we will continue to develop these partnerships throughout the strategy period to achieve the best possible results for Reading and its local communities. Our key delivery partners are:

National / Regional

- Central Government including Department for Transport
- Transport for the South East
- Network Rail
- National Highways

Neighbouring Local Authorities

- Wokingham Borough Council
- West Berkshire Council
- Bracknell Forest Borough Council
- Hampshire County Council
- Oxfordshire County Council
- South Oxfordshire District Council
- Local Parish and Town Councils

Transport Operators

- Train operators including Great Western Railway and South Western Railway
- Bus operators including Reading Buses, Arriva, and Thames Travel
- Community transport operators including Readibus
- Reading taxi associations

Major Organisations

- Education providers including the University of Reading, colleges and schools
- Public services including the Royal Berkshire Hospital

Local Community

- Community groups and local residents
- Private sector including local businesses
- Local Media
- Local interest groups

Monitoring and Review

Performance monitoring is key to manage and improve the delivery of our strategy programme. We have identified a number of key performance indicators and targets which set our ambitions to transform travel options in Reading and enable us to measure progress against achieving our overall vision and objectives.

These targets relate to significantly increasing usage of sustainable transport, improving air quality and reducing carbon emissions, improving road safety and improving public satisfaction with travel in Reading.

Given the longer-term time-scales of this Strategy, it will be regularly reviewed to ensure it remains current and that it is best placed to respond to future needs and opportunities as they arise.

School Streets Trial - Geoffrey Field Infant and Junior School & Christ the King Catholic Primary School

1. Introduction

Purpose

1.1   The Reading Transport Strategy 2040 is a statutory document (known as a Local Transport Plan) that outlines the high-level policy and strategy for transport to meet existing and future transport demand in the town to 2040.

1.2   This strategy sets out how transport can play its part in delivering Reading's 2050 vision and Reading's Local Plan, to make Reading a great place to live, work, study and play. It outlines our approach for all types of transport in Reading and seeks to embrace opportunities to adapt to changing travel demands and new technologies.

1.3   Key considerations in developing the plan include the climate change emergency, enabling healthy lifestyles, promoting social inclusion, sustainable economic growth, increasing productivity and forecast population and housing growth. This document replaces the current Local Transport Plan (LTP) and looks ahead to 2040.

1.4   In preparing this plan, we have identified the challenges we need to tackle, and have established a high-level vision and focused objectives, under our five themes: creating a clean and green Reading; supporting healthy lifestyles; enabling sustainable and inclusive growth; connecting people and places; and embracing smart solutions. This has been informed through the consultations carried out in 2019 and 2020, which sought the views of residents, schools and businesses. This analysis and consultation has enabled the identification of new schemes, initiatives and policies to transform transport options in the area.

1.5   Reading's transport strategies have always been valuable platforms for jointly developing and communicating our plans and programmes for improving transport with the local community. They have enabled engagement and partnership working with other organisations and key stakeholders, including our neighbouring authorities and local and national transport operators. Our strategy is also an important tool to ensure we deliver improvements efficiently and that these achieve best value for money.

1.6   Excellent progress has been made in delivering significant transport improvements in Reading since our first LTP in 2001. This is summarised in the About Reading chapter. This plan builds on our approach and past success, taking our longer-term strategy forward to 2040, in line with our Local Plan which sets the spatial planning strategy for the area.

Our Approach

1.7 The Reading Transport Strategy (RTS) is supported by an Integrated Impact Assessment, which includes our Strategic Environmental Assessment, Health Impact Assessment and Equalities Impact Assessment to ensure the impacts of the plan provide positive benefits and meet relevant legislation in these key areas.

1.8 Our strategy is focused primarily on Reading Borough. However, due to the compact nature of the Local Authority area, it also includes schemes within the wider Reading urban area.

1.9 Given the longer-term timescales for this strategy, it will be regularly reviewed and evolved to keep it current and to ensure it is best placed to respond to future needs and opportunities as they arise. The evolving strategy will be adaptable to future challenges and new technologies.

1.10 A key focus of this strategy is to ensure the needs of Reading's growing population and economy are developed in a sustainable way that supports the Council's commitments to addressing climate change. The RTS therefore aims to influence decisions about where future housing should be located both within and outside the Borough. Growth should be directed to places where sustainable travel options can be made more attractive and therefore provide a viable alternative to private car trips.

Figure 1: Reading's Location

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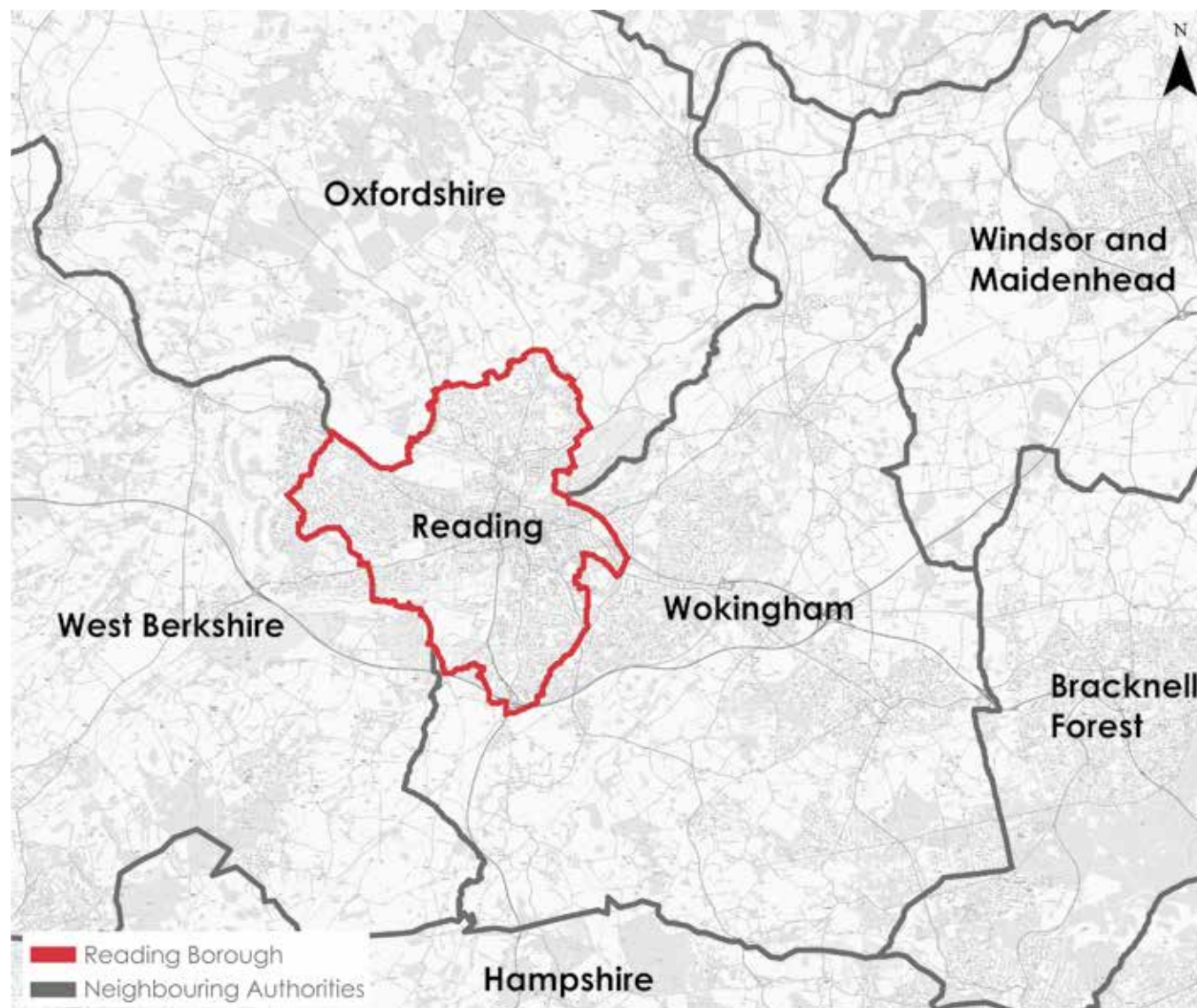
1.11 Our strategy details our long-term vision for transport in Reading and the transport objectives which support this. Chapter 5 sets out the challenges and opportunities the plan will address. It reviews the current and expected future needs of people to travel to and around Reading against the capacity and quality of the infrastructure and services to meet these needs. Schemes to help resolve or embrace these challenges and opportunities are further identified in this chapter at strategic and neighbourhood area levels.

1.12 Our transport vision and objectives have influenced the preparation of a set of policies relating to transport modes and themes. Supporting sub strategies provide more detail on the objectives and actions proposed for certain thematic topics, such as walking and cycling, our Bus Service Improvement Plan, parking, school travel and public rights of way.

1.13 We have set out the likely mechanisms which will enable us to fund our proposals, alongside our approach for ensuring value for money in transport investment, and monitoring arrangements to track our progress.

Consultation and Engagement

1.14 The RTS has been developed to ensure that the strategies, decisions and implementation of transport schemes reflect the needs of local residents. A wide range of consultation and engagement has been undertaken with residents and key local stakeholders to allow them to influence and shape the development of the plan.

1.15 At the beginning of the development of our new strategy, we consulted comprehensively with local residents, businesses and key stakeholders to understand local views to help set the main themes and objectives that underpin the strategy. This included surveys, a website, public drop-in sessions and workshops with key stakeholders and interest groups. We sent leaflets to over 70,000 households and 3,800 businesses. Direct engagement was held with around 750 people at various events within the Borough, and 2,881 responses were gathered through our online survey.

1.16 There was an overwhelming level of public support for the five strategic objectives that underpin the RTS, with 90% of responses expressing agreement. Our vision for transport in Reading and the strategic objectives to deliver our vision are set out in Section 2 of this document.

1.17 Sustainable travel is fundamental to each of the five strategic objectives. Increasing public transport patronage is essential to this, and 94% of responses indicated support for extending the public transport network with more frequent services to schools, workplaces and isolated areas, as a means to increase public transport use.

1.18 To further promote sustainable travel, significant support was shown towards the implementation of car-free spaces (90%), reallocating road space for sustainable transport (75%), as well as improving the connectivity of the walking and cycling network in Reading (92%).

1.19 There was also a significant level of support for delivering demand management measures with 60% of respondents stating they thought a charging scheme would be effective in reducing the number of private vehicles on the road.

1.20 The statutory consultation on the previous draft RTS was undertaken in summer 2020, resulting in over 250 responses, including detailed responses from statutory consultees such as transport operators and neighbouring authorities.

1.21 Feedback included the need to further consider the long-term impacts of the Covid-19 pandemic (which are now better known), and support for improving opportunities and facilities for active travel, improving public transport, and reducing car use and congestion. Key stakeholders highlighted that they are keen to continue to work with us to develop and deliver schemes, and were generally supportive of the strategy.

Evidence Base

1.22 A significant base of evidence has been used to underpin the development of this strategy, using national, regional and local data. We have analysed this data to develop our policies, schemes and initiatives.

1.23 There are seven local areas in and around Reading, representing the town centre and the six main transport corridors radiating from central Reading. Information for each area has been considered, including the demographics, movement characteristics, planned and committed development and infrastructure proposals.

1.24 We will develop action plans for each neighbourhood area that enable us to identify and prioritise local transport measures that will deliver value for money and positive outcomes in respect of our overall strategy vision and objectives. Our approach will ensure that existing assets are used as effectively as possible and the benefits of upgraded or new infrastructure will therefore be maximised.

1.25 Our plans will be progressed in partnership with appropriate neighbouring authorities where these extend beyond our administrative boundaries. These will be shaped by consultation with our partners, stakeholders and local communities.

Integrated Impact Assessment

1.26 The RTS is supported by an Integrated Impact Assessment (IIA) which has been undertaken in tandem with developing the plan. An IIA Report was published for consultation in tandem with the previous draft RTS, and the IIA has been updated for this latest version of the RTS.

1.27 The purpose of the IIA is to identify, assess and address likely significant effects on the environment and likely effects on health and equalities from the emerging RTS. In doing so, the IIA has helped to shape the content of the RTS in order to maximise its sustainability and socio-economic performance.

1.28 The IIA incorporates a suite of statutory and non-statutory impact assessments:

- Strategic Environmental Assessment (SEA)
- Equalities Impact Assessment (EqIA)
- Health Impact Assessment (HIA)

1.29 These impact assessments have been undertaken in a co-ordinated manner to support development of the RTS. The SEA element of the IIA identifies the likely significant effects on the environment, whilst the EqIA and HIA elements identify likely different impacts on demographics groups and persons with protected characteristics (in accordance with the Equality Act 2010) and on health outcomes respectively. The

HIA element of the IIA was undertaken on a non-statutory basis to support demonstrating compliance with SEA and EqIA requirements relating to the assessment of likely health effects in an integrated manner.

1.30 In accordance with statutory SEA requirements, we consulted on our IIA Scoping Report both within the Council and with the Environment Agency, Natural England and Historic England in Autumn 2018. The Scoping Report:

- Defined an evidence-based suite of key issues which should be addressed in the RTS; and,

- Defined an integrated assessment framework to underpin the testing, assessment and refinement of all components within the emerging RTS (objectives, schemes, policies, etc).

1.31 Taking account of consultee feedback, the IIA has been undertaken on an iterative basis in tandem with developing the RTS itself. As detailed within the accompanying IIA Report this allowed any uncertainties, issues or mitigation requirements identified during the IIA to be addressed in the RTS. In addition to meeting statutory requirements this iterative process has maximised the sustainability and socio-economic performance of the RTS.

2. Vision and Objectives

Our Vision for Reading 2050

2.1 We have formed a vision for our town, by coming together with local businesses, community groups and the University of Reading to plan for Reading's future.

2.2 The result is the Reading 2050 Vision, an ambitious description of what Reading can be, with three themes central to Reading's long term success as a smart and sustainable city. These three themes are

- A green tech city
- A city of culture and diversity
- A city of rivers and parks

Source: Reading UK - https://livingreading.co.uk/reading-2050

Our vision for Reading 2050 is "an internationally recognised and economically successful city region, where low carbon living is the norm and the built environment, technology and innovation have combined to create a dynamic, smart and sustainable city with a high quality of life and equal opportunities for all"

2.3 Six vision statements were identified to bring the themes together and describe what success looks like. These identified the aim for Reading to be a place that:

- Shares success to support and enable thriving communities

- Delivers a real sense of place and identity

- Thrives on cultural and cross-generational diversity

- Recognises our heritage and natural assets

- Embeds technology to deliver innovation and low carbon living for all

- Welcomes ethical and sustainable businesses who support Reading

2.4 The Reading 2050 Vision identifies key elements for its delivery, including a number in which transport plays a major part. Transport will be critical to enhancing the connectivity needed to facilitate economic growth and enable everyone enjoy the multitude of assets the town has to offer. The way in which we deliver this will be key to low carbon living, and creating the green and healthy spaces to allow our communities to thrive. Technology will support this, facilitating smart and efficient solutions, and maximising the impact that transport can make.

2.5 The Reading Local Plan vision, which sets out in more detail a vision for Reading in 2036, and considers the context of the longer-term direction of travel to 2050, is informed by the Reading 2050 Vision.

Source: Reading UK - https://livingreading.co.uk/reading-2050

Our Vision For Transport In Reading

Our Vision for Transport in Reading

2.6   This Reading Transport Strategy (RTS) will help to deliver both the Reading 2050 and Reading Local Plan visions, through an ambitious programme of measures to enable and encourage sustainable travel choices in the town by 2040, with the intent that future transport strategies will continue to support the Reading 2050 vision in the longer term.

2.7   Climate change is the defining crisis of our time, but we have the power to face it and avoid its devastating consequences. Our vision for transport and the supporting policies and schemes will help us take action to reduce our contributions towards climate change, and adapt to protect us from the impacts of climate change.

2.8   In order to achieve our ambitions, we will need to embrace emerging opportunities and our strategy will need to be adaptive to innovation. Travel demand in the future will be affected by changes in technology and wider society. The extent and pace of change is not certain, however it is clear that innovations such as driverless and connected vehicles and new approaches to the provision of transport will bring the potential for historic transport trends to change significantly, and our ambition is for residents of Reading to be at the forefront of benefitting from these opportunities.

"Our vision is to deliver a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing. Future mobility options will enable everyone in Reading to thrive, enjoy an exceptional quality of life and adapt to meet future challenges and opportunities."

18

2.9 Our overarching vision for transport in Reading has been aligned to our wider vision for the town in 2050, our Local Plan, and relevant national, regional and local policies.
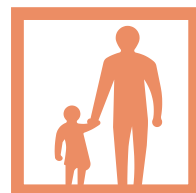
Our Objectives

2.10 Our strategic objectives have been developed as the guiding principles running through this strategy to ensure and set out how we will measure our success in delivering our vision for transport in Reading.

Creating a Clean and Green Reading

Provide transport options to enhance quality of life, reduce emissions and improve air quality to create a carbon neutral town

Supporting Healthy Lifestyles

Create healthy streets to encourage active travel and lifestyles, improve accessibility to key destinations and increase personal safety

Enabling Sustainable and Inclusive Growth

Enable sustainable growth and connect communities so that everyone can benefit from Reading's success

Connecting People and Places

Promote the use of sustainable modes of transport by providing attractive alternatives to the private car, helping to provide a transport network that is fast, affordable, connected and resilient

Embracing Smart Solutions

Use technology to manage the network efficiently and allow informed travel choices, whilst enabling Reading to become a smart, connected town of the future

Our transport vision is supported and informed by wider polices and guidance that: set out how Reading can foster economic growth; become an activity hub in the Thames Valley; improve sustainability in the town; and work in partnership with other authorities to achieve this.

National Policy and Guidance

Plan for Growth

2.11 'Build Back Better: our plan for growth' sets out the Government's plans to support economic growth through significant investment in infrastructure, skills and innovation. The Plan aims to level up the whole of the UK, support the transition to Net Zero and support the Government's international ambition for a Global Britain.

2.12 The Plan focuses on implementing the visions of the Industrial Strategy for making the UK the world's most innovative economy, creating good jobs and greater earning power for all.

2.13 There is a focus on economic activity and productivity, and connecting people to opportunity, through investment in broadband, transport and cities

Figure 2: Policy Context

Levelling Up the United Kingdom

2.14 The Levelling Up White Paper sets out the next stages of the Government's programme to address The UK's geographical disparities. The Paper sets out policies aimed to deliver on the overarching objectives levelling up. These objectives include:

- *'Boost productivity, pay, jobs and living standards by growing the private sector, especially in those places where they are lagging.*

- *Spread opportunities and improve public services, especially in those places where they are weakest.*

- *Restore a sense of community, local pride and belonging, especially in those places where they have been lost.*

- *Empower local leaders and communities, especially in those places lacking local agency.'*

Net Zero Strategy

2.15 The Net Zero Strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net zero target by 2050. A key part of this focuses on transport, where there are a number of policies and proposals to help reach this target, including shifting away from car use and increasing the share of journeys taken by walking, cycling and public transport, including the required investment. Other policies include:

- Zero-emission vehicle mandate
- Funding to support the automotive sector
- Investment in vehicle grants and EV infrastructure
- Decarbonising the maritime sector
- Aiming to become a world-leader in zero emission flight

National Planning Policy Framework

2.16 The vision for this strategy has also been informed by the National Planning Policy Framework (NPPF) and supporting National Planning Practice Guidance (NPPG).

2.17 The NPPF aims to achieve sustainable development, defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It has three interdependent objectives, summarised below:

- Economic: help build a strong, responsive and competitive economy
- Social: support strong, vibrant and healthy communities
- Environmental: contribute to protecting and enhancing our natural, built and historic environment

National Infrastructure Strategy and National Infrastructure and Construction Pipeline

2.18 The National Infrastructure Strategy sets out the Governments priorities to improve connectivity, increase productivity and deliver carbon net zero.

2.19 The National Infrastructure and Construction Pipeline sets out the Government's investment strategy in relation to infrastructure projects. The Pipeline builds upon the National Infrastructure Strategy and identifies transport as the sector with the highest number and total value of projects in the pipeline. Investment in transport infrastructure will total 35% of the total pipeline, and over £13bn has been allocated for Local Authority Transport[1]. It also highlights that just under £70bn of investment is to be made in transport related projects and infrastructure between 2021/22 and 2024/25[2].

Transport Investment Strategy

2.20 National transport priorities are identified in the Transport Investment Strategy, which focuses on creating a reliable and connected transport network that meets the needs of all users, growing the economy and supporting additional housing, through value-for-money investment.

Better Planning, Better Transport, Better Places

2.21 The Chartered Institution of Highways & Transportation (CIHT) Better Planning, Better Transport, Better Places guidance (August 2019) sets out a new approach to transport planning and development, recognising that nationwide, car parking and traffic still dominate development despite decades of Government encouraging a more sustainable approach to transport within spatial planning.

2.22 The guidance disposes of 'predict and provide' where development and transport infrastructure is planned based on outdated historic patterns and trends. Instead, it introduces an approach where a vision is set, and then development and transport is determined to deliver that vision.

2.23 The advice aims to support the creation of places that meet the requirements of the 21st century and address the environmental, economic and social challenges that we are facing.

DfT Uncertainty Toolkit

2.24   The Uncertainty Toolkit guidance sets out techniques for exploring uncertainty, in relation to the transport system, as part of transport modelling and appraisal.

2.25   The guidance sets out six 'Common Analytical Scenarios' for assessing uncertainty around future travel demand. These include:

- High Economy: high productivity and population growth
- Low Economy: low productivity and population growth
- Regional: people leave London and the South East
- Behavioural Change: people embrace new ways of working, shopping and travelling
- Technology: high take-up of connected autonomous vehicles
- De-carbonisation: high take up of electric and zero-emission vehicles

Regional Policy and Guidance

Berkshire Local Industrial Strategy

2.26   The Thames Valley Berkshire Local Enterprise Partnership's mission is to enable growth in the sub-region, through the implementation of the Berkshire Local Industrial Strategy (BLIS), sustaining the area's status as the most productive sub-region in the UK and supporting the national Industrial Strategy. The BLIS sets out five key priorities to achieve its vision of being 'the best of both global and local', and for Berkshire to 'grow with intent':

- Enhancing productivity within Berkshire's enterprises
- Ecosystems which are maturing and evolving and extend beyond Berkshire
- International trade, connections, collaborations and investment
- Vibrant places and a supportive infrastructure
- Making Berkshire an inclusive area where aspirations can be realised

West of Berkshire Planning Framework

2.27   The West of Berkshire Spatial Planning Framework provides a collective and ambitious vision for growth in the region, recognising the need to address the infrastructure deficit to enable the area to fulfil its potential as part of the wider economy of South-East England.

Transport Strategy for the South East and Strategic Investment Plan

2.28   Transport for the South East (TfSE) brings together 16 transport authorities and five Local Enterprise Partnerships (LEPs) to plan strategic transport across the south east of England. It intends to become a statutory body and is already working closely with Government. TfSE has developed the Transport Strategy for the South East (June, 2020) which sets to achieve this key vision:

'By 2050, the South East of England will be a leading global region for net -zero carbon, sustainable economic growth where integrated transport, digital and energy network have delivered a step change in connectivity and environmental quality.'

2.29   To deliver the strategy, TfSE will work with partners and authorities to create a better connected, more sustainable, integrated transport system for the South East, benefitting those who live in, work in and visit the area.

2.30 In June 2022, TfSE published a draft Strategic Investment Plan (SIP) for consultation which provides a framework for investment in strategic transport infrastructure, services and regulatory interventions over the next 30 years. The SIP includes 24 regional packages of investment opportunities across different travel modes, with a key focus on sustainable modes. This includes numerous rail, mass transit, active travel and highways schemes for the areas of Berkshire, North Hampshire and West Surrey (collectively referred to as 'Wessex' in the SIP).

2.31 In our consultation response to the SIP, we highlighted that decarbonisation should be given a higher status over the other policy interventions to ensure we achieve the local and national targets of net zero. We also stressed that whilst the initiatives across all modes are supported and important, priority should be placed on sustainable transport schemes.

Local Policy and Guidance

Our Local Plan

2.32 Our Local Plan guides development in Reading up to 2036 and will therefore play a decisive role in how our town evolves. The Local Plan seeks to deliver new homes and employment space in Reading, alongside critical infrastructure to accommodate forecast housing demands and job creation, and to ensure the town remains an attractive place to work, live and study. It also looks to reduce inequality in Reading, improve the environment (both urban and natural), make better use of its heritage assets and expand its role as a centre for arts and culture.

2.33 The RTS will help to deliver our Local Plan and will also, where appropriate, support the delivery of other Local Plans currently in development across the city region.

Our Climate Emergency Strategy and Climate Change Adaptation Plan

2.34 In 2021 Reading was named as one of only 11 UK local authorities, and one of just 95 across the world, to make a coveted 'A' list on environmental action for bold leadership and transparency. This accolade demonstrates our strong track record of partnership working on climate change.

2.35 We have pledged to aim for a carbon-neutral Reading by 2030. We have declared a climate emergency, and we call on the Government to accept moral and ethical responsibilities and to give Reading the additional powers and funding needed to help us achieve our goal.

2.36 We have developed a Climate Emergency Strategy (November 2020), considering the implications of climate change for future generations, which are predicted to be very significant. Reading has a long-standing commitment to action on climate change and is at the forefront of providing solutions to this global challenge and to take the opportunities that arise in doing so.

2.37 Transport-related risks of the impacts of climate change include:

- Damage to transport infrastructure from extreme weather events (for example winds or temperatures)

- Discomfort to travellers (for example urban heat islands, where temperatures are extremely hot in warm weather)

- Flooding of parts of the transport network (from either surface water or rivers)

- Prolonged dry periods leading to increased air pollution and lower levels of dispersion

2.38 Our Climate Change Adaptation Plan sets out how we will both reduce our environmental impacts that contribute towards climate change, and how we will adapt to address the impacts climate change will have on our town and lives. The plan covers six themes which are:

- Transport and mobility
- Water supply and flooding
- Health
- Natural environment and green spaces
- Energy and low carbon development
- Purchasing, supply and consumption

2.39 These themes are each considered from four different perspectives:

- Education
- Adaptation (resilience)
- Business
- Community

Reading Town Centre Strategy - Transport & Mobility Review

2.40 The town centre review provides a review of existing conditions and trends as part of the Reading Town Centre Strategy. The review identifies a number of themes and linked measures to encourage more sustainable travel in and around Reading Town Centre. These include:

- Improving connectivity over the IDR
- Increasing cycle access to the town centre and upgrade of cycle parking quality
- Managing through-traffic on the IDR

Our Air Quality Action Plan

2.41 The Environment Act 1995 introduced a statutory duty for Local Authorities to review and assess the air quality in their districts, and where problems exist, to formulate an action plan to improve the situation. Air quality is assessed against UK Air Quality Objectives (AQO), which are target levels of each pollutant based on their effect on human health. Our air quality monitoring and modelling identified a number of areas close to busy roads that did not meet national air pollution targets, and because of this we have declared a large area of the Borough as an Air Quality Management Area (AQMA).

2.42 We have also prepared an Air Quality Action Plan (AQAP) identifying measures which will improve air quality across the Borough, with a particular focus within the AQMA.

2.43 The AQAP recognises that transport is the main contributor to air quality exceedance in Reading and includes details of objectives, policies and actions to achieve these objectives. We are committed to taking action to improve air quality, through identifying areas where levels of local air pollutants exceed air quality objectives and working with partners and the community to reduce pollutants and their impacts on health.

Health and Wellbeing Strategy

2.44 Our Health and Wellbeing Strategy sets out the areas we will focus on to improve and protect the health and wellbeing of people who live in Reading and those who visit. The strategy and associated action plan cover a wide range of topics, including the need to increase physical activity levels through active travel and increase social interaction through improving access to transport

Our Corporate Plan

2.45 Our Corporate Plan sets out how we will enable Reading to realise its full potential and ensure that everyone who lives and works here can share the benefits of its success.

2.46 The plan is updated every year and outlines our strategy to deliver our vision, whilst recognising the importance of the social and environmental challenges. Recently, this has been against the backdrop of a difficult financial environment, including reductions in Central Government funding and growing demands on key Council services. The Plan groups the Council's work into the following three themes:

- Healthy Environment

- Thriving Communities

- Inclusive Economy

2.47 We are working towards a clean and safe town that is easy to travel around, and where people benefit from clean air and being able to walk and cycle instead of travel by car. To support this, we are investing in active travel and public transport and tackling congestion, as well as enhancing parks and open spaces, and improving recycling rates.

2.48 We are focusing on inclusion and are committed to tackling inequality to ensure everyone is supported to live their best lives. We are doing this by prioritising the needs of the most marginalised and vulnerable groups, and through investment in community organisations and services.

2.49 We are working towards a town where access to education, training and good jobs is available to all, child poverty is eradicated and upwards mobility is enabled. We are doing this through providing education and training opportunities, investing in infrastructure to keep us at the forefront of advances in technology, and building on our cultural heritage.

Forbury Gardens

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3. About Reading

Reading Borough

3.1 Reading Borough forms the central core of the wider urban area which is generally known as Reading. As such, the Borough cannot be viewed in isolation from its wider context. Figure 1 (page 13) shows how the urban area centred on Reading extends beyond the Borough boundaries and into West Berkshire and Wokingham. For instance, areas such as Calcot, Purley-on- Thames and parts of Tilehurst are located in West Berkshire, and Woodley and Earley are in Wokingham.

3.2 In a wider sense, the Reading urban area in many ways functions as a single 'city region' with the nearby towns of Wokingham and Bracknell. The relationship to South Oxfordshire is different, in that the Borough boundary currently forms the edge of the urban area, however there is still a significant level of demand for travelling between the two areas. Whilst Reading is bordered by Wokingham in the south, there are also significant movements between Reading and Hampshire, particularly Basingstoke and Winchester.

3.3 Reading Borough itself was estimated to be home to 174,200 people in 2021[3] and around 233,000 in the greater Reading area. The population is set to rise by a further 1% by 2040[4]. Whilst, in common with most areas, there is an ageing population, Reading

nonetheless has a younger population profile than many of its neighbours. Given the urban nature of Reading, it is unsurprising that it ranks fourth in the South East for population density, with 3,969 people per square kilometre[5].

3.4 Reading is a major centre of employment, with approximately 121,000 people working in the Borough[6]. There are **more jobs in Reading than workers**[7], which means there is a significant demand for traveling into Reading from other local authority areas,

Figure 3: Movement of Workers to, from and within Reading
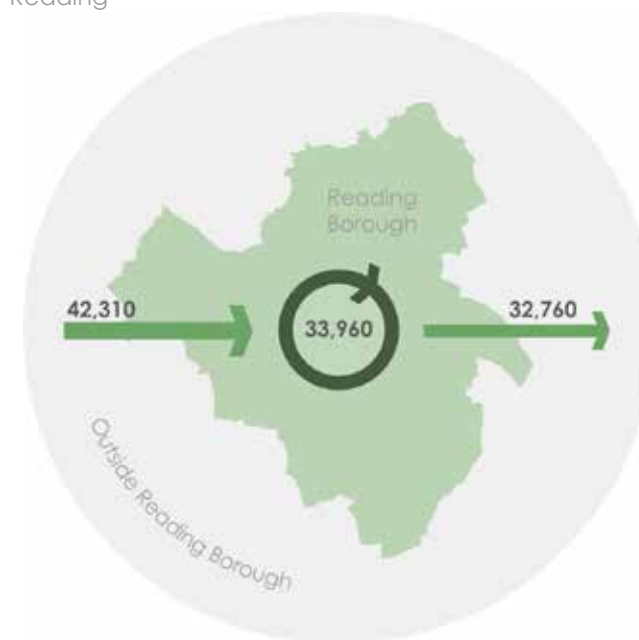
as shown in Figure 3, placing strain on the transport network and impacting the wellbeing of residents within the Borough. This reflects the economic success of the town, which functions as the centre of the Thames Valley, one of the most economically dynamic regions in the country.

3.5 Reading is a hub for a variety of businesses, including ICT, professional services and pharmaceuticals. The attraction of Reading is enhanced by a workforce that ranks within the UK top 5 for qualification levels and productivity[8]. At the same time, the town also hosts a number of industrial activities, and has an increasing role within the logistics sector. Berkshire has over twice the national average of technology specialists in employment[9]. Many of these businesses rely on the high level of skills in the area, and there are strong relationships with the University of Reading and other higher education providers in the area. However, despite the overall economic buoyancy, there are pockets of deprivation within the urban area where there are high levels of unemployment which is a key challenge this strategy seeks to address.

3.6 The centre of **Reading is a major retail and leisure destination, with The Oracle ranked in the top 50 shopping centres in the UK**[10]. Reading is also home to the University of Reading and Reading College. A large percentage of the local working population are highly skilled, ranking as 5th highest

The Oracle

amongst 63 sample UK cities for working age population with high level qualifications[11]. The University of Reading is renowned for world-class research, particularly in the areas of health, environment and food security. It also has one of Europe's leading business schools and a recently established science park.

3.7 Reading ranks highly from an economic perspective; it has the **10th highest employment rate, the highest average weekly earnings and a labour force where 26% of all jobs are within knowledge intensive business service, the highest percentage in the UK**[12]. Reading significantly benefits from a relationship between the availability of highly skilled workers and a network of highly skilled businesses. The Thames Valley region also has the highest levels of productivity in the UK outside of London[13].

3.8 Reading is a place with huge potential, second only to London for wages; it has above average economic productivity and rates of employment. Despite this economic success, Reading has some of the most deprived neighbourhoods in the whole of the Thames Valley, which are often masked by statistics at Borough and even ward levels. High costs of living and housing have contributed to Reading being **identified as the 5th least equal city in the UK**[14], indicating that many residents are not benefitting from the town's success. We are committed to reversing this trend and ensuring all residents have the ability to benefit from the town's success.

3.9 Reading has seen an increase in the number of LSOAs (Lower-layer Super Output Areas) that are within the UK's most deprived 10%, from none in 2010[15], to 2 in 2015[16] and to 5 in 2019[17]. Deprivation statistics consider income, employment, education, barriers to housing and services, health, living environment and crime, many of which are factors that transport either contributes towards or is affected by. The availability, accessibility and affordability of public transport and the provision of walking and cycling facilities are critical to ensuring equality of opportunity and connectivity across the Reading area.

The Wider Urban Area and Strategic Transport Connections

3.10 Reading is situated within a wider area that includes Wokingham and Bracknell which functions as a city region: a densely populated urban area with a regional centre, sub regional hubs, major business/ science parks and large suburban areas. This region currently encompasses the existing urban areas and planned development areas, and is expected to expand as additional development is identified at the edge of the existing region.

3.11 The area forms a natural economic cluster which is **forecast to be the UK's second fastest growing economy in the South East between 2022 and 2025**. Reading's economy has already grown by 4% in comparison to 2019 pre-pandemic levels – the biggest increase for any area of the country, and is expected to grow by 3.1% per year until 2025[18].

3.12 The region straddles four administrative boundaries over 200 sq. km, sitting at the centre of the Reading travel to work area; and the housing, labour and commercial market areas, shown in Figure 4.

3.13 Reading is the main town within the region and is a major population and employment centre within the South East, with a workday population of 165,005.

Figure 4: City Region, Travel to Work Area, Housing, Labour and Commercial Market Areas
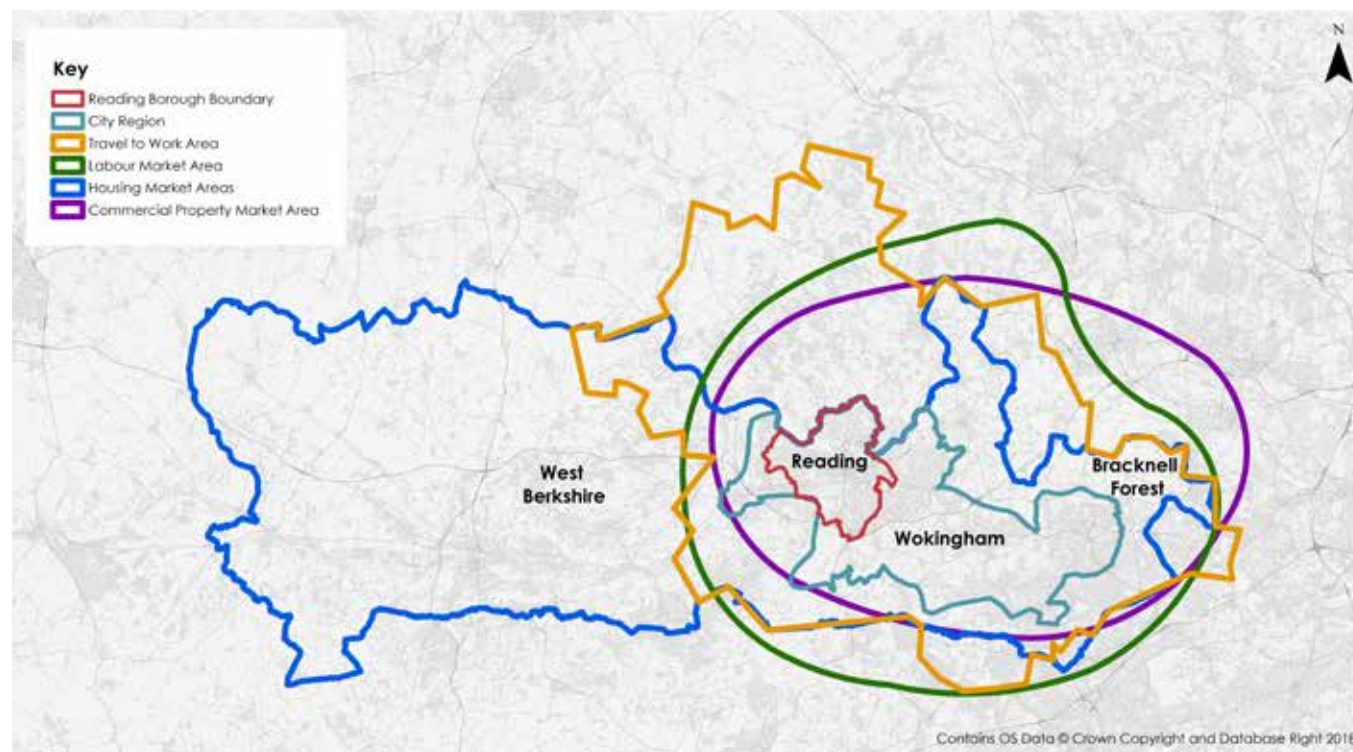
When considering the wider city region, the workday population is 401,824, comprising Reading Borough itself, and a further 126,524 people in part of Wokingham Borough, 83,753 in part of Bracknell Forest and 26,542 in part of West Berkshire[19].

3.14 Reading's location on the Great Western Main Line railway and the M4 motorway makes it a major hub for regional and national transport movement. Reading Railway Station is one of the busiest railway stations in the UK outside of London and marks the western extent of the Elizabeth Line. In addition, Reading's location on the Kennet and Avon Canal and River Thames and at the meeting point of several national cycle routes, connecting to London, Wales and the Isle of Wight via Southampton, gives it significance for a variety of modes of travel.

3.15 Reading benefits from close proximity to London and Heathrow Airport via both road and rail, alongside excellent links to national rail and road networks. There is ongoing significant investment in the national transport network in the area, with schemes coming forward including the Elizabeth Line, the Western Rail Link to Heathrow and railway line electrification.

3.16 The local road network within the area includes the A33, A4 and A329(M) which form part of the national Major Road Network (MRN). These roads are important in Reading, as they provide links to the wider strategic network. In particular, the A33 provides a link between the M3 motorway at Basingstoke to routes north of Reading that connect to the M40 and is therefore used heavily by vehicles travelling long distances.

3.17 Such connectivity is represented by Reading's status as a regional transport hub, international gateway and a major transport interchange as shown in Figure 5.

3.18 Whilst this excellent access to wider strategic networks provides many advantages to Reading and local residents, it also creates significant demand for travel in to and through the Borough. Despite having the third highest bus use in the country Reading remains one of the most congested towns in the UK, with car congestion in the area causing the second highest levels of delays in any local authority outside London[20].

M4 Junction 11

3.19 Reading is the seventh highest ranked city in the UK for inward investment[21], and the fourth most productive[22]. Reading was also ranked fourth out of the UK's top cities for good growth, considering a number of factors including economic performance and transport connectivity[23].

Figure 5: Existing Strategic Transport Connections
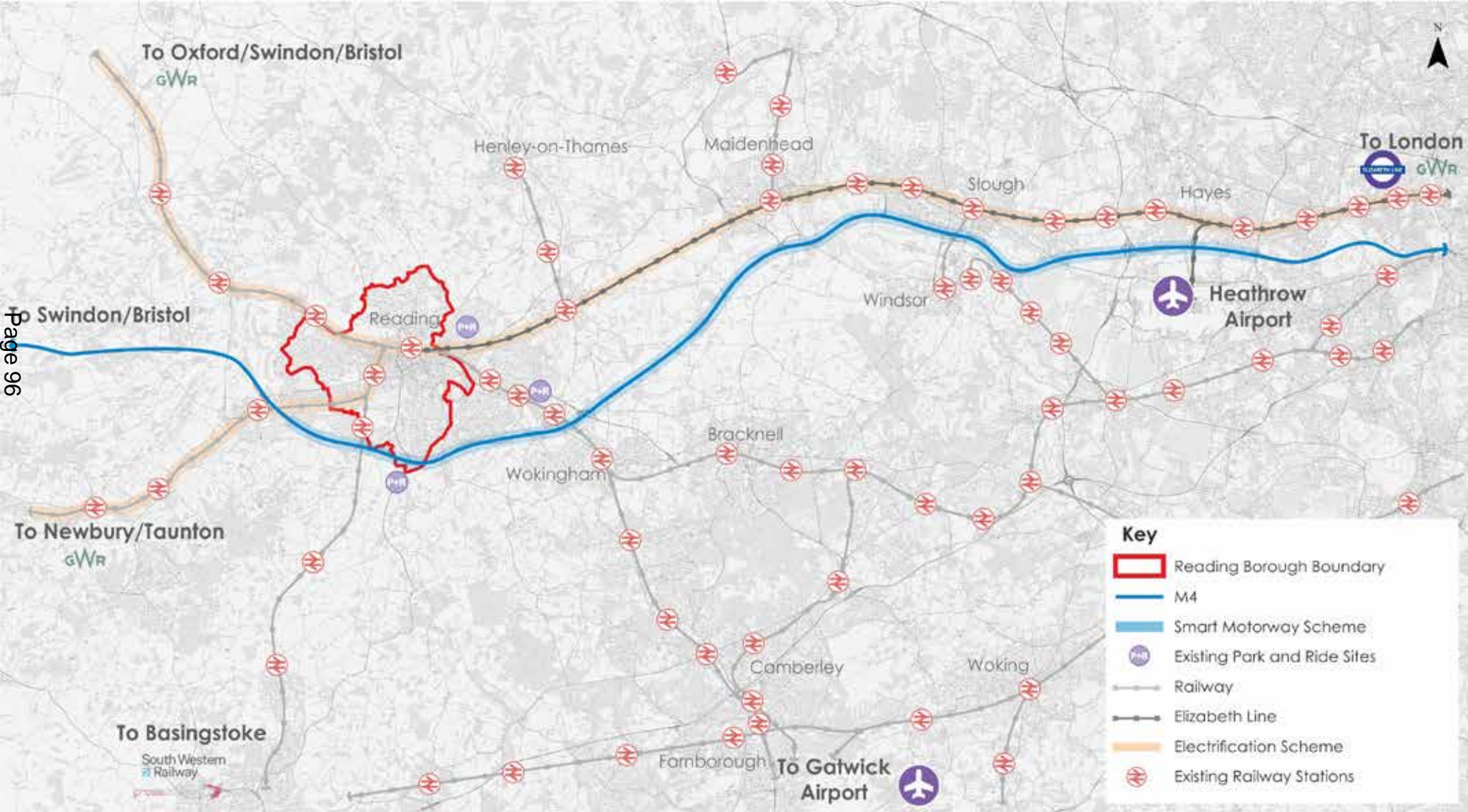
3.20 Economic success and growth in Reading are expected to continue and substantial house building is planned in both Reading and neighbouring authority areas. Major new development is proposed in central Reading, south Reading and at the edges of the Reading urban area within neighbouring Wokingham, West Berkshire and South Oxfordshire authorities, as well as in Bracknell Forest further east.

3.21 Between 2013 and 2036, Reading's Local Plan commits to the delivery of 15,847 homes – an average of 689 per year. Accounting for adopted and emerging Local Plans for neighbouring Local Authorities, this increases to a total requirement of approximately **2,600 homes per year** across the city region. Figure 6 shows the planned annual increase in housing numbers in Reading and surrounding Local Authorities[24].

3.22 The need to manage the increased demand this growth will have on the local transport network and mitigate the potential negative impacts for local residents is a significant challenge that this strategy seeks to address. We will do this by providing a high-quality, efficient and connected transport network that prioritises walking, cycling and public transport trips to manage the additional forecast trips. It will be important to encourage sustainable travel to manage growth by providing high-quality alternatives to the private car.

Figure 6: Planned Annual Housing Increase
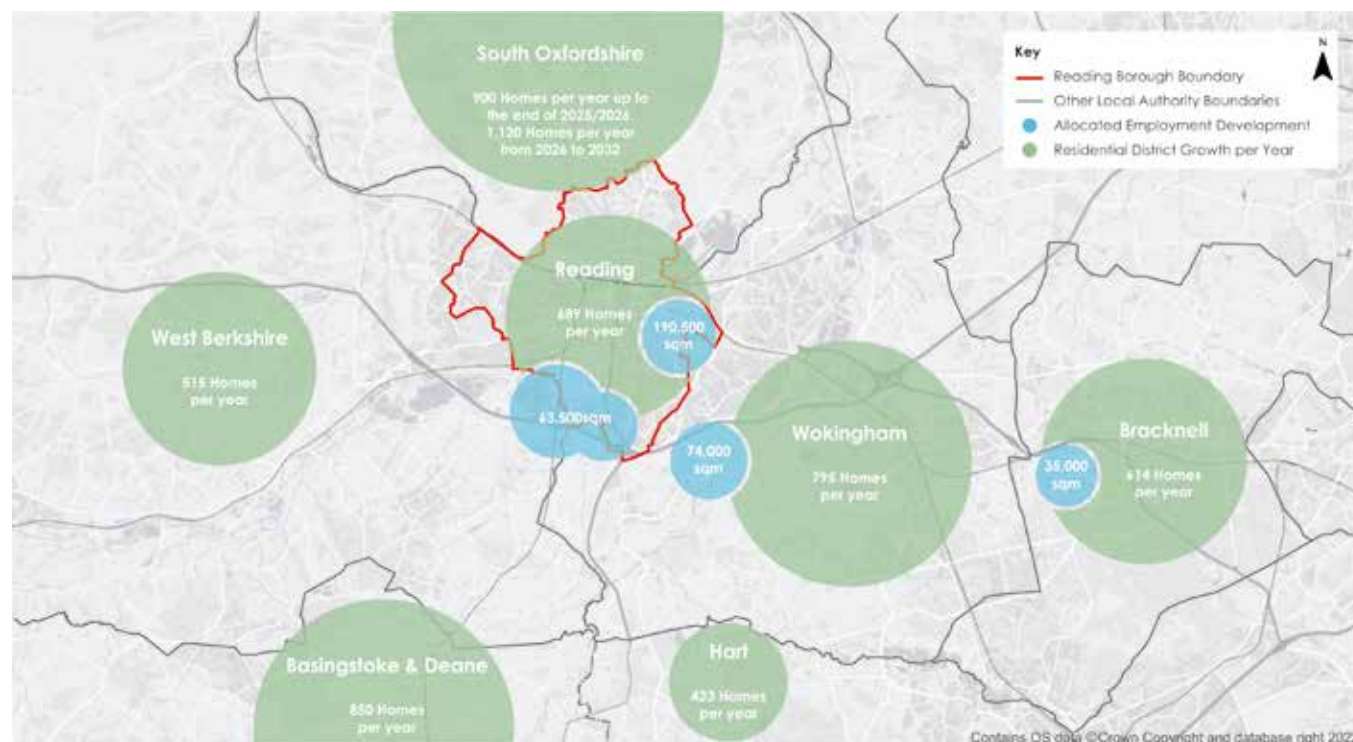
Environmental Considerations

3.23 Across Reading, there are environmental constraints that will influence where we deliver our schemes, and how they are designed, particularly where these constraints are significant or concentrated. Figures 7 to 10 show the flood risk, heritage, ecology and landscape constraints within and surrounding the Borough. These constraints will be taken into account in the development and delivery of all physical infrastructure schemes, which will also be supported by relevant technical information and assessments.

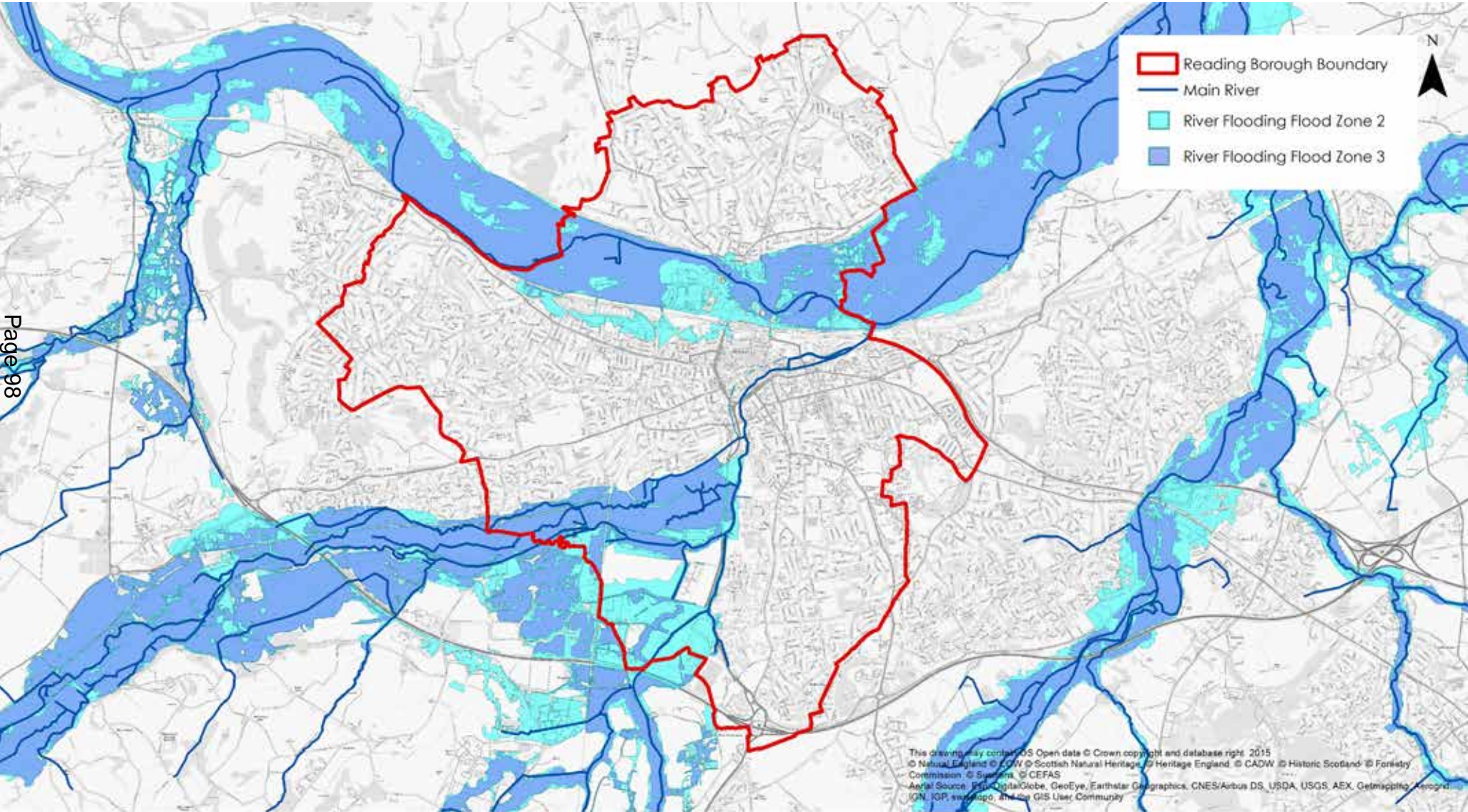Figure 7: Environmental Constraints - Flood Risk
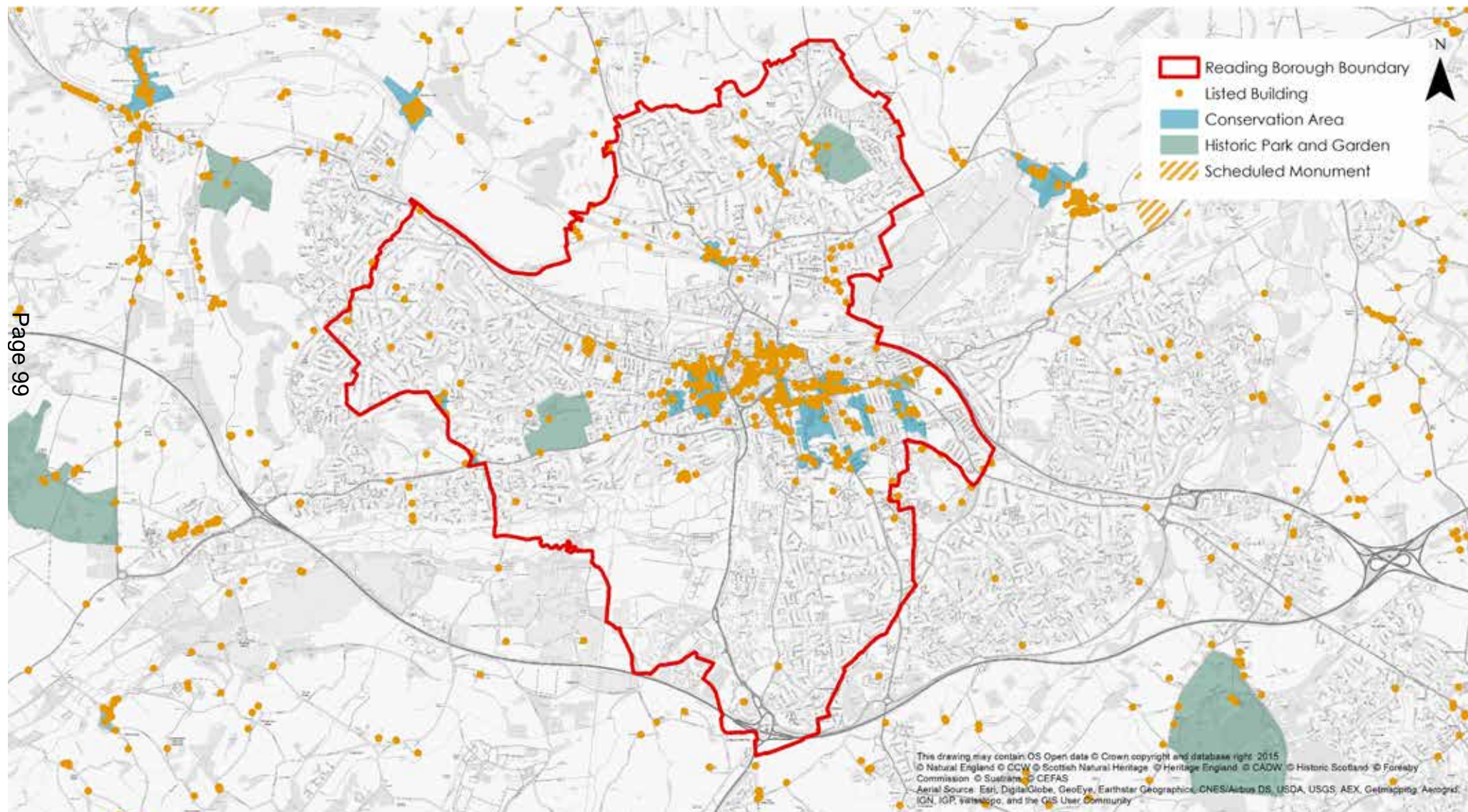
Figure 8: Environmental Constraints - Heritage

33
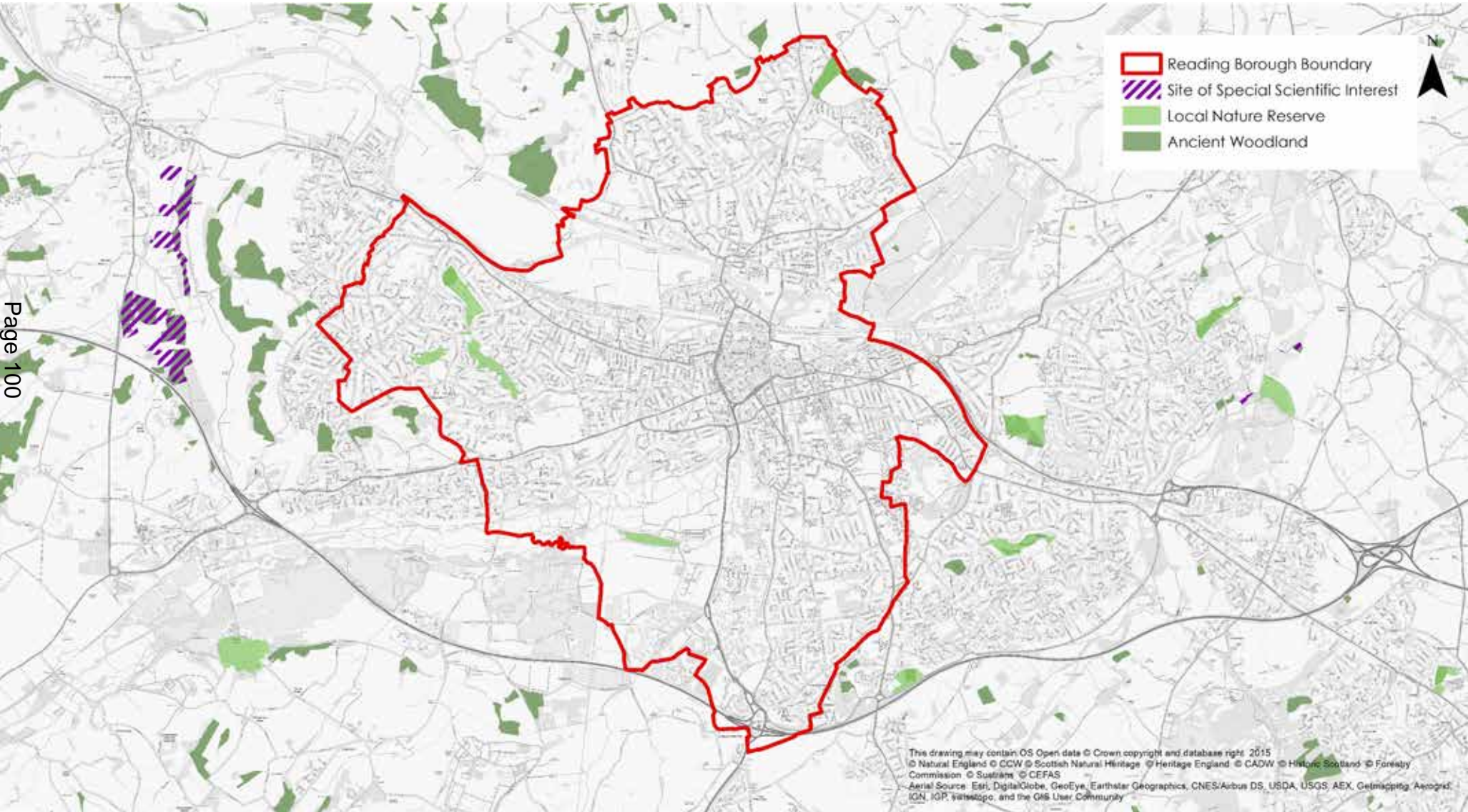
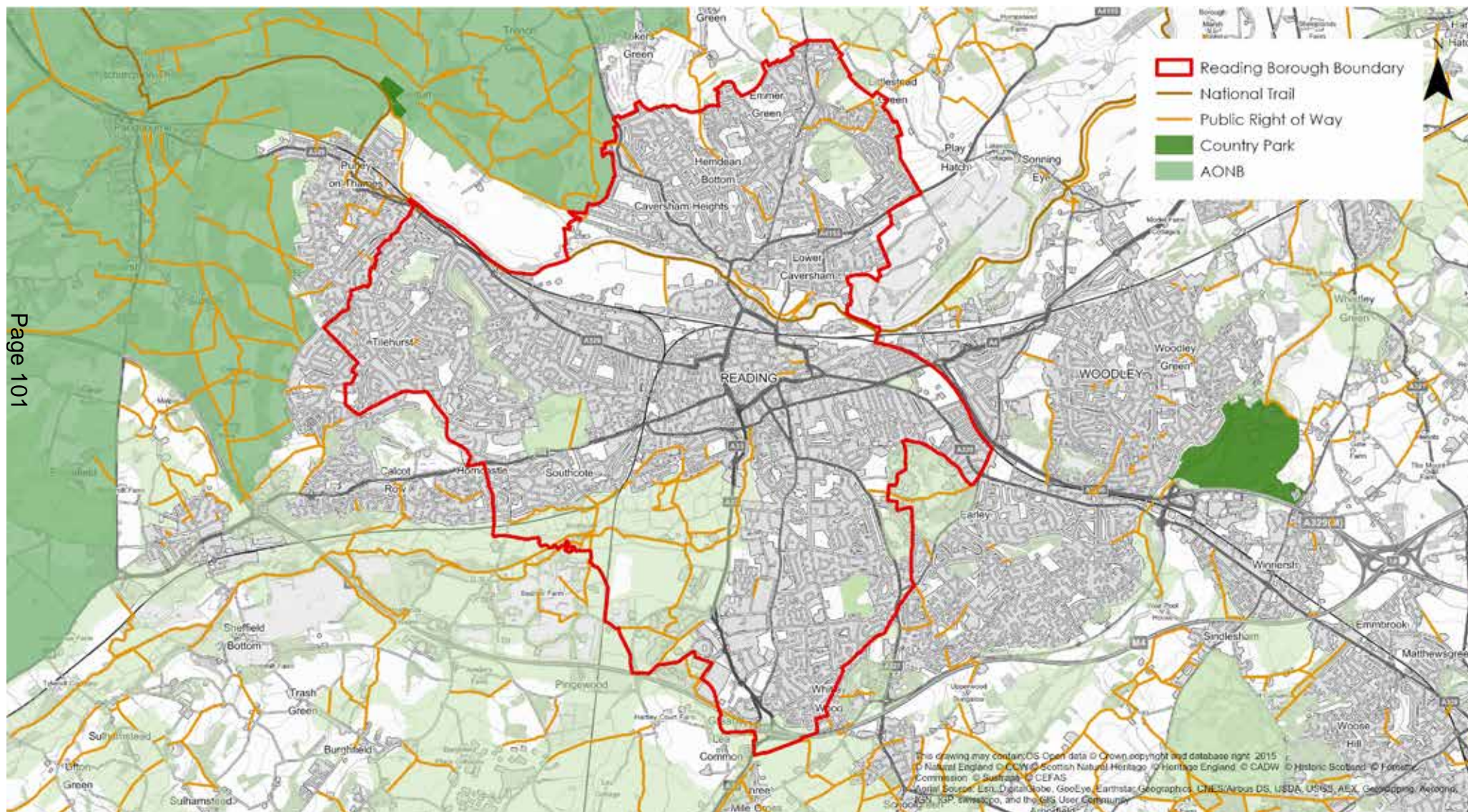Figure 9: Environmental Constraints - Ecology

34

Figure 10: Environmental Constraints - Landscape

35

Current Travel in Reading and the Wider Urban Area

Walking and Cycling

3.24 Walking on its own is not only a trip mode choice but walking forms a part of almost all journeys taken by other means of travel. This is as people travel to and between their homes or work places and car parks, bus stops, railway stations or other interchanges.

3.25 Walking and cycling also offer health benefits, both in terms of the physical benefits of active travel and through increasing opportunities for social engagement. There is clear evidence that the environment in which people live has a significant impact on health and wellbeing. It has both direct health benefits, and an impact on people's attitudes, behaviours and perceptions of their environment. For instance, reducing air pollution can improve perceptions of safety and promote outdoor physical activity and social interaction[25].

3.26 It has also been demonstrated that good neighbourhood design (in terms of walkability and mixed land use) has positive impacts on health and wellbeing, through increasing opportunities for social interaction and active travel, and helping to promote healthy behaviours[26]. Neighbourhood and street layouts should be designed to allow

for pedestrian and cycle connections within and between neighbourhoods, encouraging healthy lifestyles[27]. Physical activity, such as walking and cycling, has been shown to improve mental health, particularly in terms of self-esteem, mood and depression, as well as dementia[28].

3.27 Mental health issues are common in the UK, with approximately 33% of people experiencing a mental health problem each year[29].

3.28 Creating an attractive environment where people feel safe to walk and cycle has the potential to lead to many positive health outcomes. Benefits include increased mobility, physical activity levels, greater social interaction, reduced BMI and reduced risk of injury. We can achieve this through delivering improved infrastructure prioritising pedestrians and cyclists, such as segregated facilities, traffic calming measures, and public space improvements.

3.29 The provision of open and green space, high quality public transport and improved air quality have been demonstrated to lead to increased physical activity, improved cardiovascular outcomes, and increased social interaction, among other health benefits[30].

3.30 Additionally, provision of access to green open spaces and recreational activities by sustainable means will be an important consideration.

Thames Path, Caversham

Cycle Signage

3.31 A large proportion of people in Reading walk to and from work, as shown in Figure 11, however, there is scope to increase the number of walking and cycling trips. Our Local Cycling and Walking Infrastructure Plan (LCWIP) sets out how we will increase the number of walking and cycling trips into the town centre within a 2km and 10km radius respectively. Additionally, our Rights of Way Improvement Plan (ROWIP) sets out how we will maintain and improve our rights of way network, with an overall objective of encouraging more people to choose walking and cycling for local journeys, or as part of longer multi-modal journeys. There is also scope to increase trips within local or adjoining areas such as those made to local facilities and services including local centres, schools, healthcare, leisure centres and libraries.

3.32 Many measures for the promotion of active travel and its health benefits were delivered during the Covid-19 pandemic. We want to build on this and encourage people to make long term sustainable travel choices with less reliance on the private car. This will provide benefits for the environment such as a more pleasant walking space, alongside health benefits of cleaner air.
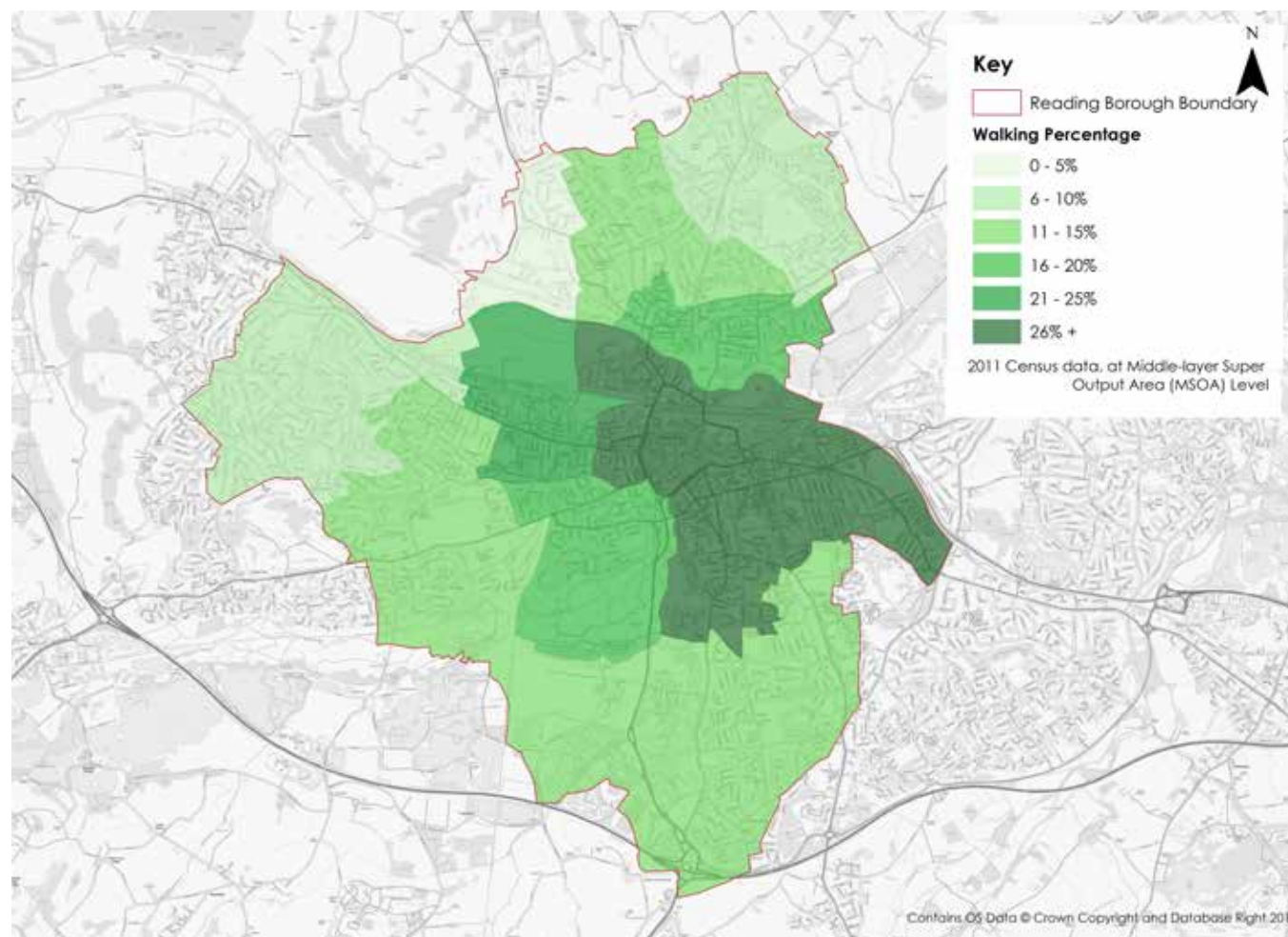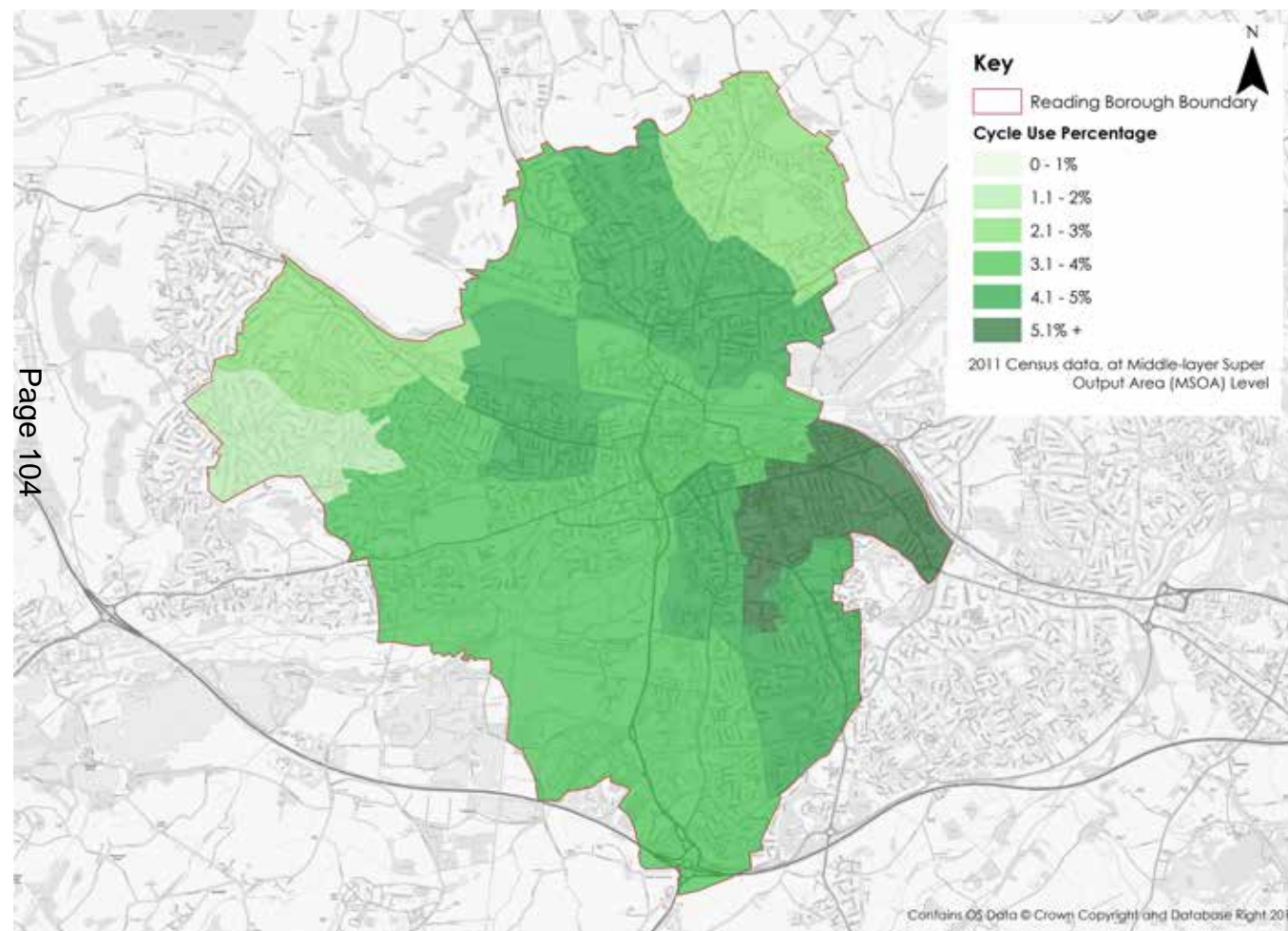
Figure 11: Walking Mode Share

Figure 12: Cycling Mode Share

Key

Reading Borough Boundary

Cycle Use Percentage

0 - 1%

1.1 - 2%

2.1 - 3%

3.1 - 4%

4.1 - 5%

5.1% +

2011 Census data, at Middle-layer Super Output Area (MSOA) Level

Contains OS Data © Crown Copyright and Database Right 2018

3.33 Cycling levels in Reading are slightly above the national average. However, other urban areas, such as those who have been provided significant Central Government funding through the Cycling Ambition Cities programme, have demonstrated the significant potential of increasing cycling mode share when supported by significant investment. In addition, there is significant opportunity to increase commuter cycling trips from the wider urban area due to the compact and relatively flat nature of much of the town, and build on the increased level of cycling that occurred during the Covid-19 pandemic.

3.34 Whilst there is a good network of radial cycle routes within Reading, there are limited orbital connections and some areas are not accessible via any dedicated cycle routes. In the wider city region, the new National Cycle Network route (NCN 422) links Newbury to Ascot via Reading, Wokingham and Bracknell; however further cycle improvements are needed to better connect the wider city-region and suburban areas, including proposed development sites. Cars dominate key corridors into and out of Reading making both walking and cycling less attractive due to poor air quality and limiting the space available to provide for sustainable travel. Investment has been made in walking and cycling schemes to improve local connectivity within the town, as well as strategic connections across the city region.

Public Transport - Rail

3.35 Existing rail lines runs east-west and north-south through Reading, with frequent services from Reading Station providing fast links to London, the West, Wales, South West, South Coast, Gatwick Airport, the Midlands and North of England. Interchange at Hayes Station currently provides rail access to Heathrow Airport from Reading.

3.36 Reading Station is the **UK's 9th busiest railway station outside London. Passenger numbers are recovering following the Covid-19 pandemic, and pre-pandemic catered for around 17 million passengers** (and a further 4 million interchanging passengers) every year, with passenger numbers increasing annually[31]. The upgrade of Reading Station, completed in 2015, has relieved previous capacity constraints and allowed us to secure ongoing sustainable economic growth in Reading, providing further redevelopment opportunities.

3.37 The Elizabeth Line opened in May 2022, with services initially running between Reading and London Paddington. Since November 2022, direct services are operational between Reading, through Central London and across to the east side of London.

3.38 Reading is planned to further benefit from significant investment in the following strategic rail schemes:

- The Western Rail Link to Heathrow will provide direct access to Heathrow Airport from Reading

- The high speed rail line (HS2) will reduce journey times from London to the Midlands and the North via an interchange on the Reading to Paddington line at Old Oak Common, enhancing connections from Reading to the rest of the UK. The first section is planned to open between 2029 and 2033.

Public Transport - Bus

3.39 We have supported investment in buses for a number of years, including through delivery of bus priority and dedicated infrastructure, for example at the M4 junction 11, along the A33 and at Park and Ride facilities, at Mereoak and Winnersh Triangle. This investment has been further reinforced with significant investment from Reading Borough Council, owned Reading Buses in prioritised customer service, new technologies and environmentally friendly vehicles.

3.40 Reading Buses offer free Wi-Fi, on-board charging for mobile devices, smart ticketing, real-time rail information on buses that link with Reading Station, audio and visual displays and GPS tracking for real-time information. **Reading Buses reported a 48% increase in bus use since 2009**, when it started sharing open data, and in 2018[32].

3.41 Reading Buses has **one of the most environmentally friendly fleets in the country**, with 85% of the fleet are hybrid, gas powered, or meet Euro 6 emissions standards[33],[34].

Figure 13: Proportion of Reading Buses' Fleet Meeting Euro Emissions Standards

■ Euro 4   ■ Euro 5   ■ Euro 6 or Electric
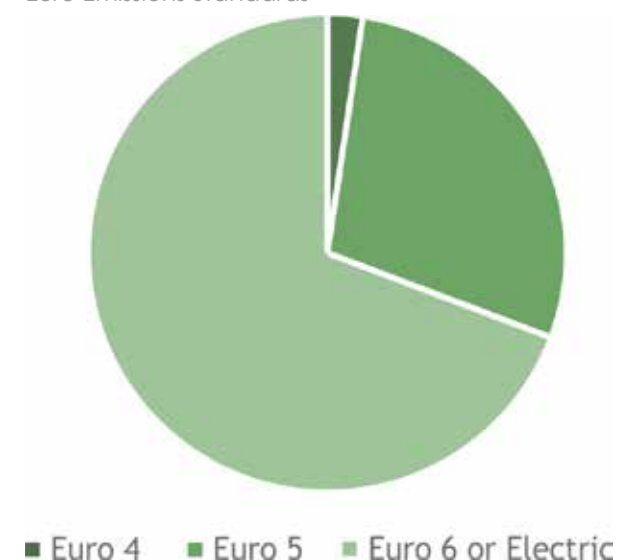
3.42   Bus use per head of population in Reading increased by 27% between 2009 and 2019[35]. This has been against a backdrop of national decline (-18% across England), and a decline of 7% in the South East overall, as shown in Figure 15. Few places have similarly bucked the long-term trend of decline in bus use. Whilst bus use declined significantly in Reading and across the rest of the UK during the pandemic, trip numbers are now recovering, and Reading has the third highest level of bus use in the country outside London.

3.43   Whilst Reading benefits from frequent, high quality bus services delivered by one of the most successful bus companies in the UK, and supported by Reading Borough Council, neighbouring areas of the South East are not so fortunate. Services in out-of-town areas are prone to delays on the road network from car congestion due to high car usage and resulting in lower levels of bus passenger journeys per head of population for commuter trips travelling to Reading from outside of the Borough.

3.44   Some neighbouring areas have amongst the lowest bus use figures nationally and therefore a large proportion of people travel from these areas into Reading by car.
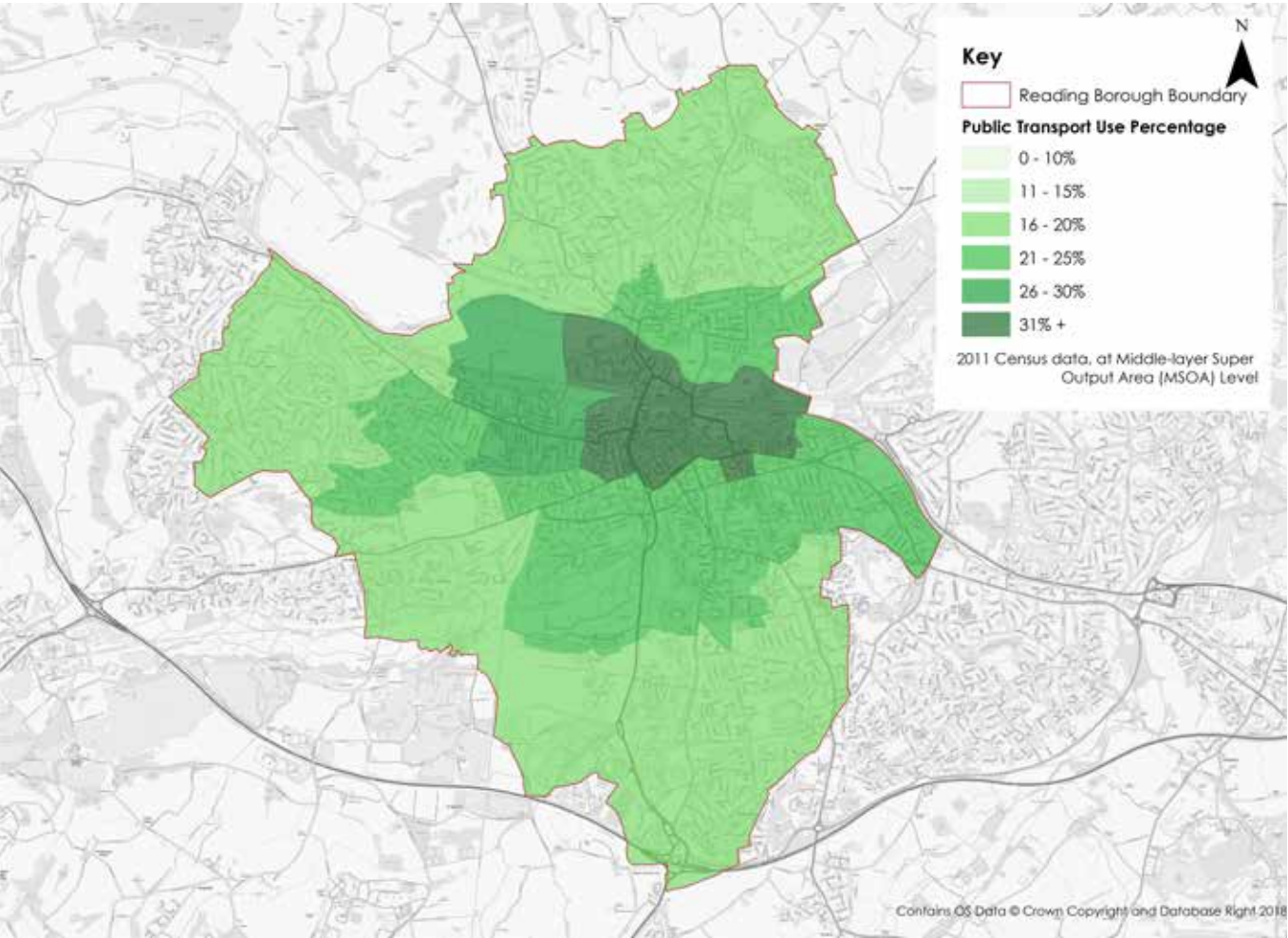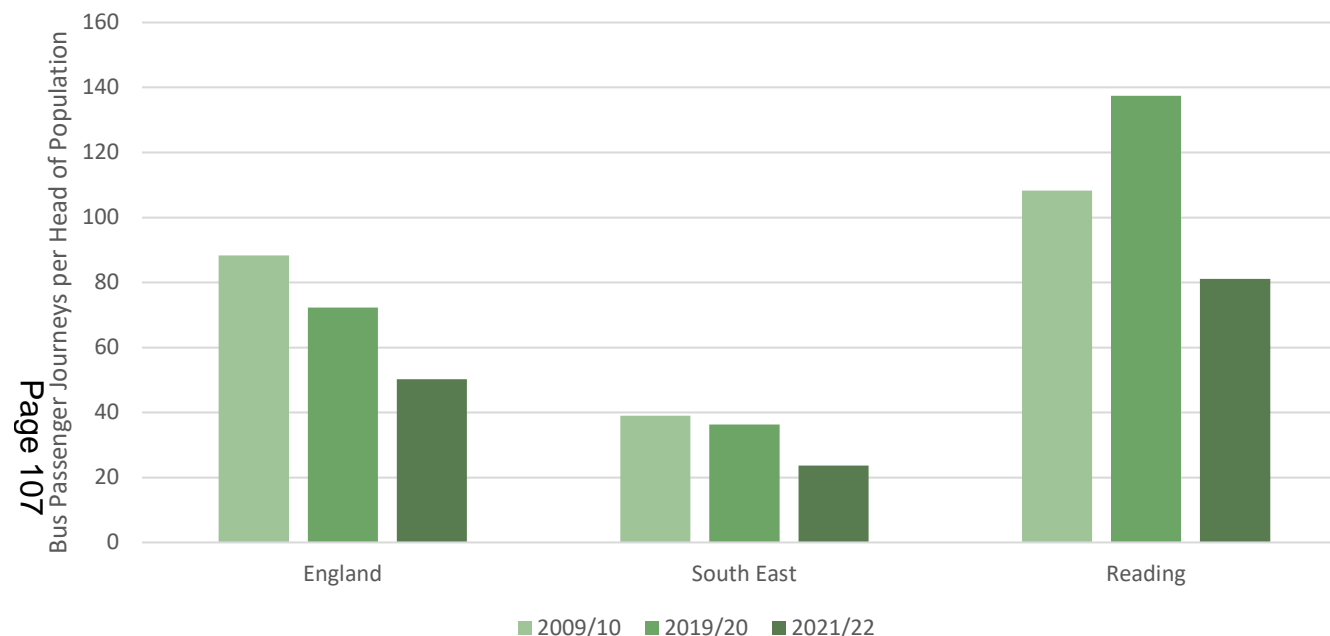
Figure 14: Bus Mode Share

Figure 15: Bus Use in Reading

Bus Passenger Journeys per Head of Population

Legend: 2009/10, 2019/20, 2021/22

Categories: England, South East, Reading

Road

3.45 The M4 motorway runs east to west just south of Reading, with three junctions offering access to the city region. The M4 Junctions 3 to 12 Smart Motorway scheme, completed in 2022, has increased capacity on this road.

3.46 There has been a huge shift in the town's economy, from its origins in 'beer, biscuits and bulbs', to a compact service economy which specialises in business and insurance services, home to the largest concentration of information and technology corporations in the UK. The Thames Valley generates some £45.8 billion per annum in output[36] and is the most productive area in the UK in regard to GVA per hour worked[37].

3.47 A high proportion of people in the wider city region continue to drive to and from work and schools, with the **average annual delay to drivers in Reading more than twice England's average**[38]. Pre-pandemic, the average car commuter in Reading spent 35 hours a year in congestion during peak hours.

3.48 Reading car commute times **increased by 46% between 2007 and 2016**[39] and a survey undertaken by RBC showed that 93% of local businesses that responded believe congestion affects productivity[40]. Whilst congestion has subsequently decreased during the pandemic, they are now increasing and causing air quality and productivity issues.

3.49 Reading's road network can become crippled when incidents or closures occur on the M4, or other major roads into/out of the town centre. It is vital that National Highways continue to build resilience into the strategic road network to enable the transport system to continue to operate efficiently during such periods of disruption as the town continues to thrive and grow.

3.50 The ability to continue to attract inward investment while reducing environmental impacts in Reading depends on managing the transport network and providing sustainable transport facilities as demand for travel grows. This will require sustained investment across the transport network so that Reading and the Thames Valley area can continue to thrive.

41

Building on Our Success

3.51   We have made significant investment in the transport network in recent years. During this time, significant levels of investment have been secured to provide new and upgraded transport infrastructure and encourage people living, visiting and working in Reading to use sustainable transport options.

3.52   We have an excellent track record of successfully securing external funding to deliver improvements to the transport network in Reading. This includes over £25 million from the Department for Transport's Local Sustainable Transport Fund, which enabled us to deliver a programme of sustainable schemes including Christchurch Bridge, and Mereoak and Winnersh Triangle Park and Rides sites; over £40 million from the Thames Valley Berkshire Local Enterprise Partnership to help deliver a new railway station at Green Park, and initial phases of the South Reading Bus Rapid Transit corridor scheme, Thames Valley Park and Ride (in partnership with Wokingham Borough Council), upgrades to Reading West Station and Theale Station (in partnership with West Berkshire Council), and a new cross-Berkshire National Cycle Network route.

Figure 16: Town Centre Cordon Count Results
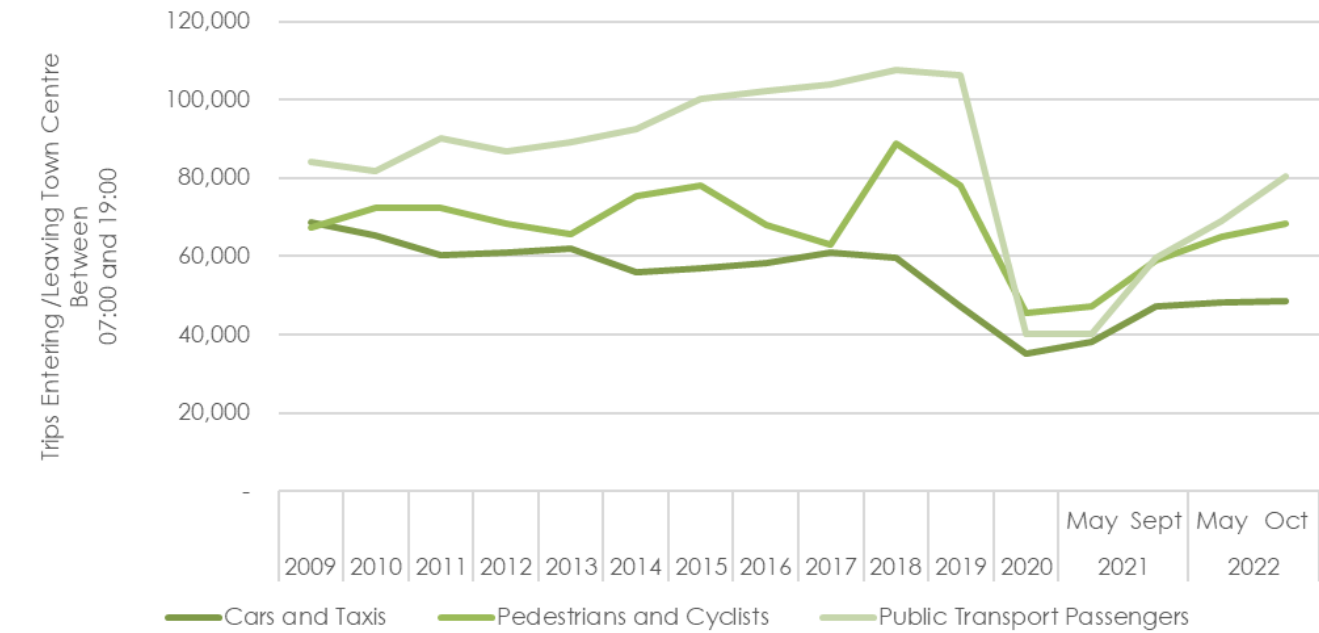
Mode	2008-10 Average Total Trips	2017-19 Average Total Trips	2020-22 Average Total Trips	% Change (2008-10 to 2020-22)
Walk	65,663	67,686	47,573	- 15%
Cycle	5,726	8,913	9,503	+ 87%
Bus	45,948	60,847	35,164	- 4%
Train	37,523	45,147	22,780	- 18%
Car & Taxi	66,405	55,991	43,577	- 27%
Total	221,265	238,584	158,597	- 28%

3.53 Reading has been at the forefront of delivering innovative technology schemes including the recent Smart City Clusters and ADEPT Live Lab projects. Reading has also been involved in EU- funded projects researching the application of sustainable transport initiatives and sharing best practice.

3.54 Progress in delivering our transport strategy objectives has been monitored annually since 2008 through our cordon counts, where we conduct a 12-hour survey of trips made into and out of the town centre by each mode of travel. The historical data, as shown in Figure 16, is a useful indicator that, prior to the Covid-19 pandemic, there had been an overall increase in the number of trips being made into and from the town centre and a continuing upward trend in sustainable transport trips against a decline in car trips.

3.55 Whilst Covid-19 resulted in a drastic reduction in town centre trips, there has been relatively strong recovery in the number of trips made by sustainable modes, and a sharp increase in the number of trips made by cycle, with close to a doubling of trips since 2008-10. Walking trips have decreased, however at a lower rate than overall trips during this period. Whilst the number of car and taxi trips has increased since our emergence from the pandemic, these appear to be plateauing at levels below those seen pre-Covid, indicating that some sustainable travel patterns adopted during Covid are continuing.

3.56 This shift towards sustainable travel has contributed towards generally decreasing levels of NO_2 air pollution in Reading although air quality remains a significant concern in the town with areas that breach legal limits.

Engagement and Initiatives

3.57 In addition to numerous major projects that we have delivered in recent years (such as those shown in case studies on the following pages), we have also delivered a wide range of initiatives and engagement activities.

3.58 These include air quality measures, such as the installation of 'No Idling' signage at schools, expansion of the Co-Wheels car club in Reading, and a significant Transport Strategy Visioning Consultation, Public Exhibition programme of residential and business personalised travel planning.

3.59 As part of our school travel strategy, we have engaged with schools across Reading to encourage uptake of various initiatives including road safety education, Bikeability cycle training, the national school sustainable travel accreditation scheme Modeshift STARS, Living Streets' Walk on Wednesday (WOW) programme, and School Streets.

Transport Strategy Visioning Consultation, Public Exhibition

Active Travel

Recently delivered schemes include:

- Christchurch Bridge
- Reading Station Cycle Hub
- National Cycle Network 422
- London Road Active Travel Improvement Scheme
- Forbury Retail Park to Napier Road Active Travel Link
- Church Street Public Space Enhancements
- Active Travel Fund schemes
- School Streets

3.60　We have delivered many significant active travel schemes including Christchurch Bridge and National Cycle Network route 422, alongside a comprehensive programme of local improvements such as numerous new pedestrian and cycle crossing facilities, additional cycle parking at Reading Station, Reading town centre and local centres throughout the urban area, School Streets and cycle training, road safety education and school and personalised travel planning initiatives.

3.61　Much-needed repairs to walking and cycling links in the town have also been carried out, such as the St Laurence's Church wall at the Forbury, where the structural buttresses supporting the wall had blocked the footway since the 1970s. We also refurbished and reopened an underpass under the Great Western Main Line connecting Newtown to the River Thames, reducing severance for residents in the area.

3.62　As part of the Emergency Active Travel Fund, various schemes, including a two-way segregated cycle route on Sidmouth Street, have been implemented across Reading with the aim of supporting social distancing and encouraging active travel. A number of these schemes have reallocated road space from the private car to walking and cycling.

Case Studies

Project Name: Christchurch Bridge
Cost: £5.9 Million
Status: Completed 2015

Christchurch Bridge was opened in 2015, providing a step-change in pedestrian and cycle provision between Caversham and Reading railway station and town centre, reducing the severance caused by the River Thames and helping to encourage active travel. The bridge also enhances access to green space at Christchurch Meadows for residents in the town centre. It was the first new crossing of the Thames in Reading for almost 90 years.

Determining key geometric requirements of the bridge required careful development with attention to architectural concept, build-ability and environmental elements. The design incorporates extensive new landscaping, including an area of wetland habitat to achieve flood mitigation and enhance biodiversity, while managing constraints including proximity to adjacent properties. Christchurch Bridge provides a legacy for future generations. The bridge is the first across the River Thames built outside London for 20 years.

Project Name: NCN 422
Cost: £4.2 Million (across Berkshire)
Status: Completed 2020

The new National Cycle Network Route 422 will connect Newbury and Ascot, via Reading, Wokingham and Bracknell. The scheme provides better connections for long distance cycle journeys, as well as enhanced facilities for more local journeys within Reading. The section within Reading links to those in neighbouring authorities serving major business parks, local centres, Royal Berkshire Hospital, the University of Reading and schools.

Enhancements include both on and off-carriageway cycle facilities, new crossing points including raised tables and tiger crossings to improve connectivity along the Bath Road, through the town centre and along Wokingham Road.

Project Name: School Streets
Cost: Approximately £20k per scheme
Partners: Schools and colleges

School Streets create a safer and healthier environment for everyone, including local residents. The initiative is part of the Council's wider ambitions for encouraging more active travel, such as cycling and walking, and as a result support better physical and mental health, lower carbon generation and improved air quality.

The running of school streets in the borough is both led and organised by schools themselves, with support and guidance provided by the Council.

Reading now has 4 school streets incorporating 6 schools with a scheme at Park Lane Junior in Tilehurst, Wilson Primary School off the Oxford Road, Thameside Primary School in Caversham and at Crescent Road covering Maiden Erlegh School, Alfred Sutton Primary and UTC Reading.

Project Name: Shinfield Road Active Travel Scheme [under construction]
Cost: £1.3 Million
Partners: University of Reading, Active Travel England

Work commenced in 2022 on our Shinfield Road Active Travel Scheme which will see the delivery of a new cycle route along Shinfield Road between Christchurch Green and Shinfield Rise. This new segregated cycle scheme will link south Reading and the Royal Berkshire Hospital, the University of Reading, local centres and Reading Town Centre. It links with existing new cycle routes

delivered by the Council on Redlands Road and Christchurch Road in the first stage of its Active Travel programme.

The improvements include the provision of no waiting restrictions (double yellow lines) on Shinfield Road along the route, to address the parking issues being experienced particularly near the University.

New advanced stop lines and early release for cyclists are also provided to improve safety as well as a number of new and improved crossings for pedestrians which also form a key element of the scheme.

Public Transport

Recently delivered schemes include:

- Reading Station Upgrade
- Reading Station Interchanges
- Reading Station Town Centre Enabling
- Cemetery Junction Bus Priority
- Winnersh Park and Ride
- Mereoak Park and Ride
- South Reading BRT Initial Phases

3.63 Public transport has been a key focus for Reading over recent years, and we have delivered several major schemes, including major upgrades to Reading Station and delivery of parts of our South Bus Rapid Transit (BRT) corridor. In addition, we have carried out a replacement programme for old bus shelters and implemented Park and Ride services from Mereoak Park and Ride to the Royal Berkshire Hospital, Green Park and Reading football matches.

3.64 The delivery of bus priority measures in Central Reading and along routes leading out of the centre have helped keep bus services out of congestion, contributing to the significant rises in bus use mentioned earlier.

3.65 We have successfully campaigned for the Elizabeth Line to be extended from Maidenhead to Reading, to provide a direct route from Reading across London. TfL Rail services between Reading and Paddington began from December 2019 with four trains an hour (six per hour at peak times) running between Reading and Paddington. With the formal opening of the Elizabeth Line in May 2022, frequencies increased to up to 12 trains per hour and, following the completion of the route in November 2022, passengers can now travel through Central London all the way to Canary Wharf and Abbey Wood without changing. The Elizabeth line services also radically improve the local train services within the Thames Valley by providing more regular trains linking Slough, Maidenhead and Twyford to Reading.

3.66 We have also delivered a new station at Green Park, and improvements to Reading West station, both of which were completed in Spring 2023.

3.67 In 2015, we opened Mereoak Park and Ride near the M4 Junction 11, which was shortly followed by the opening of Winnersh Triangle Park and Ride two months later. Combined with Madejski Park and Ride, the facilities have provided a cost-effective alternative to private car travel into the centre of Reading. All three sites are served by regular bus services, with Mereoak and Madejski also benefitting from the South BRT corridor.

Bus Interchange at St Mary's Butts

The Great Western Mainline

Project Name: Reading Station Area
Cost: £879 Million
Status: Completed 2015
Partners: Network Rail

Reading Railway Station underwent a major upgrade, which was completed in 2015.

The works included provision of a new North interchange and remodelling of the southern interchanges to improve public space and enhancing the connectivity and legibility of the area. New platforms were built, along with track layout reconfiguration to remove bottlenecks on the Great Western Main Line and a new rail

signalling centre for the Thames Valley. Major work was also carried out on the Great Western Main Line to prepare for electrification.

The works have led to a 125% improvement to through line platform capacity, and a 38% improvement in service performance[41]. The new station has been designed to accommodate the Elizabeth Line and Western rail access to Heathrow Airport.

The revitalisation of Reading Station has been a catalyst for major redevelopment in Reading as a whole, including Station Hill and Thames Tower.

Project Name: South Reading Bus Rapid Transit
Cost: £18.3 Million (to date)
Status: In progress
Partners: Reading Buses, Wokingham Borough Council, Thames Valley Berkshire Local Enterprise Partnership, Green Park, Reading International Business Park

Reading's South Bus Rapid Transit (BRT) corridor scheme has delivered a series of bus priority measures on the A33 between Reading Town Centre and the Mereoak Park and Ride facility to the south of the M4 junction 11. The scheme is designed to reduce forecast congestion

and improve public transport journey times and reliability on this key corridor into Reading, helping to accommodate the increasing travel demands associated with economic growth and development by attracting more travel to be made by public transport instead of private car. We have a phased approach to implementation of South BRT, delivering sections of the scheme as external funding is secured.

Journey times for South BRT services have reduced by up to 24% from 2015 when Mereoak was opened and these services are now the most reliable in the Reading area. As a result of this improvement, average passenger numbers on these services have increased by 62% from 2015 to 2019.

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Case Studies

Project Name: Green Park Station
Cost: £24 Million
Status: Completed 2023
Partners: Network Rail, Great Western Railway, Thames Valley Berkshire Local Enterprise Partnership, Department for Transport

Reading Green Park Station is a new railway station in south Reading, located on the Reading to Basingstoke line. A half-hourly service operates at the station, north to Reading Central and south to Basingstoke.

The new station building is fully accessible, and facilities include a new overbridge with stairs and lift. A multi-modal interchange is provided, including bus interchange, decked Park and Ride facility, short stay car park (Kiss and Ride), taxi drop-off, disabled parking facilities, access road, and landscaping.

The station acts as an integrated transport hub for southern Reading, linking surrounding residential areas and major business parks to the railway network and improving access to sustainable transport, including linkages to the South Reading BRT route.

Green Park is one of the largest employment areas in central Berkshire and offers significant opportunity for growth. The station helps to alleviate congestion in the area and along the A33 corridor, helping to unlock growth at the business park, and also directly unlocking residential development at the adjacent Green Park Village.

Construction of the station began in Spring 2019, and the station opened with the first public services on Saturday 27th May 2023, which marked the town's first new railway station since the opening of Reading West Station in 1906.

Highway, Network Management and Parking

Recently delivered schemes include:

- Cow Lane Bridges
- Red Route
- A33 Pinch Point Scheme
- Electric Vehicle Charging Infrastructure
- Eastern Area 20mph
- Traffic Signal Upgrades
- Reading Bridge Strengthening

3.68 Reading has grown significantly over the last few years, with advances made both in the provision of information (through Variable Message Signs and mobile applications, for example) and through data collection such as the Bluetooth journey-time monitoring system.

3.69 Detection infrastructure has been installed at disabled parking bays in Reading, facilitating development of a mobile application that can be used to remotely determine whether disabled parking is available.

3.70 Traffic signal upgrades have also been carried out across the majority of traffic signal junctions across the Borough, replacing life expired equipment, installing new low energy equipment and improving the network's ability to respond dynamically to changing traffic flow and pedestrian and cycle movements at crossings.

3.71 Reading's transport systems produce a significant amount of data, therefore making best use of this data to optimise the network for all users has been a key priority. This included the securing of DfT funding to apply machine learning to the datasets to not only understand the current operation of the network, but to also predict the near-term future to enhance how Reading deals with congestion, incidents and events.

3.72 Several highway and parking schemes have been delivered within the Borough, including safety schemes, schemes to improve public space, and increases to highway capacity. 20mph speed limits have been implemented around primary schools, as well as waiting restrictions and yellow zigzags, and verge and footway parking bans have been implemented in Tilehurst and Southcote. Mobile payment facilities for on-street pay and display parking have also been installed, alongside residents' parking schemes in many areas.

Case Studies

Project Name: Cow Lane Bridges
Cost: Included in Reading Station Area works
Status: Completed 2019
Partners: Network Rail

Improvement works to the Cow Lane Bridges were completed in 2019, improving travel around Oxford Road and Portman Road. This major upgrade to the bridges has been delivered to enable two-way traffic through both bridges, thus removing a major traffic bottleneck within Reading.

The scheme can also accommodate larger vehicles such as buses and lorries. This provides the opportunity to route lorry traffic in the West of Reading away from the Oxford Road, creating a potentially safer and more welcoming environment for residents and businesses in the local area.

An enhanced walk and cycle route has been provided as part the scheme along Cow Lane.

Project Name: Red Route
Cost: £250,000
Status: Completed 2019

A Red Route has been implemented in Reading on the 17 bus route along the Oxford Road, through the town centre and along Wokingham Road. This is a no stopping restriction which will keep key public transport services moving, prevent delays for bus passengers and improve safety for pedestrians and cyclists.

There are over 4.5 million trips on the 17 bus route each year[42], and so the Red Route has provided wide-scale benefit to local residents by improving traffic flow and making public transport more reliable.

This initiative is intended to be rolled out to other locations across the town where enhanced enforcement will provide similar benefits.

4. Challenges and Opportunities

Introduction

4.1 To achieve our overall vision for transport in Reading we have identified the issues currently faced in terms of transport, and future challenges and opportunities that this strategy will need to address, to inform our objectives, schemes and policies.

4.2 We have considered:

- Current travel patterns
- Existing transport infrastructure
- Socio-economics and demographics
- Health, wellbeing and environmental issues
- Mitigation of climate change impacts
- Adaptation to climate change
- Future development and growth
- Impact of Covid-19

4.3 This chapter provides details of the key challenges and opportunities for transport in Reading and considers the whole of Reading Borough, as well as the wider urban area, including parts of Tilehurst and Purley, Calcot, Woodley, Earley and Winnersh, to allow consideration of cross-boundary issues. Our analysis has considered Reading Borough at a strategic level, as well as local issues.

Key Challenges

4.4 Seven key challenges for our strategy to address have been identified through detailed analysis of the evidence base. These are:

- Adapting to the future
- Improving air quality
- Reducing car congestion and the negative effects it causes
- Providing affordable and accessible travel for all
- Removing barriers to healthy lifestyles
- Achieving good accessibility to local facilities and employment
- Accommodating development and delivering the Local Plan

Adapting to the Future

We know that we are in the midst of a climate crisis. This, alongside fast changing technological innovation, means the future is uncertain and Reading will need to adapt, through both decarbonisation and accepting the need to travel more sustainably. This will affect the way we travel and transport goods, whilst at the same time provide new and innovative opportunities for society.

Our transport strategy will need to enable Reading to not only adapt to the challenges of the future, but also to drive us towards the sustainable future in our vision. This will include facilitating changing travel patterns and behaviour, shifting more travel of both people and goods to sustainable modes and also ensuring Reading maximises the opportunities that emerging or currently unknown technologies will allow.

Climate Emergency Crisis

4.5 We are in a state of crisis with our actions to date having increased atmospheric CO_2 levels to a level where average global temperatures will rise to around 1.5 to 2.0 degrees above pre-industrial base by around 2050. There are significant risks of temperatures rising further.

4.6 The impacts of climate change will affect us all. Flood events are expected to become both more severe and more common, damaging infrastructure, including the transport network, and buildings. Droughts will also become more common, and food may become more difficult to grow. Power and water supplies are very likely to be disrupted[43].

4.7 Transport is the biggest sector in terms of CO_2 emissions in the UK[44] representing nearly a quarter of emissions. Whilst transport emissions reduced significantly during the Covid-19 pandemic due to restrictions on travel, more recent data indicates that emissions post the lifting of restrictions are expected to have increased back to near pre-pandemic levels.

4.8 The very modest technological improvements in petrol and diesel engine technology over the last 20 years to reduce CO_2 have been more than offset by consumer behaviour changes, which include a large and rapid increase in SUV sales and a move to internet shopping, leading to a

large increase in delivery vans. Globally, the growth in SUV sales is the second highest cause of continuing increases in atmospheric CO_2 after power generation[45].

4.9 The Government's targets for net zero by 2050 and a need to more than half CO_2 emissions globally by 2030 as set out by the Commission for Climate Change require radical action. This cannot be achieved through only technological intervention; people will need to make changes to the way they live their lives and how they travel.

4.10 By 2030, the sale of new ICE (Internal Combustion Engine) cars and vans will be banned in the UK, with some hybrid cars able to be sold to 2035. ICE HGVs are to be banned by 2040. Car manufacturers are expected to reduce outputs of combustion engine cars in advance of this, and by 2030, 70% of new cars are likely to be electric[46]. As older cars are gradually replaced and removed from the network, fewer and fewer ICE vehicles are expected to remain on our roads, although we could still have large numbers on the roads in the 2030s.

4.11 Even with zero emission vehicles, we will need to substantially reduce how much we travel by private car over the period of this strategy; the manufacturing processes for electric vehicles and (at least currently) the sources used for electricity generation to power them both result in air pollution that contributes towards climate change. Additionally, electric vehicles produce particulate pollution as they are used, and both electric and combustion engine vehicles add to congestion and reduced levels of physical activity.

The Green Industrial Revolution

4.12 Previous industrial revolutions have fundamentally transformed global economies and the way we live, as shown below. The Industrial Revolution brought steam power and mechanical production, with the Technological Revolution bringing electricity and mass production. The most recent industrial revolution - the Digital Revolution - brought electronics, IT and automated production. We are now on the cusp of a fourth industrial revolution: the Green Industrial Revolution. This will be shaped by the need for a cleaner and greener future to meet the global climate challenge and deliver both economic growth and carbon net-zero, in world with rapidly advancing technologies, such as cyber-physical systems and artificial intelligence.

4.13 The UK government's 10 Point Plan for a Green Industrial Revolution lays the foundations for the industrial revolution:

- Advancing offshore wind
- Driving the growth of low carbon hydrogen
- Delivering new and advanced nuclear power
- Accelerating the shift to zero emissions vehicles
- Green public transport, walking and cycling
- Jet zero and green ships
- Greener buildings
- Investing in carbon capture, usage and storage
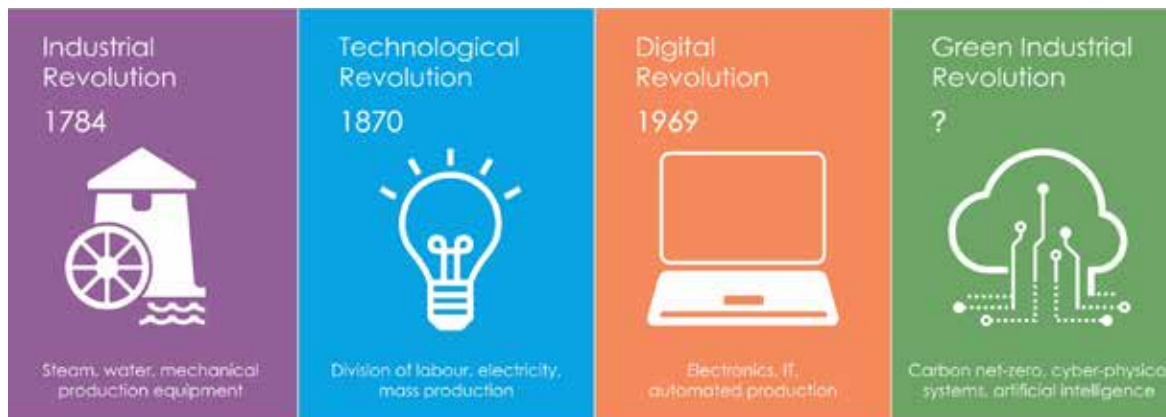- Protecting our natural environment
- Green finance and innovation

4.14 This highlights that we cannot meet our transport challenges of the future through just working within our transport silo but need an integrated smart city approach to delivering services.

4.15 There are a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human[47].

4.16 Being able to capture the benefits of rapidly changing technology is key to meeting future challenges including climate change and there is huge opportunity from new technologies. However, with such rapid change comes real risks of communities being left behind and risks of a technology led future that is not inclusive, which does not benefit society as a whole.

4.17 The Berkshire Local Industrial Strategy details plans for enabling growth in the region, supporting the UK Industrial Strategy.

Revolutions Timescale

Industrial Revolution 1784	Technological Revolution 1870	Digital Revolution 1969	Green Industrial Revolution ?
Steam, water, mechanical production equipment	Division of labour, electricity, mass production	Electronics, IT, automated production	Carbon net-zero, cyber-physical systems, artificial intelligence

Main Technological Changes

4.18 There are a number of technological changes that are foreseen in the transport sector, as outlined in the following sections.

New Fuels

4.19 Public transport, both rail and road has already invested heavily in moving away from use of diesel as a main fuel with electric trains and biogas buses already providing much of Reading's public transport. Significant investment is now also being made by the car industry in electric vehicle technology (EVs). Hydrogen fuel cell technology is also being developed and we may see this coming forward in this period, probably for freight and potentially public transport in the first instance. These technologies will help further de-carbonisation the transport sector, although their impact may not be significant before 2040.

4.20 There is a challenge of providing the right balance of public electric car charging infrastructure to support EV take up, whilst not necessitating expensive electricity grid reinforcement and battery storage that may not be required in the long run.

Autonomous Vehicles

4.21 There is significant investment and publicity around autonomous vehicles, and we see two distinct applications.

4.22 The first is a private autonomous car that can give hands-free travel to anywhere in the UK. There is not forecast to be a significant take up in the plan period, however in the longer term, autonomous vehicles have the potential to smooth traffic flow, almost eliminate accidents and could free up car parks for development and the continuing development of driver assist systems will contribute to these outcomes in the interim.

4.23 The second is shared autonomous vehicles such as 12- to 15-person autonomous electric pods, although these could be any

Autonomous Public Transport

size of vehicle. These vehicles are already operating at certain locations across the world where they mainly operate in private controlled environments such as business parks. A number of cities globally have trialled these vehicles on-street with traffic. It is anticipated that Government legislation will enable autonomous vehicles to operate without a driver in the vehicle on the public highway in the next few years and hence they could form part of a transport strategy for Reading within the plan period. Shared Autonomous Vehicles have the potential to support public transport services, providing affordable door-to-door public transport when connected to interchanges with other public transport services. The ability to connect door-to-door could also provide an inclusive service reducing the need for households to own a car.

Drone Delivery

4.24 By 2030, between 150,000 and 400,000 commercial drones are expected to be in operation in the UK[48]. There could be drones supporting our emergency services, delivering parcels, as well as supporting other industries. Whilst drones are predicted to uplift the UK GDP by £42 billion by 2030[49], there are concerns regarding privacy, noise pollution and visual impacts which have yet to be addressed. However, the evidence suggests that drones are likely to be part of our future transport system.

Mobility Services on Demand

4.25 Mobility services are widely forecast to provide a 'step-change' in the way we will travel in the future. Instead of individuals investing in a car which is only in actual use around 4% or 5% of the time[50] they would pay a monthly subscription for a service that can be tailored to their needs which can be accessed via an app and a single payment platform.

4.26 Mobility services can bring together public transport, cycle hire, shared taxi hire and micro-mobility options, as well as private car hire and, by reducing car ownership, can significantly reduce private car dependence, which is critical to enabling economic growth in a net zero carbon future.

4.27 Currently, mobility services are generally an app which brings together journey planning and payment services on a single platform, rather than being an integrated service that will get you from A to B. However, it is expected that these services will harness the power of big data and artificial intelligence to accurately predict demand for travel and hence provide very efficient shared transport services which will remove the need and desire to own a car.

Micro-Mobility

4.28 Micro-mobility encompasses a range of transport choices from scooters and bikes (both electric and conventional) to small electric one- and two seat cars for urban transport.

4.29 Some of these, such as e-scooters will require legislation to be legal on the public roads, and others, such as e-bikes need careful consideration in designing routes as they can move at a steady 15mph with very little effort, opening up cycling to a larger section of the population and increasing the areas within easy cycle distance where safe routes are provided.

Next Generation of Network Management Systems

4.30 Whilst there have been some key developments, the current traffic management systems are essentially still based on technology from the 1970s and optimise the highway network for vehicles based on monitoring traffic flow. It is anticipated that new generation of network management systems will be delivered, which use multiple sensors (Internet of Things – IoT) including connected vehicles and the travellers themselves to create predictive network models using machine learning and artificial intelligence. This expected to link to mobility services creating a fully multi-modal and integrated system that optimises for the movement of people and not just vehicles.

Wider Changes in Society - Sharing and Circular Economy

4.31 The sharing economy is another potential step-change in transport and there we are already seeing individuals hiring out their private cars in certain cities or renting out their driveways during the day for commuter parking. New companies are making sharing very easy and safe via apps, and this is expected to grow. Another aspect of the sharing economy is car sharing and there is significant potential for this to grow.

4.32 The circular economy will help to reduce our impact on the environment, through keeping products in use for as long as possible, and then recovering and reusing materials at the end of the product life. The circular economy can apply to everything from plastic bags through to our transport infrastructure. For example, trials of 'plastic roads' have been undertaken, where recycled plastic has been mixed with asphalt to resurface roads, as an additive reducing the volume of bitumen used.

4.33 Research and trials regarding reuse of materials is on-going, and we anticipate that the way we design and build our transport infrastructure could change significantly over the plan period.

4.34 We also expect growth in services and businesses supporting the circular economy and reducing waste, such as libraries of 'everyday items', community fridges, household goods/food refill shops and repair cafés.

4.35 With all of the above predicted technological changes there will be considerable opportunities, alongside challenges to avoid isolation of individuals as technology 'passes them by'. A key aim of this strategy is to ensure inclusivity and access to travel as needed for everyone in Reading.

Figure 17: The Circular Economy

Changing Behaviours and Attitudes

4.36 People's responses to the changing technology and the environment around them can both be a challenge and an opportunity for delivering more sustainable patterns of travel and for minimising the negative impacts of transport on themselves.

4.37 Trials such as the Innovation Valley Rewards app, developed through the Adept live labs programme, show how we can incentivise sustainable travel to reduce carbon footprint and minimise exposure to poor air quality. Behaviour change is a hugely powerful tool for addressing climate change and on the plus side, the urgent need to do something about the climate has a high level of media coverage.

4.38 However, we need to be aware that electrification of vehicles, for example, may encourage more driving, as people perceive electric driving to be clean, whereas there remains a significant amount of carbon in the electricity production. Without strong support for the right behaviours, we may see potential benefits to the environment of policies and technologies being eroded and not delivering the carbon reduction and air quality improvements required.

Improving Air Quality

We know that vehicles cause air pollution through emissions of nitrogen oxides (NO_x) and particulate matter (PM), and emissions from private cars, taxis and goods vehicles are a significant concern, particularly their effects on human health. As a result of high levels of congestion in parts of Reading, an Air Quality Management Area (AQMA) has been declared covering the town centre and many of the key corridors into and out of the town, including adjacent to the Royal Berkshire Hospital. Additionally, Wokingham Borough Council has declared an AQMA along the M4 south of Reading.

The Covid-19 crisis resulted in many towns and cities, including Reading, seeing a temporary improvement in air quality with a reduction in both NO_x and fine particulates, primarily a consequence of lower traffic volumes. This not only gave us an indication of how a future might look with less air pollution and better air quality, but also what measures we need to achieve to get there.

4.39 In Reading, our monitoring shows that nitrogen dioxide (NO_2) is the only pollutant that currently exceeds a UK national objective. Levels of NO_2 have started to fall, but we must do more to reduce NO_x pollution further. Although the levels of particulate matter are below current UK objectives, it is widely accepted that there is no known safe limit for exposure to particulate matter and the World Health Organisation guidelines are much more stringent than the UK requirements. It is important that we reduce particulate emissions to limit the impact on our communities.

4.40 The negative effects of poor air quality are serious: up to 36,000 people in the UK die as a result of air pollution every year [51], and research indicates that reducing PM by 10μg/m3 would extend average lifespans in the UK by five times more than eliminating casualties on the roads, or three times more than eliminating passive smoking [52]. In Reading, **6% of deaths are attributable to PM2.5** [53].

4.41 The **mortality rate from respiratory disease has been increasing for under-75s in Reading for in recent years**, as shown in Figure 20 [54]. Current rates are 45% above the average for the South East.

4.42 Whilst technologies are developing that are reducing the level of NO_x and particulate matter vehicles emit from exhausts, and the UK is shifting towards electric vehicles, around 85% of fine particulate pollution from vehicles does not come from exhausts [55].

4.43 All road vehicles, including electric vehicles, cause air pollution from wear and tear on tyres, brakes and road surfaces, and particles are lifted back into the air through vehicle movement, as illustrated in Figure 18.
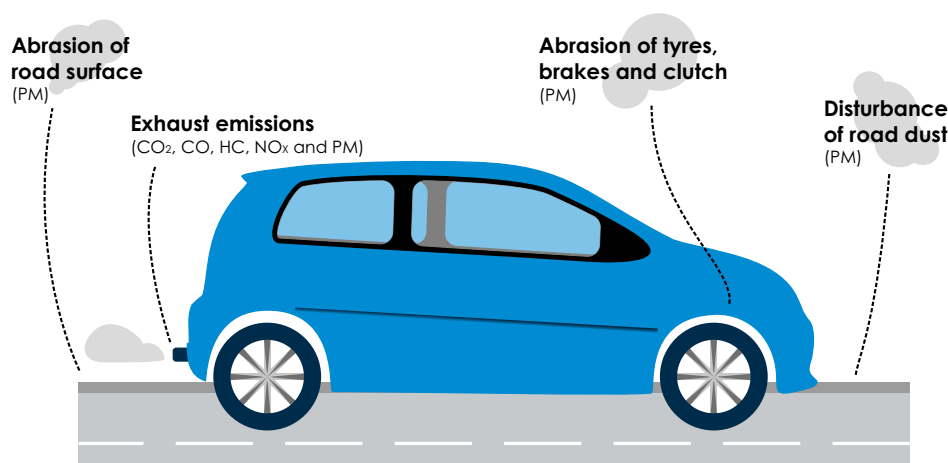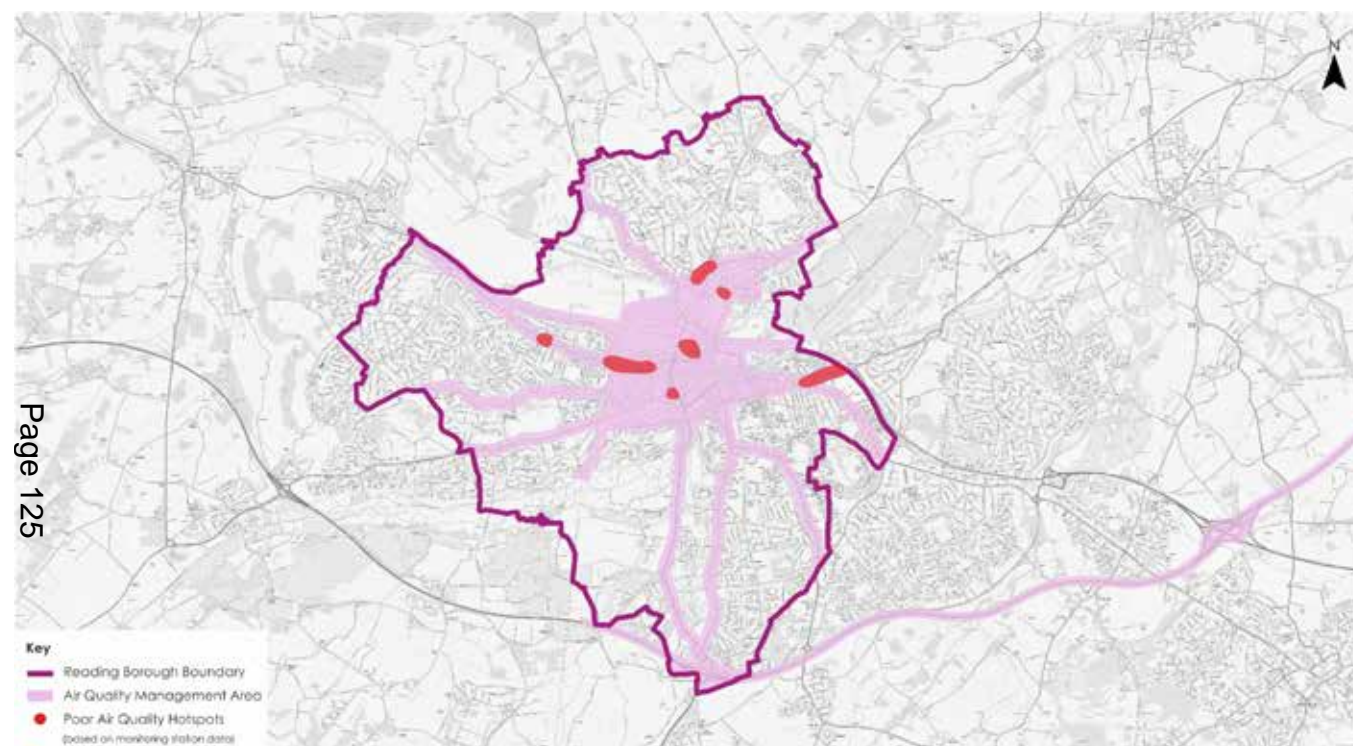
Figure 18: Vehicle Emissions

Abrasion of road surface (PM)

Exhaust emissions (CO_2, CO, HC, NO_x and PM)

Abrasion of tyres, brakes and clutch (PM)

Disturbance of road dust (PM)

Key
— Reading Borough Boundary
▰ Air Quality Management Area
● Poor Air Quality Hotspots
(based on monitoring station data)

4.44 It is expected that, in the relatively near future, non-exhaust emissions will be dominant in road transport, and reducing single/low occupancy road travel will be required to achieve improvements in air quality.

4.45 Reading has one of the cleanest bus fleets in the UK, and we have secured over £1.5 million of funding from Central Government to upgrade the remaining buses to the latest green emissions standards. Reading Buses has also trialled an electric bus in Reading to

understand how they could have potential to help improve Reading's air quality.

4.46 The electrification of the Great Western Mainline and introduction of electric trains along the route has also reduced public transport emissions by reducing pollution from trains starting and stopping in, and travelling through Reading.

4.47 There is opportunity in Reading to improve air quality and correspondingly improve health outcomes for the area. Increasing
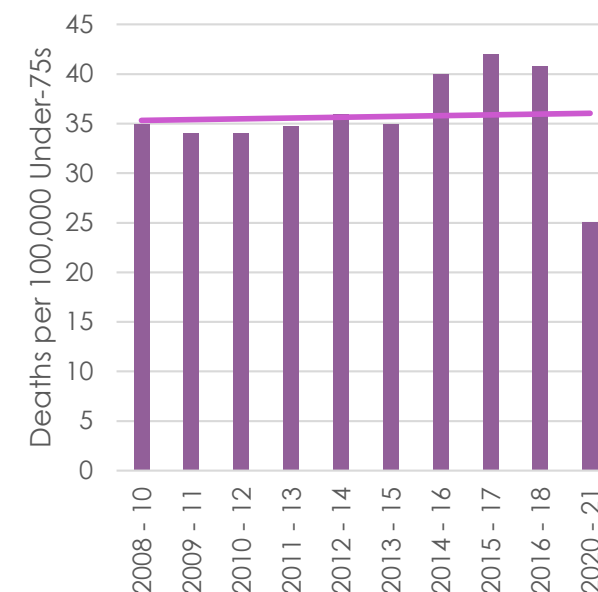
sustainable travel mode share and reducing private vehicle (particularly single-occupancy) use is key to reducing transport emissions. Improvements to walking, cycling and public transport infrastructure, as well as increased promotion of sustainable travel options will support this mode shift.

4.48 Whilst the priority is to reduce overall levels of emissions and hence improve air quality, measures to reduce people's exposure to poor air quality are another important aspect. Examples include segregating walking and cycling from busy roads; the introduction of green infrastructure; and encouraging behavioural change such as reducing engine idling or using different walking routes.

Reducing Through-Traffic and Congestion

Despite significant investment in public transport and active travel improvements, traffic and congestion around Reading continues to grow. Demands on travel may change following the pandemic. It is likely that substantial investment and infrastructure will be needed to encourage people to make sustainable travel choices, and to provide alternative, more suitable, routing options for through-traffic.

Due to a relative lack of orbital routes, a large proportion of drivers travel via the Inner Distribution Road (IDR), further adding to town centre congestion. Many trips using the IDR could take a more direct or appropriate route, if orbital route improvements or other transport alternatives were in place.

Car congestion has significant negative impacts on our public transport network and services. Public transport is critical to travel and movement around Reading: 22.2 million journeys were made by bus in 2019/20[56]. Whilst Covid-19 led to a reduction in bus usage, passenger numbers are now recovering, and increased bus usage will be critical to reducing congestion.

Figure 21: AM Peak Hour Vehicle Speed Reduction Compared to Speed Limit (indicative)
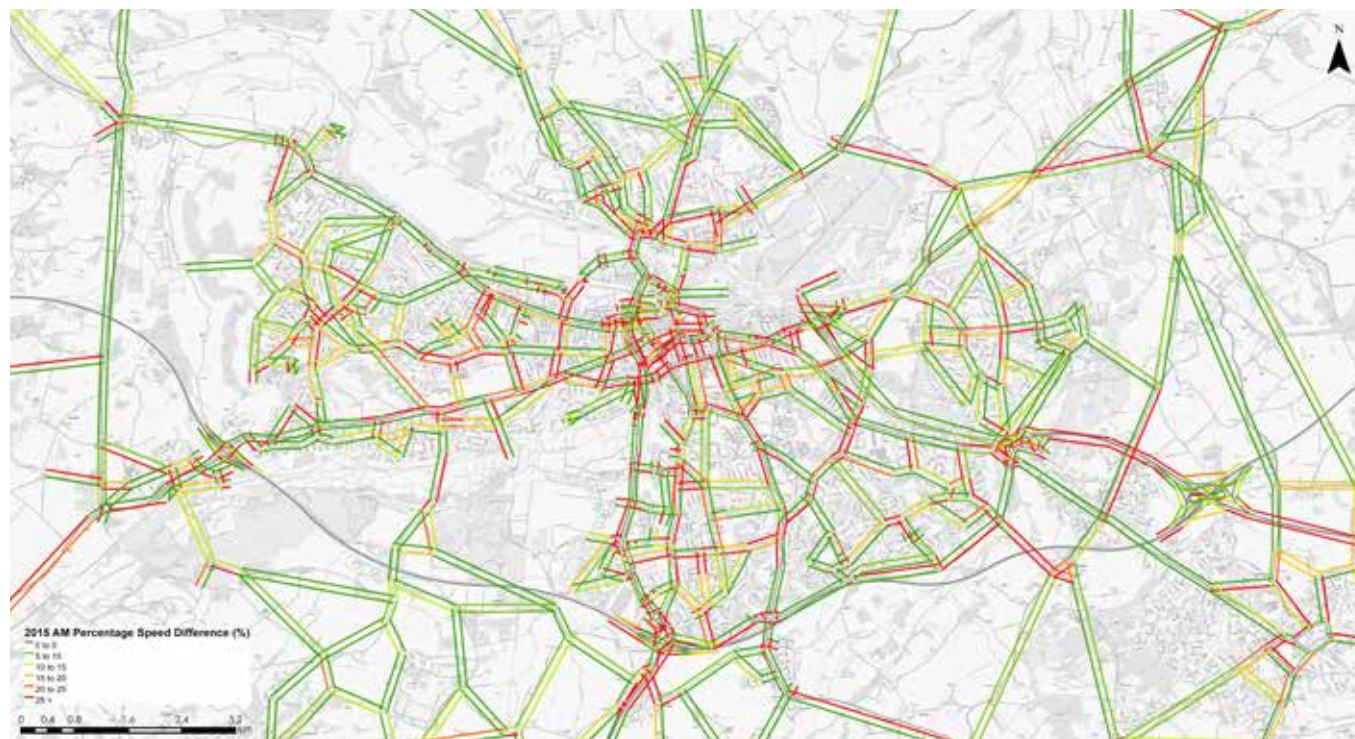
4.49 Due to Reading's location and a lack of alternative strategic north-south road connections in the surrounding area, there are high levels of through-traffic, with no origin or destination within the Borough. This adds to the high levels of congestion in the town centre, on the bridges over the River Thames and along key corridors.

4.50 Additionally, more than half of car driving commuters living and working within the Reading area do not have an origin or destination within the Central Neighbourhood Area[57], and instead travel around the edge of Reading. Due to a relative lack of orbital routes, many of these drivers travel via the IDR, further adding to town centre congestion[58].

4.51 For employment trips within the Neighbourhood Areas, the proportion of people travelling by car is relatively low, at 51%. However, for trips starting or ending outside the Reading area, this rises to around 86%[59]. This leads to increased levels of traffic and commuter car congestion within the Neighbourhood Areas as traffic travels into and out of the town.

4.52 Delays are generally worse at signalised junctions, particularly those that are not operating the latest technology, and in local centres where traffic mixes with people, as shown in Figure 21.

4.53 Despite significant investment in public transport and active travel improvements, traffic and congestion around Reading continues to grow. More substantial investment and infrastructure is needed to encourage people to make sustainable travel choices, and to provide alternative, more suitable, routing options for through-traffic.

4.54 Car congestion has significant negative impacts on our public transport network and services. Public transport is critical to travel and movement around Reading: 22.2 million journeys were made by bus in 2019/20[60]. Whilst Covid-19 led to a reduction in bus usage, passenger numbers are now recovering, and increased bus usage will be critical to reducing congestion.

Figure 22: PM Peak Bus Frequency and Highway Congestion (indicative)
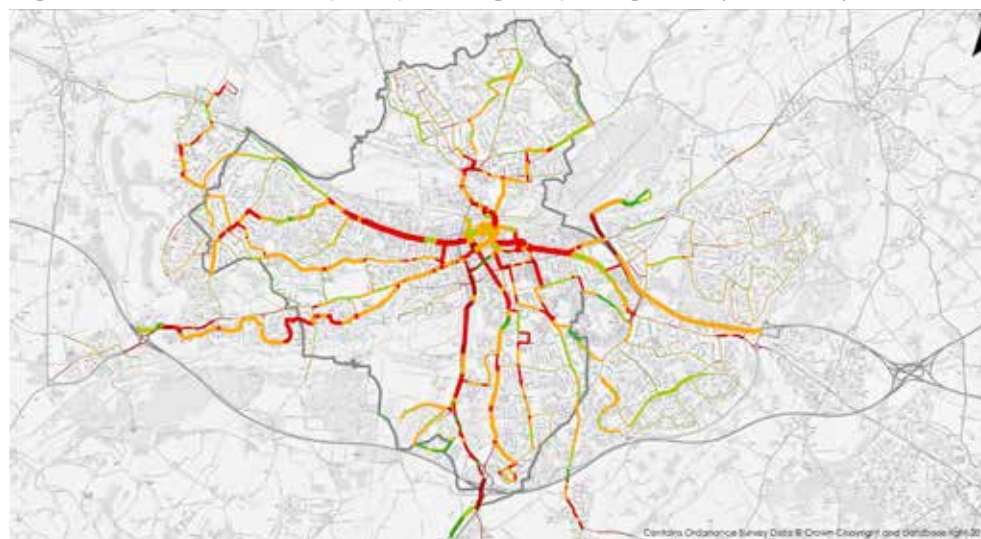
4.55 We have invested heavily in public transport priority across the town and many of the primary routes into and out of the town centre have bus priority, but there are some roads with a high bus service frequency that do not. These routes would benefit from the introduction of bus lanes and other measures to improve bus journey times and reliability.

4.56 Furthermore, there are a number of locations away from the key corridors where historically car congestion builds up, particularly in the peak hours and at school times, and causes delays to bus services, as illustrated in Figure 22. Whilst there is existing bus priority at some congestion hotspots, there are locations where bus priority is not present and, if introduced, would improve service frequency and reliability, making bus services more attractive in Reading.

4.57 Delays are also caused where there are obstructions in the carriageway, such as on-street parking and delivery and servicing. The introduction of a Red Route no-stopping restriction along Oxford Road and Wokingham Road aims to keep public transport moving and reduce delays for passengers, whilst also improving safety for pedestrians and cyclists. The scheme includes parking and loading bays, to provide appropriate places for vehicles to park, whilst not obstructing vehicle movements.

4.58 There is an opportunity to introduce similar measures along other corridors in Reading, especially in local centres, where movements conflict and buses experience delays.

61

Providing Affordable and Accessible Travel for All

We want Reading to be a town where everyone, regardless of background, disability, income, age or gender, can easily and safely travel around. Our transport system needs to be accessible to all, providing access to employment, education, healthcare and leisure opportunities, to allow our growing town to thrive.

The Covid-19 pandemic, and subsequent cost of living crisis has resulted in a period of deep economic uncertainty and anxiety for many residents and businesses. Our transport strategy and policies will need ensure it supports the economic recovery of all sections of society.

4.59   The RTS is supported by an Integrated Impact Assessment, prepared in accordance with statutory requirements including the Equality Act 2010. Likely different impacts of different demographic groups and people with protected characteristics have therefore been considered throughout the preparation of the RTS.

4.60   Specific demographics groups have been identified as most likely to be vulnerable to transport impacts. These are people on low incomes, people with health issues of disabilities, and older people. We have also considered Reading's diversity, and how other groups may be affected by transport.

Income Deprivation

4.61   Incomes in the Reading urban area are generally high, but there are areas of deprivation, particularly in the Whitley, West Reading and Lower Caversham, as shown in Figure 23[61].

4.62   These areas generally correspond to areas of lower car ownership (Figure 24[62]), and so these communities are more reliant on public transport, as well as active travel. It is therefore important that bus services in these areas are frequent, affordable and of high quality, and that walking and cycling networks are comprehensive, facilitating liveable neighbourhoods. This will enable convenient and direct access to employment opportunities and other facilities.

4.63   Outer parts of the Reading urban area, particularly outside the Borough boundary, generally have high incomes and correspondingly high car ownership. These areas also typically have less frequent and slower bus services, as there is very limited bus priority outside Reading Borough. Consequently, a high proportion of trips from these areas to/from Reading are made by car, increasing car congestion on local Reading roads. Priority for public transport services is needed, including Park and Ride services, to increase their attractiveness.
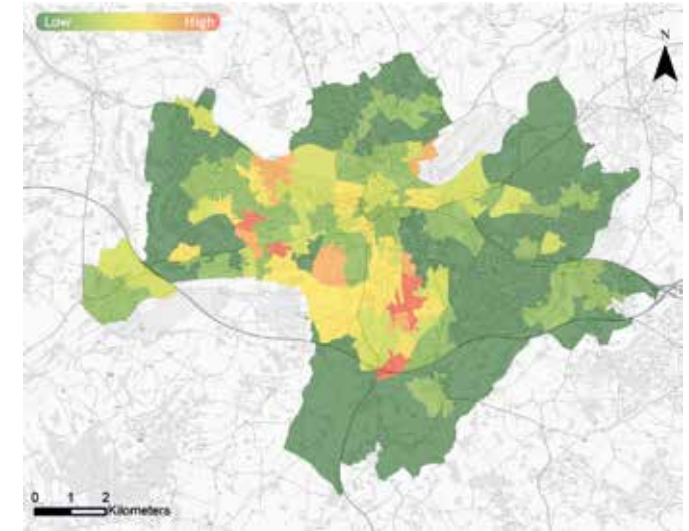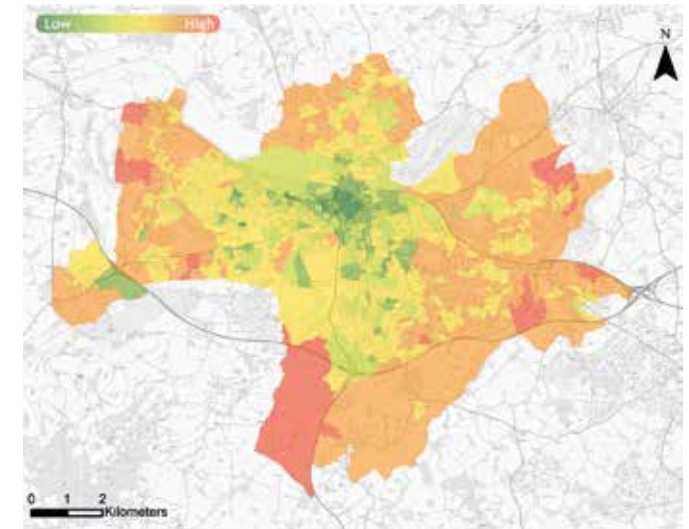

Figure 23: Income Deprivation

Figure 24: Car Ownership Levels

4.64 We are in the middle of a cost-of-living crisis, which is affecting large proportions of the population, including those typically classed as middle-income. It is critical that people's ability to access sustainable transport is maintained and improved to support people to be able to travel to work, either where they have no other means available, or to prevent a switch to private car due to perceived high public transport costs.

Health and Disability

4.65 Parts of the Reading urban area, particularly in the town centre, Whitley Coley and West Reading, have relatively high levels of health and disability deprivation. There are high levels of car congestion on roads around the town centre and along key road corridors in Reading. This leads to low environmental quality and high levels of air pollution, negatively affecting people's mental and physical health. This is reflected in Figure 25 [63]. Overall, 12.9% of people in Reading report having a limiting long-term illness or disability[64].

4.66 Sustainable transport provides a significant opportunity to improve quality of life for those with health issues or disabilities through providing access to local services and reducing social isolation. A high-quality, accessible transport network is important to provide disabled people with equal opportunities. In Reading, much has been done to improve the transport experience and accessibility for disabled travellers. Readibus

provides door-to-door assisted bus services which are free to use for disabled people with support from Reading Borough Council.

4.67 All buses operated by Reading Buses are wheelchair accessible and most now have audio and visual on board stop announcements. However, there are still many barriers facing disabled people to use public transport. Common barriers include:

- Narrow, uneven or poorly maintained
- pavements
- Dropped kerbs that are not flush with the
- road surface
- Very high or very low kerb heights
- Poor colour contrast
- Pavement obstruction by parked vehicles, street furniture and overgrown vegetation
- Use of disabled parking spaces by non-
- Disabled drivers
- Difficulties navigating shared spaces
- Limited availability of travel information in accessible formats
- Cost of travel for those on lower incomes
- Lack of alternative provision where there are steps
- Availability of assistance and support

Figure 25: Health and Disability Deprivation
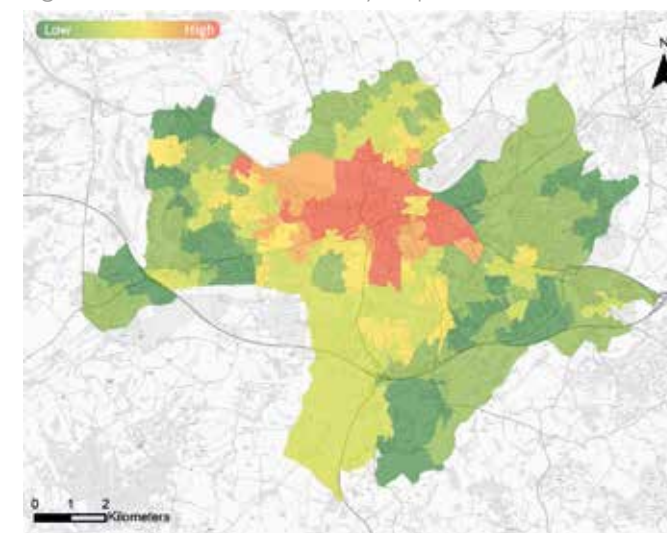
Older People

4.68   There are high proportions of older people clustered in parts of the Reading urban area, particularly in the outer parts of the Borough and neighbouring authorities, as shown in Figure 26[65].

4.69   33% of people aged 65 and over living in Reading live alone[66],[67] and are therefore more likely to be socially isolated and experience loneliness. Older people are also less likely to own and drive a car[68],[69] and may be less mobile. They are often reliant on public transport to meet their transport needs and to facilitate social interaction within their local communities, improving their mental and physical health.

4.70   Some of the areas of Reading with high populations of older people are less financially viable environments in which to operate traditional commercial bus services. This is due to a high proportion of residents and bus users that may have concessionary travel passes which are used for a free off-peak bus travel.

4.71   Some older people will still be travelling in the morning peak period when free travel is not available, whether for work or other reasons. Average retirement ages in the UK have been increasing, as shown in Figure 27, with an increase of 1.8 years for men, and 3.2 years for women between 1990 and 2022[70].

This is likely to lead to an increased demand for travel for older people in Reading, as a larger proportion of the population continues to travel for work for longer. By 2040 the number of people living in Reading aged 65 and over is expected to increase by 41%[71].

4.72   However, a high proportion of older people will likely be travelling outside peak travel times for leisure, shopping and health or personal appointments rather than for work or education. Nevertheless, bus services provide important connections for residents to local facilities, and so it is important that a good bus service can be provided.

4.73   Older people may also be less familiar with technology than younger generations, and so it is important that travel information and tickets are available in accessible formats, such as print or telephone.
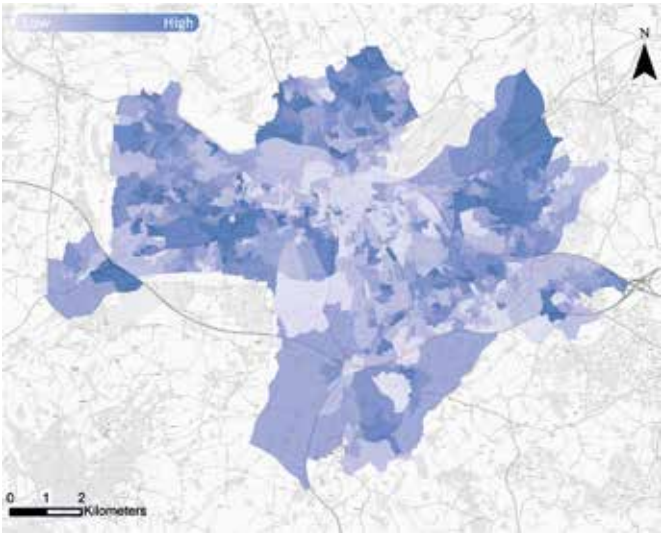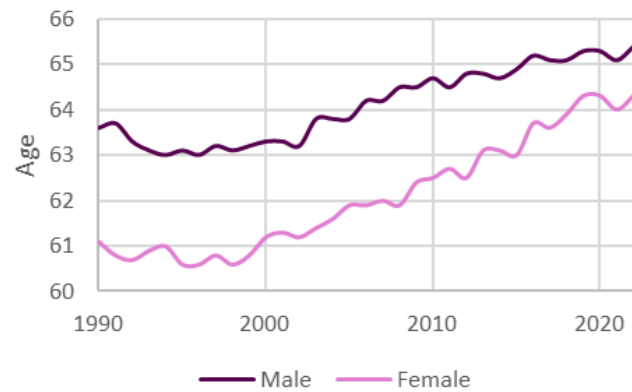
Figure 26: Proportion of Population Aged Over 65


Figure 27: Average UK Retirement Age

Diverse Communities

4.74 We need to ensure our transport network is designed to enable all of our residents, regardless of background, race, culture, religion and beliefs, sexuality, age or gender, are able to travel safely and easily.

4.75 The needs and safety of more vulnerable residents in Reading is a key consideration for future travel options.

4.76 Reading is highly multi-cultural, and has the 11th highest proportion of residents born outside the UK of any non-London local authority in England[72].

4.77 The median age of Reading residents is 35 – the 20th youngest of any UK local authority outside London[73]. Opportunities for teenagers and young adults, including generation Z, to access sustainable transport is a key consideration for the delivery of this strategy.

4.78 Younger travellers, in particular children, may have more difficultly than the average user in understanding complex information and responding to changes on the network (for example delays or cancelled services). Provision of appropriate information is therefore key to enabling younger people to use the network.

4.79 In addition, children are more vulnerable whilst travelling, and so our transport network needs to be safe and secure, so that children feel comfortable whilst travelling and are able to travel independently.

4.80 Some of our residents have lower levels of English proficiency. Travel around Reading can be inherently more challenging for these people, as the majority of travel and route information is in English. This could discourage the use of public transport by people with lower levels of English proficiency, which could lead to reduced opportunities and increased social isolation.

4.81 We recognise that certain sections of the community are much more likely to work in careers which are dependant on car use. In promoting modal shift, we will give due consideration to these needs.

4.82 There are a large number of visitors to Reading every year. Some of these are visitors on business, and others are for leisure reasons, such as Reading Festival. Visitors are less likely to be familiar with Reading and the transport network, and therefore clear and visible information is needed to allow them to plan and carry out their journeys.

4.83 Safety and security on our transport network and the provision of accessible information for all are key challenges we have identified in supporting our diverse communities in Reading.

Wayfinding Scheme - Travel Information
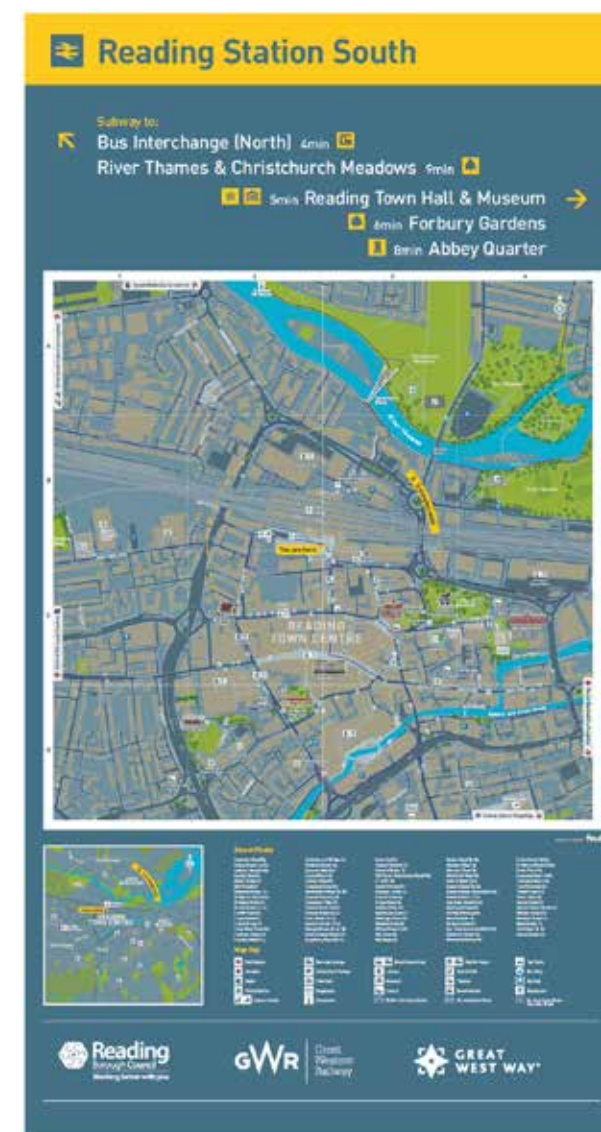
Removing Barriers to Healthy Lifestyles

Reading's pedestrian network and public space has had significant investment over the years, but there are areas of the town which require enhancement, such as the street paving, landscaping and furniture. Improvements are also needed to better accommodate pedestrian movement and desire lines.

The quality of the environment in parts of the town is good, especially areas where enhancements have been delivered in recent years. However there are local centres and parts of the town centre where improvements to the public spaces and streets will create a more welcoming and attractive space, with better provision for all people walking, cycling and those who are mobility impaired.

During the Covid-19 crisis the government measures in the lockdown allowed for one form of outdoors exercise per day. As a result, many people re-discovered the footpaths, roads and parks in their local neighbourhoods, as well as recognised the benefits of being outside for their physical and mental well-being. In a post-Covid world, creating and maintaining attractive spaces and removing barriers to healthy lifestyles will help this behavioural change to be permanent.

Figure 28: Serious and Fatal Vulnerable Road User Collisions (2017 to 2021)
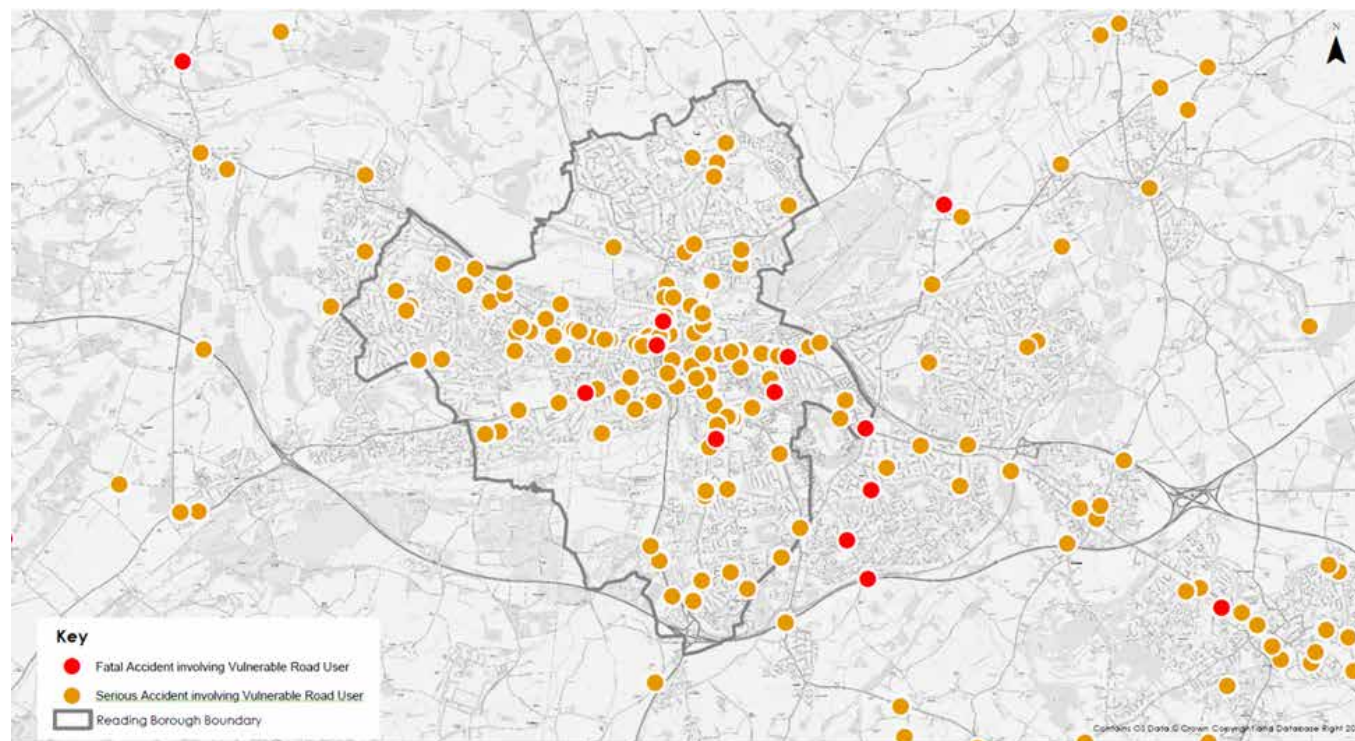
4.84 Safety is an important consideration for this Strategy. We have reviewed vulnerable road user collisions in the last five years, shown in Figure 28, to understand existing road safety issues and inform the development of the RTS. Areas where pedestrian movements conflict with vehicle movements can be perceived as feeling less safe than areas which have been designed with greater pedestrian-only space.

4.85 Pedestrians crossing the road can sometimes be subject to undue delay, where the street design currently prioritises cars. Whilst 29 traffic signal junctions were upgraded in the town as part of the LSTF programme, many still operate outdated technology. Upgrades to modern traffic signal systems and improved crossing facilities would better enable priority to be given to pedestrians, creating a more pedestrian-friendly environment and further encouraging walking.

4.86 We recognise that wider societal and cultural issues, including anti-social behaviour, can significantly impact both personal safety and perceptions of safety which can act as barrier to sustainable travel usage. This can have a particular impact on people choosing to walk and cycle in the winter months, which in turn can have a knock-on impact on usage of bus and rail services.

4.87 An example of this is work undertaken in London which demonstrates that a high proportion of women in the capital have suffered from harassment, including in public spaces and on transport services. Work has been undertaken by Transport for London (TfL) with the objective of improving women's safety on their network, including 'Project Guardian' and the 'Report it to Stop it' communications campaigns – both of which aimed to improve reporting levels and to create an environment on the network that does not tolerate intimidation and harassment. This work has been undertaken in partnership with the British Transport Police, Metropolitan Police Service and City of London Police.

4.88 This demonstrates that initiatives can be undertaken to help address these issues, and it is important to ensure that public spaces and transport systems are designed with all users in mind. This can then be supported by additional initiatives which take into account different user needs with the objective to make public places and transport services more inclusive and equitable.

4.89 These wider societal and cultural issues are critical considerations, both for the development of this strategy and in delivery of the individual schemes and initiatives within it. However, it is recognised that it is not possible for every car journey to be replaced by a more sustainable mode and therefore the strategy also includes the objective of a transition to electric vehicles which have a significantly reduced impact on carbon emissions than diesel and petrol equivalents.

4.90 Opportunities exist to deliver improvements to the public realm, enhancing the townscape and delivering environmental benefits through planting, and also encouraging healthy lifestyles and outdoor social activity.

4.91 Wayfinding in Reading has been improved through localised schemes which have delivered new and upgraded signage, however, consistent signage across the town centre and wider Borough is not yet in place. This makes sustainable travel less attractive, particularly for people unfamiliar with Reading. Therefore, there are opportunities to improve signage to encourage walking, cycling and bus use as a preferred mode over private car, both for a complete trip, and as part of a multi-stage trip.

4.92 Over the years, Reading has developed and signed a series of branded and coloured coded local cycle routes, shown in Figure 29, which provide connections between suburban areas and the town centre linking to key facilities and services, including schools, employment, leisure facilities and local centres.

4.93 Our local cycle network is complemented by four National Cycle Network routes (4, 5, 23 and 422), linking Reading to major towns and cities. The network is made up of a combination of on and off-carriageway facilities, and designated quiet streets, and

covers the wider Reading area.

4.94 The local cycle network is supported by a number of unbranded routes along quiet streets, providing feeder routes to the main network. An interactive map for walking and cycling is available on our website.

4.95 In some areas, additional local routes are required, to better connect communities to local facilities, employment areas and the town centre. This will increase the attractiveness of cycling in Reading.

4.96 Reading also suffers from bicycle theft, particularly in the town centre and other areas. Whilst additional secure bicycle parking has been delivered in recent years, such as at the northern interchange of Reading Station, there is further opportunity for more secure and smarter bicycle parking across the town such as concierge services.

4.97 Additionally, there are improvements that could be made to existing bicycle parking to provide increased levels of security, protection against weather and better storage for larger bicycles.

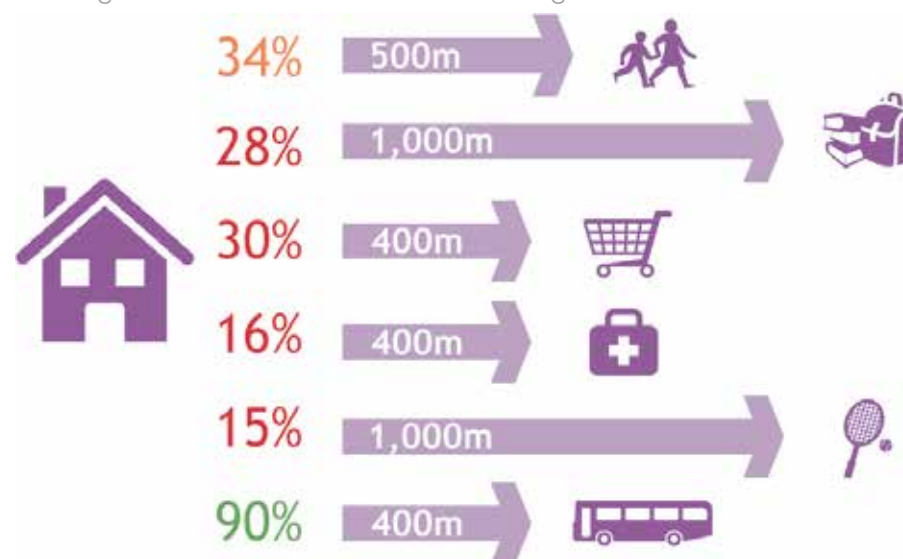Figure 29: Existing Branded Cycle Network
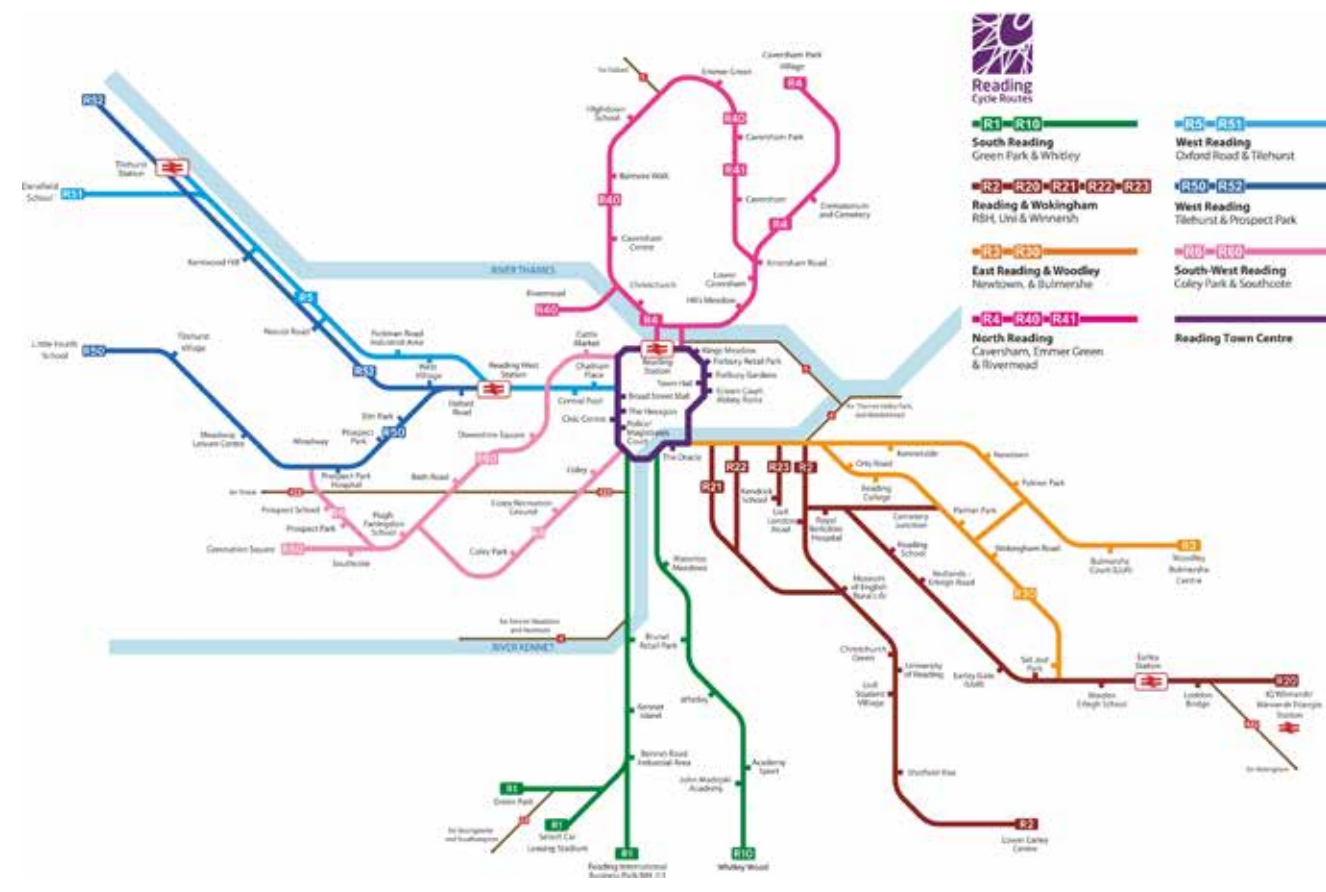
Achieving Good Accessibility to Local Facilities and Employment

Local Facilities

4.98 Good access to local facilities is key to enabling growth and supporting sustainable travel patterns. Within the wider Reading area, access to local facilities varies significantly, depending both on the type of facility and the location. Overall, access to public transport stops is good, with 90% of Reading residents living within 400 metres of a bus stop. However, accessibility to other amenities is significantly lower, with the majority of people living outside typical reasonable walking distances, as shown in Figure 30.

4.99 Our Local Plan sets out requirements for appropriate provision of new facilities in Reading, such as schools, but the location of these facilities is broadly determined by developers, rather than the Council.

4.100 Accessibility to schools is reasonable in many areas, however, residents within the Central Neighbourhood Area, and parts of the Northern and Western Neighbourhood Areas are located a significant distance from both primary and secondary schools. The Western and Northern Neighbourhood Areas also have areas a significant distance from a local retail centre, along with the South Western Area.

Figure 30: Percentage of Homes Within Reasonable Walking Distances of Local Facilities

4.101 GPs are often located close together, meaning they serve a wider catchment area, and can be a significant distance from some patients.

4.102 Many sports facilities are located where there is green space, for example at major parks, and so the opportunity to relocate or expand provision can be limited.

4.103 Many local facilities in Reading are clustered in groups. This can lead to benefits, as people are able to access multiple facilities in one trip, and these hubs often serve as the heart of local communities. However, these clusters of facilities can also lead to a greater proportion of residents living further away from them or can encourage increased car usage.

4.104 Access to the Royal Berkshire Hospital is particularly challenging leading to car congestion and a perceived difficulty in finding somewhere to park. Greenwave bus services between Mereoak Park and Ride and the hospital provide a useful and easy to use alternative for many hospital visitors Numerous buses link the hospital with Central Reading but relatively few offer direct links from residential areas of Reading.

4.105 Nationally, just over 40% of trips by all modes of transport in the morning peak hour are associated with education[74].

4.106 There is a high level of car use for trips to and from school in Reading, contributing to congestion in the peak hours, and an extended afternoon peak period. The level of physical activity for children is reduced and in Reading 39% of children are overweight or obese by the time they leave primary school[75]. There is an opportunity for local facilities to be served by high-quality, frequent bus services, in order to reduce car travel where possible, and to enhance access to amenities for people who do not own a car.

4.107 Additionally, accessibility to local facilities should influence future land-use planning, to enable delivery of key amenities where they are required most, reducing the need to travel for communities. There is an opportunity with new developments to deliver facilities that serve both new residents or employees, and existing communities in the local area, contributing towards a shift to sustainable travel and also increasing social cohesion.

Employment

4.108 Up to 45% of car trips on the network in peak hours are related to employment[76]. Whilst many areas of employment in and around Reading, such as the town centre, have good accessibility by sustainable modes, others are more accessible by private car, particularly for those not travelling from origins along the same radial corridor.

Figure 31: Existing Bus Network
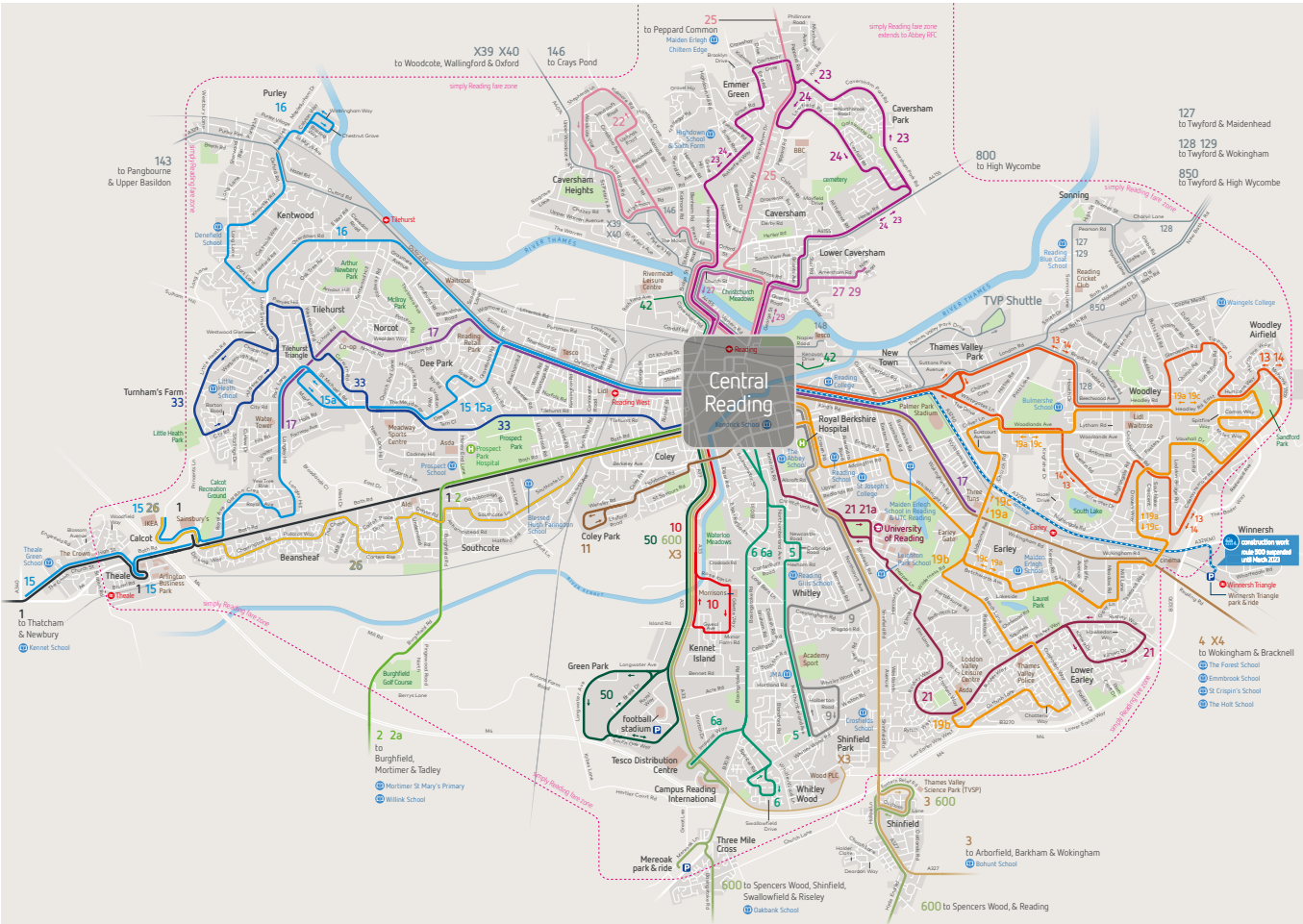
4.109 This leads to high levels of congestion on our network in peak hours, reduced levels of active travel and increased journey times, which leads to losses in productivity.

93% of local businesses that responded to a recent survey believe congestion affects productivity[77].

Accommodating Development

Significant development is planned in Reading and the surrounding area with around 16,000 homes planned to be delivered between 2013 and 2036 in Reading alone[78]. Within Reading and the nearby local authority areas of South Oxfordshire, West Berkshire, Wokingham, Bracknell, Basingstoke and Deane, and Hart, over 5,000 homes are planned to be delivered each year and many of the people living in these homes will travel to Reading.

The Covid-19 pandemic resulted in a significant and immediate downturn in the economy, and the lasting lasting impact will be on the national and local economy is now emerging.

The need for new homes has continued to grow despite the impact of the pandemic. Therefore we will need to provide improvements to accommodate these additional travel needs and enable development to be delivered without affecting the health and wellbeing of residents within the Borough.

4.110 Reading is also an employment hub, and significant growth in employment floorspace and jobs is anticipated within the town and greater Reading area. The region's economy is forecast to be the UK's second fastest growing economy in the South East between 2022 and 2025[79].

Figure 32: Planned Future Housing Growth
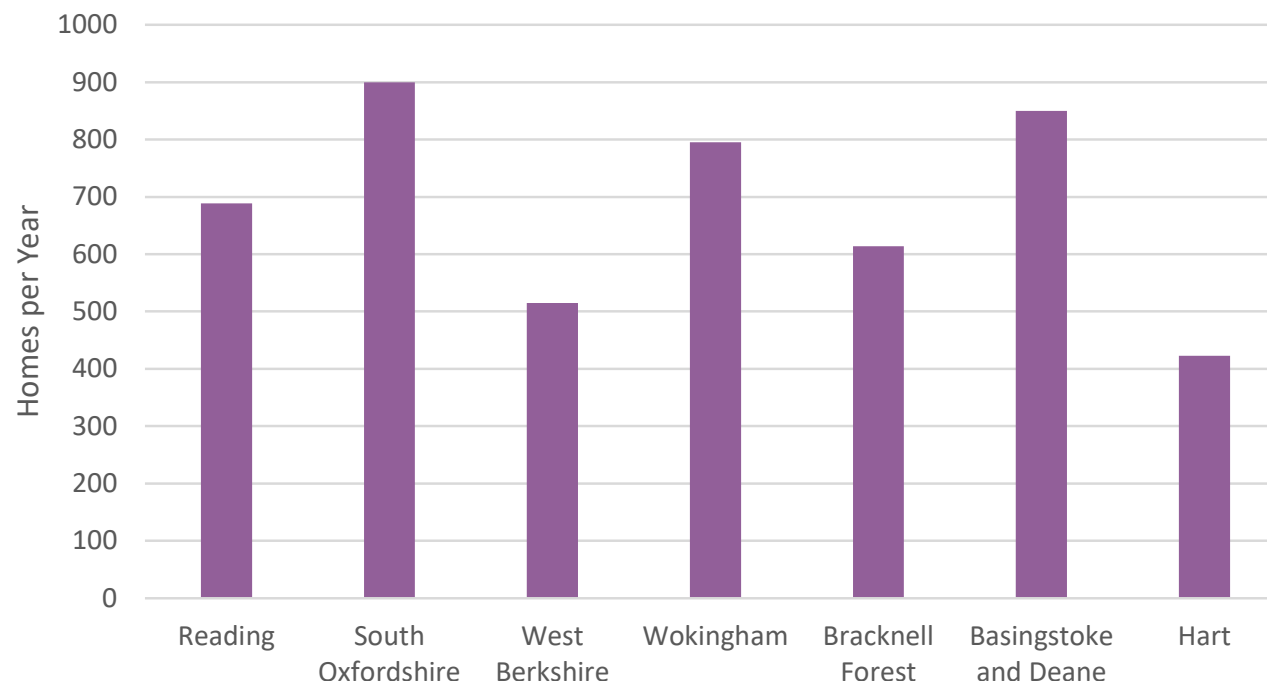
4.111 The spatial strategy for development in Reading and the surrounding area is set out in the Local Plans for each Local Authority.

4.112 Without interventions, car traffic is predicted to increase as a result of development, leading to additional demand on roads across Reading, particularly key corridors. Levels of rat-running traffic through residential areas are forecast to increase, as car drivers seek to avoid congestion. The RTS is therefore key to implementation of

Reading's Local Plan, and will also support neighbouring Local Plans.

4.113 Development and transport need to be planned together, to enable people to make sustainable and healthy travel choices, to make best use of existing resources, and to encourage integration of communities. Transport improvements will be required to support development of proposed sites and overall increases in travel in and around Reading.

5. Our Policies

Introduction

5.1   This chapter sets out our policies to support delivery of the overarching transport vision and objectives for Reading. These supporting policies are broken down by individual theme and provide the guiding principles for implementation of the strategy. This chapter also highlights the key statutory duties the Council must fulfil in its role as a Local Highway Authority.

5.2   The Reading Transport Strategy (RTS) is supported by a number of sub-strategy policy documents, which provide additional detail on various themes. A current list of these sub-strategies is included at the end of this chapter. Further supporting strategies may be developed over the life of the RTS.

Multi-Modal Policies

Sustainable Transport

5.3   We want to achieve a step change in the provision of walking, cycling and public transport choices for people travelling to, from and within Reading.

5.4   This will help us to achieve our overall vision for transport in Reading including enabling healthy lifestyles and creating a clean and green environment. It will also support our aim of providing an accessible transport system for all, and enable sustainable developments to come forward and to provide opportunities for local residents.

Figure 33: Roadspace Efficiency
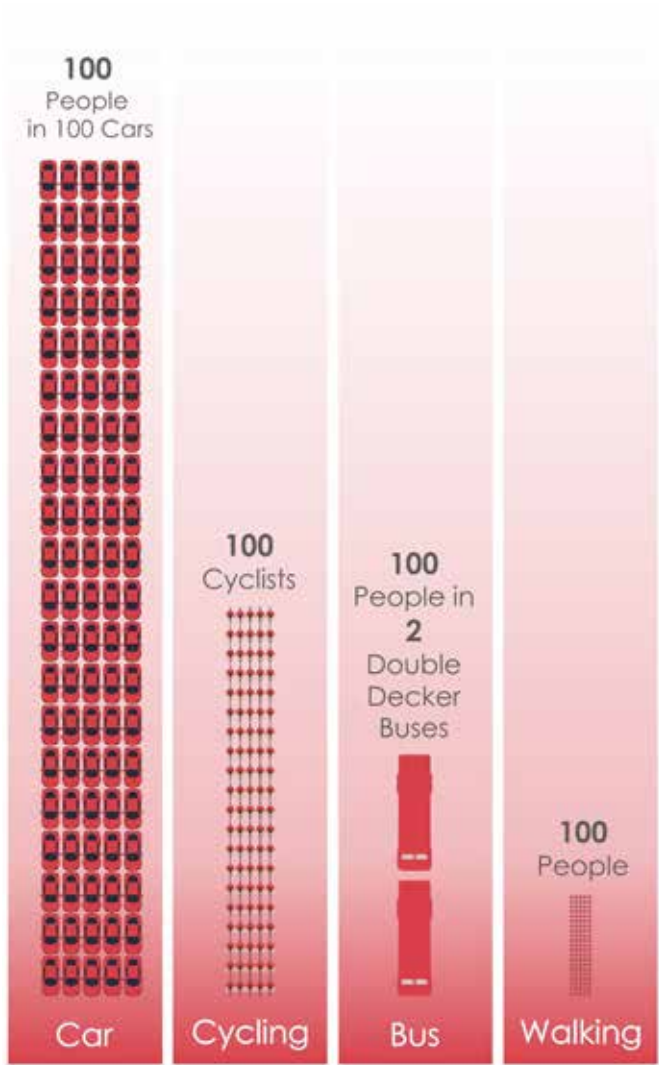
Policy RTS1 | Sustainable Transport

1.1: We will prioritise sustainable travel modes to offer an attractive and realistic alternative to private car trips.

1.2: We will increase the capacity of the sustainable transport network by reallocating road space to sustainable modes.

1.3: We will seek to ensure essential car journeys which are required for reasons relating to work, family, safety, gender differences or equality issues are made by electric vehicles or alternative ultra-low emission vehicles. In addition, We will complement any increase in general traffic capacity with sustainable transport improvements.

1.4: We will develop sustainable transport schemes in partnership with neighbouring Boroughs to support an increase in sustainable cross-boundary journeys.

1.5: We will support schools, businesses and organisations to develop travel plans, and to join national travel accreditation programmes, such as Modeshift STARS.

The Environment and Climate Change

5.5   The environment plays a key role in supporting the quality of life, health and wellbeing of our residents. The RTS will support the environment, including the aspirations of our Climate Change Strategy which sets out our ambition to become a carbon neutral town by 2030.

5.6   Opportunities will be delivered through the RTS to enhance the local environment through the creation of healthy streets and the greening and provision of better transport links to encourage increased use of our rivers and parks.

Figure 34: Embodied Carbon Reduction Hierarchy
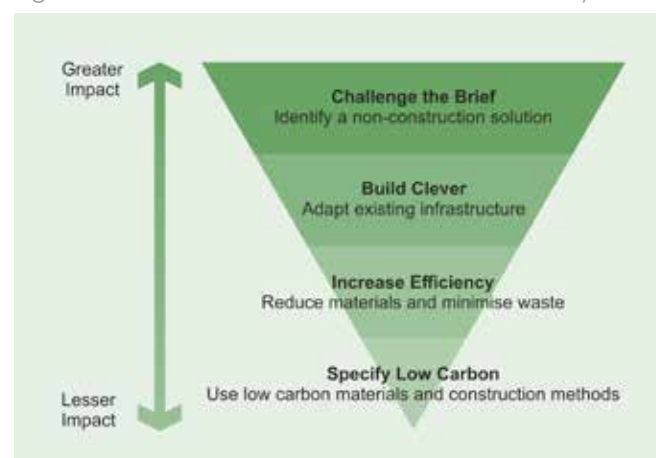
Policy RTS2 | The Environment and Climate Change

2.1: We will design our schemes to improve the built and natural environment, enhancing the quality of life of our residents.

2.2: We will ensure transport schemes deliver improved air quality, reduced emissions and biodiversity net gains.

2.3: We will adapt our transport network to prepare for climate change.

2.4: We will protect and promote the heritage of our town, whilst improving access to places of heritage interest.

2.5: We embed consideration of whole life carbon in transport projects from the outset, through planning, option selection, design, procurement, construction and management stages, and will seek to reduce whole life carbon where feasible.

2.6: We will seek to reduce embodied carbon in transport infrastructure projects, where feasible, in line with the embodied carbon reduction hierarchy shown in Figure XX.

Equality and Inclusivity

5.7 The Equality Act sets out our statutory duty to ensure that our policies and services do not discriminate against anyone and that we promote equality of opportunity, including the provision of transport that is accessible to all. All proposals that are considered at Council committee meetings are currently reviewed in line with Equalities Impact Assessment requirements.

5.8 The Inclusive Transport Strategy (ITS), published by Central Government in July 2018, builds on the Equality Act and sets out ambitions for inclusive transport whereby disabled people have the same access to transport as everyone else and for them to travel confidently, easily and without extra cost.

5.9 Considerable investment has already been made in ensuring the Reading Buses fleet is accessible to all through the provision of low-floor buses, complemented by audio messaging, on-board bus screens and accessible kerbs.

5.10 Improving inclusion means giving people safer, healthier and more affordable transport options. In turn this helps ensure people can remain independent and active lifestyles for longer and access key local facilities and services, such as leisure and health.

5.11 Affordability of transport is key to providing equality of opportunity and connectivity across Reading, particularly to those on lower incomes. We will continue to deliver schemes and programmes that reduce the cost of travel, provide alternative and more cost-effective modes of travel or help give people the information or skills they may need to travel more cheaply. Our concessionary fares and cycle training programme, Bikeability, are two examples of ongoing initiatives offering people on low incomes cost-effective travel choices.

Policy RTS3 | Equality and Inclusivity

3.1: We will work with transport operators to deliver an accessible network for all, taking action to address barriers caused by physical infrastructure.

3.2: We will continue to undertake Equalities Impact Assessments as part of the development of new schemes and policies, as a minimum in line with our statutory requirements, to enable us to deliver transport improvements that cater for all residents.

3.3: We will continue to work with partners to deliver public transport, such as bus, community transport and taxi operators, that is affordable and accessible to all and reduce inequalities in our communities.

Development Control

5.12 Our Transport Development Control team is a statutory consultee of the planning process and provides technical advice on the transport and highway implications of each development proposal submitted to the Planning Authority. They work collaboratively with developers to influence the transport approach and details of development, so that highway safety, convenience and amenity are improved through development, to avoid environmental degradation and to support economic activity, whilst enabling the delivery of our Local Plan.

5.13 We have developed a transport model for Reading, which we will require major proposals to use to test the impact of development on the town. Our access charge allows us to update and upgrade the model, so that it provides a suitable baseline for testing the implications of development growth in Reading and the wider area.

Policy RTS4 | Development Control

4.1: We will work with developers to design development that supports delivery of the Reading Transport Strategy and helps achieve our vision for transport in Reading.

4.2: We will work with developers to secure land for transport infrastructure where required.

4.3: New developments will be required to demonstrate how they will deliver healthy streets, and provide connection to new and existing facilities, making a positive contribution to the walking, cycling and public transport network and supporting sustainable and low-carbon travel.

4.4: We will require developers to develop and submit travel plans aligned with the vision and objectives of the RTS, including climate, equalities and health and wellbeing priorities. We will also require developments to carry out and submit evidence of travel plan monitoring, and will require remedial actions to be taken as appropriate, in line with relevant planning consents.

4.5: Private sector contributions, including Section 106 and the Community Infrastructure Levy, will be used where appropriate to improve the transport network and mitigate the impact of development, including through enhancement of walking, cycling and public transport facilities.

4.6: We will work with developers to maintain access during construction works for sustainable modes of travel as far as possible.

Sustainable Modes of Travel to School

5.14   It is vital that public transport and active travel options are available for all children to access education to improve children's physical activity levels through increased walking and cycling. Our overarching aim for school travel is therefore to increase the number of children walking, cycling or taking public transport and in reducing the number of car journeys to schools.

5.15   The Council has a statutory duty to develop and keep under review a Sustainable Modes of Travel Strategy (SMoTS) to school, which is a statutory document under the Education and Inspections Act 2006.

5.16   Our SMoTS includes policies to assist all schools with developing, implementing and monitoring ambitious school travel plans and increasing the use of sustainable transport options for travel to school. It also identifies the responsibility for providing road safety education and national standard cycle training and defines the process for developing measures to create safe routes to schools.

Policy RTS5 | Sustainable Modes of Travel to School

5.1: We will keep our SMoTS strategy updated to reflect our priorities in delivering the national sustainable schools accreditation programme, Modeshift STARS, and new initiatives, such as school streets, seeking to create safer and more attractive environments around schools.

5.2: All schools will be incentivised to renew their school travel plan annually as part of the national accreditation scheme – Modeshift STARS and set ambitious targets to increase the percentage of the school community walking, cycling and using public transport.

5.3: We will encourage and support the promotion of sustainable travel to schools through implementation of education, training and initiatives, such as Modeshift STARS, Bikeability and school streets.

5.4: We will work with school communities to identify barriers currently preventing sustainable travel, and provide solutions to create safer and more attractive sustainable travel routes to schools. We will provide additional support to schools in deprived areas and to SEND schools, as required.

Smart Solutions and Innovation

5.17 It is anticipated that technology will continue to transform the way we work and travel within our plan period. We will strive to remain at the forefront of technological advancements where they provide real benefits to those who live and work in Reading and where they reduce carbon.

5.18 Reading is home to many high-tech companies and start-ups providing opportunity to collaborate and deliver innovation with the private sector.

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Policy RTS6 | Smart Solutions and Innovation

6.1: We will embrace the latest technologies to improve the efficiency and resilience of the transport network for the benefit of our residents.

6.2: We will work with businesses to encourage the use of technology to reduce the need to travel as appropriate, and as a Council we will lead by example.

6.3: We will continue to promote Reading as a town that actively encourages and supports the testing of innovative solutions to defined transport challenges.

6.4: We will utilise 'big data' and data analytics, where available, to facilitate informed decision-making to allow us to take actions resulting in real reductions in carbon, other environmental benefits and health and wellbeing benefits for local communities.

Public Transport Policies

Public Transport

5.19 For sustainable and successful growth, public transport will need to play a major role in delivering the vision of the Strategy across the plan period to 2040. A well-integrated, attractive and efficient public transport network is essential for meeting people movement demands of the future. Public transport can provide an alternative means of travel to the private car. If public transport provides attractive journey times, reliability and/or reduced cost compared to the private car, it can result in reduced congestion and emissions.

Policy RTS7 | Public Transport

7.1: We will continue to build on the well-established bus and rail connections and work with partners across Reading and the wider region to maintain and improve an accessible, affordable reliable and sustainable, integrated public transport network.

7.2: We will support the evolution of public transport as technologies advance and new types of services become viable.

Bus and Community Transport

5.20 Bus services provide the everyday access for millions of journeys each year within, to and from Reading. Buses represent the most efficient use of road space for the transport of people going to the same corridor or location. Despite this, buses are often seen stuck in queues of low occupancy cars going to the same place.

5.21 We will continue to invest in bus priority to improve the operation of buses to provide more capacity, more frequency, high quality and faster journeys, working with bus operators to re-invest the efficiency savings in improved services.

5.22 We recognise the contribution of Reading Buses as main public transport operator and major employer in Reading for over 100 years. The company is wholly owned by Reading Borough Council and a major asset in the provision of sustainable transport and the future development of inclusive and sustainable travel in Reading.

5.23 Cross-town access from residential areas to schools, workplaces and the hospital is sometimes difficult and bus services will need to be developed to meet these travel needs.

5.24 We will continue to support the development of high-quality Bus Rapid Transit (BRT) and Superbus Network services serving new development areas including business

parks and housing in and outside of Reading. This will involve continuing to work with neighbouring authorities to secure investment in the transport network through new development. This will include investment in BRT routes connecting strategic Park and Ride sites and offering easy interchange with fast journeys into central Reading and key locations, for example the Royal Berkshire Hospital.

5.25 We will continue to work with education providers to ensure that school bus services are developed to support other sustainable ways of access to school and reduce the negative effects of cars on 'the school run'.

5.26 Community transport, including dial-a-ride services plays a key role in enabling those who are unable to use public transport to live independent lives. The main dial a ride provider in Reading is Readibus who offer a comprehensive service, with support from local authorities, to support people who live in our local communities. We currently provide subsidy towards this service.

5.27 We will work with adult social care and health services with regard to the role of transport in tackling loneliness and improving health, particularly in the elderly, and support community support initiatives such as social subscribing where they come forward.

5.28 Our Bus Service Improvement Plan (BSIP), developed in partnership with local operators and neighbouring local authorities, is a supporting sub-strategy to the RTS. It outlines our ambitious plans to transform bus services in Reading, initially to build back passenger levels which reduced during the Covid-19 pandemic, and subsequently to encourage more patronage on buses. Our BSIP provides a collection of detailed policy statements and actions to be implemented.

Policy RTS8 | Bus and Community Transport

8.1: We will work with bus operators, businesses, health and education providers towards delivering high quality fast, frequent and reliable bus services that are not forced to take second place to excessive or inappropriate car use.

8.2: We will maximise the use of bus services by ensuring space on the highway is dedicated to buses or shared with buses, taxis, cycles and emergency vehicles where feasible, to ensure equality of urban mobility and to free up space for regeneration of streets with planting and improvements to the public space.

8.3: We will work with neighbouring authorities and other parties to enable the provision of community transport services in Reading for the benefit of our residents and reduce social isolation.

8.4: We will work with health services and adult social care services and communities to deliver accessible public transport services that work for communities and help address social needs, such as keeping elderly mobile and tackling loneliness.

Rail

5.29 Reading's central location at the meeting point of seven rail lines and the historic development of frequent train services has given Reading a unique train network and we recognise the importance of Reading as a national rail hub and the contribution of train services to mobility to and from Reading. This has been enhanced by the redevelopment of Reading Station, the opening of the Elizabeth Line, the delivery of Green Park station and the upgrading of many of the trains used on Great Western Railway services.

5.30 Recognising that train is by far the quickest way into or out of Reading in virtually any direction, the local and longer links need to be developed by train companies and supported by Reading Borough Council as alternatives to increasing car use in the Thames Valley. We are a statutory consultee on train operating company franchises and Network Rail plans and will continue to work closely with these companies to ensure Reading is served by the maximum level of train services and at a consistent quality that passengers would expect. We will continue to challenge fares anomalies and poor services and at the same time support the development of improved train services where there are needs.

5.31 Western Rail Link to Heathrow remains a Network Rail project for delivery which will open-up direct access by train from Reading. The Council will continue to push for this service to be realised to help reduce the numbers of cars heading to Heathrow from the Reading area.

5.32 We will support improvements on the North Downs rail line between Reading and Gatwick through schemes such as bi-mode trains and electrification of the line to give faster more frequent journeys to the airport.

5.33 We will continue to support and encourage the development of 'Park and Rail' and initiatives to improve station access in the wider area.

Policy RTS9 | Rail

9.1: We will continue to lobby for improvement and work with the rail industry including train operating companies to provide improved services for train travellers to and from Reading.

9.2: We will continue to support the development of the other Reading Stations (Reading West, Tilehurst and Green Park) to ensure each is accessible and provides a high-quality entry to the rail network with high quality frequent and reliable train services.

Taxis and Private Hire Vehicles

5.34 Taxi and private hire vehicles are a key part of the public transport network providing a service when other modes of public transport may be unavailable, or in areas that the current public transport network may not serve, allowing journeys that may not otherwise be possible to be made by public transport. This reduces the need for people to own private cars.

5.35 Our role seeks to ensure that providers of taxi and private hire services adhere to the quality obligations set out in the relevant licences, and are compliant with all relevant guidance on the conditions that arise from the application of the appropriate sections of legislation.

5.36 Alongside the Police, we can revoke taxi and private hire licences if the licence holder does not meet their obligations. A penalty points system is in place for breaches of regulations, as set out in the licence holder handbook. Through these mechanisms, we will continue to work with taxi and private hire providers to deliver high-quality and reliable taxi services in Reading.

5.37 Technology can play a huge part in making taxis more accessible to people with the introduction of apps, cashless pay systems and enabling ride sharing.

5.38 We are also responsible for providing and maintaining suitable taxi ranks and pick- up points, and we will continue to liaise with operators to maintain adequate and appropriately located facilities across Reading. We will continue to support a shift towards electric taxis and will work with taxi and private hire service operators to identify ways in which we can support fleet changes.

5.39 A new policy has been adopted to encourage taxi drivers to switch to cleaner vehicles to improve air quality and contribute towards the aim to be a carbon neutral town by 2030. We are initially offering incentives in the form of reducing licence fees for the cleanest vehicles. Since April 2020, a 25% reduction in the vehicle licensing fee for all Ultra Low Emission Vehicles (ULEVs) (emitting a maximum of 50g/km of CO_2) has been available. A discount of 50% is offered for electric vehicles.

5.40 Additionally, by 2028, all hackney carriages in Reading will be required to be either electric or ULEVs. This is further supported by our EV strategy, which aims to reduce emissions from our taxi fleet, and private hire vehicles.

5.41 This will contribute towards reducing, and eventually removing altogether, the most polluting taxis on Reading's roads, having a positive step towards combating the impacts of climate change.

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Policy RTS10 | Taxis and Private Hire

10.1: We will work with operators to deliver smart, accessible and efficient taxi services across the Borough.

10.2: We will work with taxi and private hire services, offering support and incentives to encourage a shift towards the use of cleaner vehicles.

10.3: We will work with taxi operators in Reading to transition to electric or hybrid vehicles by 2030.

Waterways

5.42 A number of leisure riverboat services currently operate along Reading's waterways. River transport services do not have the same capacity for people movement as other public transport services, however we support the continued and increased use of our waterways by private operators to provide services for leisure and commuter services that could contribute to reducing congestion, where this would not cause unacceptable local problems.

Policy RTS11 | Waterways

11.1: We will work with private operators to seek opportunities for external funding for waterway schemes and improvements to the connecting networks.

11.2: We will encourage better walking and cycling access to waterways for leisure, tourism and recreation, as well as health and fitness, promoting waterways as key destinations, whilst recognising the need for consideration of impacts on the environment and existing communities adjacent to the waterways.

11.3: We will work with private operators and the Environment Agency to ensure safe and effective management of activities adjacent to and on the waterways, including boat usage.

Connected and Autonomous Vehicles (CAVS)

5.43 The Government is committed to the UK being world leaders in the development and delivery of connected and autonomous vehicles (CAVs) and legislation that will enable CAVs to operate on the public highway without a 'driver' overseeing it.

5.44 Whilst there is significant uncertainty over when a private autonomous car that can go anywhere may come to the market, and whether we will see any within this plan period, there is a significant likelihood that Shared Autonomous Vehicles (SAVs) will come forward within the next 5 to 10 years.

5.45 These Shared Autonomous Vehicles, such as 15-seater pods operating with traffic in a demand-responsive way on pre-defined routes, have significant potential to provide last-mile connectivity for main public transport services such as at stations and Park and Rides, and provide door-to-door public transport to deliver a transport system for all.

Policy RTS12 | Connected and Autonomous Vehicles

12.1: We will monitor the development of Connected and Autonomous Vehicles (CAVs), in particular Shared Autonomous Vehicles (SAVs), and seek to implement feeder services to the BRT and use SAVs on the BRT as technology, legislation and costs align.

12.2: We will future proof the transport network for emerging and unknown technologies such as CAVs, by reallocating road space to public transport, and other forms of sustainable transport.

Active Travel Policies

Healthy Streets and Quiet Traffic Areas

5.46 To support our Local Plan in its vision for Reading to be a clean, green, healthy, safe and desirable place, we will integrate the principles of Healthy Streets, and other best practice examples into the development and delivery of public space, walking and cycling schemes as outlined below:

- Inclusive streets suitable for people from all backgrounds

- Easy to safely navigate and connect people to places

- Shade, shelter and places to stop and rest

- Walkable and provide options for cycling

- Low levels of noise and air pollution

- Reduced levels of traffic and slow traffic speeds

- Streets that improve quality of life, support social interaction and enable active lifestyles

- A sense of safety and security

- Attractive streets that deliver environmental benefits including greening and opportunities for wildlife

5.47 As part of the integration of the Healthy Streets principles, we will encourage the creation of green corridors. The greening of streets and increased biodiversity will improve air quality across the Borough, and in turn provide a more attractive environment for walking and cycling.

5.48 Around 75% of respondents supported the reallocation of road space to sustainable modes, including walking, cycling and public transport, as part of consultation on this strategy.

Policy RTS13 | Healthy Streets and Quiet Traffic Areas

13.1: We will encourage the creation of healthy streets in Reading, to improve air quality, reduce congestion and help make our communities healthier, greener and more attractive places to live, work, learn and play.

13.2: We will reallocate road space away from the private car, to provide healthier streets and encourage more sustainable, active modes of travel.

13.3: We will create Quiet Traffic Areas in residential areas to reduce through traffic, slow traffic speeds, increase opportunity for social interaction and improve the quality of life for residents.

Walking and Cycling

5.49 Enabling and encouraging walking and cycling across the Borough, to support healthy lifestyle choices, inclusive growth improved air quality and carbon reductions, where everyone benefits from Reading's success, will continue to play a core role in our Transport Strategy.

5.50 Further to the completion of key infrastructure projects delivered through the Local Sustainable Transport Fund, we have set out ambitious plans to transform our streets and create an enhanced network of walking and cycling routes set out in our Local Cycling and Walking Infrastructure Plan (LCWIP), a sub-strategy of the RTS. The plan sets out our long-term aims for encouraging more people living in, working in and visiting Reading to consider walking and cycling for local journeys, or as part of a longer multi-modal journeys.

5.51 We will aim to achieve this by prioritising pedestrian and cycle movements and providing safe and attractive routes that connect people to local services and support multi-modal journeys, such as those containing an element of bus or rail travel.

Policy RTS14 | Walking and Cycling

14.1: We will transform our walking and cycling network to be safe, clean and green and better connect people to local facilities and services, including education, retail, leisure and employment, as set out in the LCWIP.

14.2: We will create a hierarchy of walking and cycling routes, building on our existing network and seek to secure new routes, including through proposed developments, and, where feasible, provide segregated cycle routes. This will reflect the latest national and local guidance for walking and cycling infrastructure design, such as DfT's Local Transport Note 1/20.

14.3: We will design our walking and cycling network to accommodate all users where feasible. This will include wheelchair users, adapted cycles, those who are visually impaired and cycles with trailers, for example.

14.4: We will integrate the LCWIP into cross-departmental strategies to maximise the benefits of walking and cycling, including improved health and wellbeing, air quality, reduced emissions and to create a more attractive local environment.

14.5: We will monitor the development and uptake of new technologies such as e-bikes and e-scooters, to inform our walking and cycling strategy.

High-Quality Public Space

5.52 As set out in our Local Plan, we want to deliver attractive, high-quality public spaces and streets throughout Reading, including at the town centre, local centres and the main walking and cycling routes in the Borough, to encourage healthy behaviours and improve community cohesion.

5.53 Building on the RTS and our Local Plan, we will develop a strategy for the town centre, which will set out our vision for the town centre and help shape future growth of the area, linking planning, development and transport. The creation of an attractive, connected streetscape will attract new business, create jobs and increase visitor numbers.

Policy RTS15 | High-Quality Public Space

15.1: We will deliver high-quality public space, encompassing streets and accessible interchanges across the Borough, including in our town and local centres, to bring social, health, economic and environmental benefits to all.

15.2: We will develop a comprehensive wayfinding system for the town to improve the travel experience of residents, employees and visitors in Reading, and people travelling through the town.

Rights of Way

5.54 We have a duty to prepare a Rights of Way Improvement Plan under Section 60 of the Countryside and Rights of Way Act 2000. This plan provides a strategy for local communities and visitors to access the countryside via more sustainable means.

5.55 This plan includes an assessment of the suitability and availability of public rights of way (including footpaths and bridleways) for all users, opportunities to improve the network and any changes to the management.

5.56 Strategic Rights of Way connecting residents to local facilities and services have been integrated in our LCWIP. We will continue to identify new opportunities to expand and improve the network through development proposals to ensure the routes are better integrated into the highway network and that routes are accessible to all.

5.57 Our Rights of Way Improvement Plan (RoWIP) further aims to improve existing rights of way in Reading and identify opportunities for enhanced footways and cycleways, with improved integration to local public transport.

Policy RTS16 | Rights of Way

16.1: We will work with developers to seek opportunities to deliver new and improved routes through development proposals to provide an integrated and accessible rights of way network for all potential users.

16.2: We will maintain and improve the existing Rights of Way network across the Borough, including footpaths and bridleways.

Footpath 1 - Kings Meadow

Network Management Policies

Network Management

5.58 The Council has a network management duty under the Traffic Management Act 2004, and our appointed Network Manager has responsibility for the movement of traffic in liaison with neighbouring local authorities and other agencies. The need to make most efficient use of our existing highway network is critical to managing congestion within a tightly constrained urban area.

5.59 Part 2, Section 16(1) of the 2004 Act defines the following objectives in the context of local highway authorities managing their road networks:

- To secure the expeditious movement of traffic on the authority's road network; and

- To facilitate the expeditious movement of traffic on road networks for which another authority is the traffic authority.

5.60 To fulfil the network management duty, a local authority may take any action that will contribute to securing more efficient use of the road network, or the avoidance, elimination or reduction of road congestion and other disruptions to the movement of traffic. Reading's approach is to be proactive in taking such actions, using innovative Urban Traffic Management and Control (UTMC) systems. Elements of the UTMC are automated to

balance traffic flows. Using the information gathered on network performance, messages are generated and disseminated through various means to encourage smarter travel choices.

5.61 Our network management policies support the overall delivery of our RTS 2040 vision and objectives by:

- Improving the operation, safety, efficiency, and effectiveness of the local transport network

- Improving data collection and management to support other policy areas and strategies and the RTS 2040 targets and monitoring requirements

- Co-ordinating a rapid response to network incidents, roadworks and planned events with effective multi-platform strategies, working with other parties where required (such as emergency services, utility providers and event promoters) to minimise disruption and delay

- Continuing to review and assess new opportunities (legislative, technical and operational) and innovative technologies that may improve the network management function to ensure efficient use of assets

- Maintaining records of Traffic Regulation Orders and consolidate signing, ensuring that all proposed changes to the network have appropriate authorisation

- Developing, maintaining and implementing seasonal and other planned multi-platform strategies to ensure that the network is able to operate at optimum efficiency

Policy RTS17 | Network Management

17.1: We will maximise the performance of our network and manage our network to aid the movement of people, prioritising sustainable transport.

17.2: We will report on the current and forecast levels of traffic in Reading, and publish targets to reduce traffic growth.

17.3: We will increase monitoring of our transport network to inform transport schemes and policies.

Road Safety

5.62 We have a duty under the Road Traffic Act 1988 to provide road safety information and advice relating to the use of roads. We are also required to take measures to prevent treatable accidents from occurring by analysing patterns in the circumstances of accidents, including location and causation factors, and to prepare and design programmes to improve road safety by addressing these factors.

5.63 Our Road Safety Strategy defines a number of detailed actions to address road safety issues in Reading and aims to reduce the likelihood, number and severity of people involved in road traffic accidents by improving road safety for all users, but particularly vulnerable road users.

5.64 Road safety issues are addressed through a combination of measures based on engineering, enforcement and education. Our past approach has focused on local accident clusters with the aim to reduce the number of deaths and serious injuries on our roads in line with Government targets. This has been combined with enforcement work in partnership with Thames Valley Police, road safety education work based on community partnerships and an understanding of local issues, particularly where there is evidence that people living in poorer communities are more likely to become casualties in road traffic accidents.

5.65 Between 2001 and 2021, the number of fatalities and serious injuries on our network has reduced by 49%, with slight injuries reducing by 62% over the same time period[80].

5.66 Partnership working, enforcement and education will still be an important element of road safety, but new guidance and analysis of current trends indicate a revised approach to reducing accidents. Therefore, our Road Safety Strategy focuses more on actions to improve safety for vulnerable road users (e.g. pedestrians, cyclists and motorcyclists) and address accident causation factors (e.g. speed, road user behaviour) rather than accident cluster sites, which are becoming rare.

Policy RTS18 | Road Safety

18.1: We will take action to improve road safety for all and to further reduce fatalities and injuries on our network.

18.2: We will improve the safety of vulnerable road users through a combination of measures, including infrastructure enhancements set out in the Local Cycling and Walking Infrastructure Plan.

18.3: We will support and promote education programmes and road safety campaigns, particularly those that better protect vulnerable road users.

18.4: We will monitor accident data and transport safety developments to identify where we can deliver improvements to road safety.

Streetworks

5.67   We have a statutory duty under the New Roads and Streetworks Act 1991 to facilitate and co- ordinate works being undertaken on the highway, to minimise impact to the travelling public, local residents and businesses.

5.68   Streetworks are necessary to provide and maintain essential utility services, such as water, gas and electric, which are mainly located within the public highway, and to maintain, adapt and improve the highway structure and its features and facilities.

Policy RTS19 | Streetworks

19.1: We will continue to actively engage with statutory undertakers to co-ordinate streetworks within Reading and reduce the potential impact of these.

19.2: We will investigate methods to improve the management of streetworks, such as permit and charging schemes, to provide access to the transport network.

19.3: We will seek to improve the accuracy and accessibility of streetworks information for all users of the road and footways, including suitable diversion routes when required.

Parking

5.69   Our Parking Strategy details our approach to the ongoing development and delivery of parking management in Reading. Parking management is an important transport planning tool, enabling us to influence how people may choose to travel, with the aim of encouraging them to use more sustainable forms of transport, including Park and Ride facilities. We also recognise the importance of providing blue badge parking to enable those who are less mobile to access key facilities and services where they are less accessible by public transport, walking and cycling.

5.70   If left unmanaged, parking would soon become disruptive to the transport networks and services, as people would park for convenience, rather than considering other people's needs. This could lead to increased pressures on neighbourhoods, and movement could be affected, to the detriment of road safety. There could also be an impact on emergency service response times.

5.71   Ambitious new parking standards are set out in the Local Plan, including the provision of electric vehicle charging points. Further details of our parking standards for new development and our approach to the provision and management of public car parks and on-street parking will be set out in our Parking Strategy.

5.72   Parking management covers time restrictions, parking charges, controlled parking zones, residents parking permits and blue badges. Parking charges provide us with the opportunity to set appropriate parking prices that allow us to fund maintenance of public car parks, manage parking demand, provide new infrastructure such as electric charging points, and incentivise the use of Park and Ride facilities.

Policy RTS20 | Parking

20.1: We will manage the parking provision across the Borough, in public car parks, on-street parking and across new developments, to influence sustainable travel choices, encourage sustainable patterns for travel and provide for those who are less mobile.

20.2: We will investigate new technologies and systems to improve the efficiency of kerbside usage, and implement these if effective.

Enforcement

5.73 Reading has an enforcement policy to try and balance the needs of all road users, at a time when demands continue to increase. The key objective is to maintain an appropriate balance between the needs of residents, visitors, businesses and access for disabled people, thereby contributing to the economic growth and success of the town.

5.74 We introduced Civil Parking Enforcement under Part 6 of the Traffic Management Act 2004 from 31st March 2000, and in October 2005, powers were introduced under the Transport Act 2000 that made it possible for Reading Borough Council to enforce the regulations governing the use of bus lanes.

5.75 We have also applied to take on enforcement powers to allow us to improve road safety, tackle network congestion, increase public transport reliability, improve air quality and increase lifespan of highway assets. This will also allow Thames Valley Police to focus on other policing priorities.

Policy RTS21 | Enforcement

21.1: We will enforce traffic and parking restrictions in Reading, to improve the effectiveness of our infrastructure, prioritise sustainable modes, improve road safety and reduce carbon emissions.

Demand Management

5.76 Demand management measures such as reallocating road space to sustainable modes, width and weight restrictions and road user charging can be used to reduce peak car demand and congestion in Reading, encourage appropriate vehicle routing and support travel by sustainable modes.

5.77 These measures can help to improve the lives of our residents by improving air quality, reducing congestion and accidents, and enabling healthy lifestyles.

Policy RTS22 | Demand Management

22.1: We will develop demand management measures to reduce congestion and improve the quality of life of our residents and prepare a supporting business case to implement potential schemes.

22.2: Demand management measures to reduce traffic will be complemented by measures to increase capacity for travel by sustainable modes.

22.3: We will reinvest revenue generated by demand management measures in sustainable transport solutions as set out in the 'Our Schemes and Initiatives' chapter.

22.4: Any demand management measures will be developed with equalities as a key focus.

Motorcycles and Powered Two-Wheelers

5.78 Powered two wheelers (PTW) have the potential to deliver reductions in congestion when used as a substitute to the car, occupying less road space, and being permitted to use some bus lanes where it is deemed safe to do so. The use of PTWs also contributes to improved accessibility and social inclusion where, for some, they provide a cheaper alternative to the car. PTWs can give independence to young people, being available from age 16, and have the potential to increase access to employment or further education opportunities.

5.79 During transport scheme development, appropriate Road Safety Audits are undertaken which consider the needs of motorcyclists and vulnerable road users.

5.80 Motorcycle parking spaces will continue to be provided in appropriate locations within the Reading area, including at transport interchanges.

Policy RTS23 | Motorcycles and Powered Two-Wheelers

23.1: We will continue to work in partnership with the police, motorcyclists' representatives and motorcycle outlets to promote best practice in road safety and education for users of PTWs.

23.2: We will continue to provide suitable levels of parking provision in key destinations.

Freight and Sustainable Distribution

5.81 For a successful economy, freight movements (transporting raw materials to producers, or finished goods from producers to consumers) should be as efficient as possible. It is important to consider the environmental impact of freight operations and potential conflicts with other transport users and land uses in the vicinity. Freight vehicle drivers face different network constraints due to factors such as height and weight or because of the time-sensitive nature of their business. It is recognised that they require different route choice and travel information to other road users.

5.82 Our objective is to support sustainable distribution methods that bring economic benefits to Reading while reducing environmental impacts, including carbon emissions, and social nuisance and visual intrustion. Our policy for freight to support the overall delivery of our RTS 2040 aim and objectives covers:

- To work with freight operators to help them operate a service that reduces impacts on the town in terms of noise and air pollution and also minimises carbon emissions

- To develop the content and delivery of local travel and route choice information for freight operators

- To manage the loading and unloading of goods to improve the efficiency and operation of the surrounding network

- To promote measures that minimise the impact of freight transport on road maintenance and road safety

- To continue to evaluate and, where appropriate, enable consolidation and interchange options between freight modes to reduce the number of freight trips within Reading

5.83 This could be carried out through a Freight Partnership arrangement which would consider, evaluate and promote or implement technical and operational solutions to address identified local issues.

Policy RTS24 | Freight and Sustainable Distribution

24.1: We will work with operators to support the efficient movement of freight, improving reliability and journey times of deliveries and minimise impact of freight transport on the local road network, whilst also supporting deliveries to the local economy.

24.2: We will work with operators to support the delivery of freight consolidation centres, to improve efficiency and reduce the number of last-mile delivery trips within Reading.

24.3: We will work with operators to explore and support more sustainable delivery methods, such as cargo bikes and electric micro-vehicles, for the last mile delivery.

24.4: We will work with operators to encourage use of low or zero emission vehicles for deliveries.

Highways Asset Management

5.84 We adopt an asset management planning approach for the management of our infrastructure assets. Our Highways Asset Management Policy applies to the creation and construction, acquisition, operation, maintenance, rehabilitation and disposal of all our highway assets.

5.85 Our policy demonstrates our commitment to continue to deliver a service to the community via our assets at an agreed level of service, our legislative requirements are satisfied and exposure to risk is limited to acceptable levels.

5.86 Our Highways Asset Management Policy is prepared and implemented in line with the UK Roads Liaison Group's Well-Managed Highway Infrastructure: A Code of Practice. Our Highways Asset Management Plan and Strategy (HAMP) supports this by defining the service standards that users can expect, and the strategies to be implemented to achieve these standards.

5.87 We record how we manage and maintain our assets in our Highway Maintenance Manual. This details the procedures we use (and levels of service expected) to maintain each highway asset including street lighting, structures, drainage, road markings, winter maintenance, traffic signals and street cleaning. The document also includes standard details and materials approved for use on the highway.

Policy RTS25 | Highways Asset Management

25.1: We will maintain our transport infrastructure to a high standard, and deliver essential improvements to meet the demands of residents, local businesses and visitors.

25.2: We will seek to deploy new technologies where they can be implemented to improve the efficiency of our maintenance services and reduce costs.

Sustainable Drainage (SUDS) and Surface Water Management

5.88 Under the Flood and Water Management Act 2010 the Council is responsible for identifying and communicating flood risk, through the preparation of preliminary flood risk assessments, flood risk and hazard maps and the introduction of flood risk management plans.

5.89 Sustainable drainage systems (SuDS) are features designed to replicate the natural drainage of an undeveloped area. We deliver SuDS as part of our transport infrastructure, in line with policy EN18 of our Local Plan, to capture surface water run-off from infrastructure and discharge this at a natural rate back into watercourses, reducing the risk of flooding due to development.

Policy RTS26 | Sustainable Drainage (SUDS) and Surface Water Management

26.1: We will incorporate SUDS and surface water management into our requirements for transport schemes.

Smart City Approach

5.90   We fully embrace the concept of 'smart cities' in the delivery of our services. Our view of smart cities is in line with the UK Department of Business, Innovation and Skills (BIS) which 'considers smart cities a process rather than a static outcome, in which increased citizen engagement, hard infrastructure, social capital and digital technologies make cities more liveable, resilient and better able to respond to challenges'.

5.91   We have taken a lead in smart city development in the Thames Valley, securing cross authority smart city investment from the LEP, and we see our expertise in technology implementation, which is at the core of our network management and open data systems, as a key skill to bring to the developing smart city capability across the Council.

5.92   We already work across Berkshire authorities in procurements such as traffic signal maintenance to improve efficiency and reduce costs. These procurements are cross-sector, for example working with public health to deliver the beat the street sustainable transport programme, and working with TVB Police to share costs of monitoring CCTV.

5.93   There are significant further opportunities to develop smart working, particularly given the central role of transport in the delivery of a wide range of Council services. Transport has overlaps with many services across the Council from health to adult social care and there are opportunities to change the way we join up these services.

5.94   We will work collaboratively across the Council and other partners to secure funding and develop business cases to deliver transport services in a more integrated way. Our strategy will include:

- Seeking to secure collaborative working and funding opportunities, both within and external to the authority, which will further our smart city approach, help the Council to deliver its services as a whole and provide cross-sector benefits and savings to maximise the value of public investment.

- Keeping updated in relation to innovation and technology and embracing technology where there is a clear benefit to the delivery of our services.

- Engaging with academia and business to better understand the opportunities and explore new business models for delivering services, and exchange knowledge with other smart cities to reduce investment risks.

- Working collaboratively with schools, colleges and universities for the mutual benefit of delivering our services and furthering the development of 'smart' skills in Reading.

- Make public data available for use to facilitate private investment and development of smart city solutions.

- Use data to better understand people's transport needs to better target services and better reflect different needs of different sectors of the community.

- Working to successfully deliver the Thames Valley Berkshire Smart Cities Cluster project.

Policy RTS27 | Smart City Approach

27.1: We will work collaboratively with partners both within and outside the Council to develop a Smart City Strategy for Reading.

27.2: We will work collaboratively with partners, create the platform for, and seek to invest in the Smart Cities approach to support future growth, to develop services that better meet individual's needs, and maximise the efficiency and attractiveness of our transport networks and services.

Mobility Services and Sharing Economy

5.95 The car ownership model could be replaced by a mobility service contract, where an autonomous vehicle could be called up on demand. This concept also opens up a new world of travel options for those who do not have access to a car or hold a driving licence.

5.96 As outlined throughout the Challenges and Opportunities chapter, current expectations are that we will start to move away from individual car ownership towards mobility services over the period of the plan. Trials are developing Mobility as a Service (MaaS), where, instead of owning a car, an individual can sign up to a monthly mobility service contract to provide them with all their travel needs. Users plan and pay for their journeys using an easy-to-use app, and the mobility service provider provides them with the most suitable transport for their travel needs, which can be public transport, cycle hire, a taxi or car hire. Reducing car ownership has the potential to significantly reduce car dependency without restricting an individual's opportunities for travel. This reduces not only vehicle operational carbon but also embodied carbon, as it will reduce the number of cars owned in Reading. This is just one example of potential business and sharing-economy-led models coming forward. Currently, commercial business cases have not been fully demonstrated.

5.97 In order that we are best placed to realise the benefits of such changes, we will actively monitor and review developments in this area and look to secure funding, where appropriate. These new services may also provide new opportunities for the delivery of Council-operated services.

5.98 Whilst we are hopeful that commercially viability Mobility as a Service models will come forward in the near future, we recognise that we need to tackle climate change and that improved, integrated, app-based journey planning and payment services that take us towards full MaaS would be very beneficial and would need to be led by us.

5.99 The sharing economy is leading to new private car hire platforms where individuals can rent out their own vehicle to local people. Whilst these services are independent from the Council, we will monitor their take up and facilitate where possible. Access to private cars locally will help reduce car ownership and in turn, reduce the number of car trips.

5.100 Connected autonomous vehicles (CAVs) offer additional benefits to the Mobility as a Service model. Congestion has a significant negative economic and productivity impact. However, if a car could pick you up and drop you off and attend to someone else's journey afterwards without the need for a driver, the efficiency of the model is vastly improved, particularly if you are willing to share your journey with someone else. We already share journeys on public transport yet are very reluctant to have strangers in our cars. This would not necessarily be a concern if we are buying a mobility package rather than a vehicle. Without the need to control the vehicle, we can also expect a marked increase in both productive and leisure time during travel. This brave new world also means that streets and accesses could be designed in different ways. Ugly signage, lighting, barriers, traffic signals and markings could be removed.

5.101 The end goal is an integrated, clean transport network, travelling autonomously, attending to transport needs through sophisticated communication and data processing: anyone can get anywhere in reasonable time and at reasonable cost.

Policy RTS28 | Mobility Services and Sharing Economy

28.1: We will work with commercial providers to deliver Mobility as a Service models.

28.2: We will work with our neighbouring authorities to develop interim app-based journey planning and payment services that take us towards full Mobility as a Service.

28.3: We will integrate our systems and data to enable the development of an improved mobility service offering across our travel to work area, to improve ease of travel by non-private car modes.

Zero Emission Vehicles

5.102 The uptake of electric and other zero-emission vehicles is accelerating. Aside from the standard electric vehicle, hydrogen powered vehicles also have the potential to reduce carbon emissions. However, since notable changes in the availability and uptake of hydrogen powered cars are not anticipated in the short to mid-term future, the strategy primarily focuses on electric vehicles.

5.103 Whilst electric vehicles cannot resolve vehicle emissions challenges alone, the technology will be important in supporting a shift to zero-carbon.

5.104 To support the shift to electric vehicles, we have developed an Electric Vehicle Charging Infrastructure Strategy, as a sub-strategy to the RTS. This sets out in detail our proposed policy approach to electric vehicles and relevant infrastructure, including charging points.

Policy RTS29 | Ultra-Low Emission Vehicles

29.1: We will develop a Reading-wide approach to facilitate and encourage the switch from combustion engine vehicles to electric and other zero emission vehicles by Reading's residents, businesses, and visitors

29.2: We will work with private operators to enter in to agreements to provide charging facilities at key locations throughout the borough.

29.3: Where appropriate, we will fast-track electric vehicle charging installations, to allow infrastructure provision to keep up with demand.

29.4: We will develop and implement a policy for appropriate, equitable and disability-aware provision across the borough.

29.5: We will strive for a renewable energy source for charging infrastructure on Council land or highway by 2030.

29.6: We will respond flexibly to fast-paced and changing technologies within the EV and other zero emissions vehicles sectors.

29.7: We will require appropriate proportions of any vehicle parking provided at new developments to be for zero emission vehicles.

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Communication and Engagement Policies

Travel Information

5.105 Travel information includes workplace travel planning, personalised travel planning, and static and dynamic travel information provision through signs, leaflets and technology. Travel information also assists in the management and monitoring of the transport networks, offering low-cost interventions to reduce congestion and the impact of transport on the environment.

5.106 Our aim is to give people the information and assistance they need to enable them to understand what travel options are available, choose how and where to travel, and guide their travel behaviour so they are making sustainable travel choices when travelling within or through Reading, no matter the journey purpose or demographic.

5.107 We will deliver travel information by:

- Securing and promoting real-time information for public transport through a range of channels to transport users and freight operators, including: arrivals and departures and traffic conditions and incidents;

- Promoting the use and implementation of web, mobile, on-bus, bus stop and key destination displays, and emerging technologies for disseminating travel information and advice to transport users.

- Supporting the delivery of customisable and personalised travel planning services that will encourage individual sustainable travel choices.

- Facilitating open data access, encouraging and supporting the wider use of data captured by UTMC to provide additional information to the public through software development partnerships and make public data available for innovative applications that benefit transport users and network performance.

- Working with Government, operators, neighbouring authorities and other partners to secure and promote interoperable technology where appropriate.

- Working with stakeholders to enable them to promote sustainable transport options to their workforce and visitors.

5.108 Travel information is also available in a number of other locations. The provision of a bus information strategy is a statutory requirement under the Transport Act 2000, and details of corresponding policies to improve the provision, quality and accessibility of information available to public transport users are contained within our Bus Service Improvement Plan.

5.109 We also use Intelligent Transport Systems (ITS) to distribute information across modes. A series of complementary technologies (such as sensors, computers, electronics and communication devices) integrated through management databases and strategies are used to improve the quality, safety and efficiency of transport networks. They deliver high quality traveller information often in real-time, leading to increased use of sustainable modes and fulfilling elements of the network management duty as required by the Traffic Management Act 2004.

Policy RTS30 | Travel Information

30.1: We will support and promote the use of a wide range of data and technology to influence travel behaviour and manage the transport network.

30.2: We will work with partners to deliver high quality, accessible, real-time data to assist users to make sustainable travel choices, recognising the differing needs of travellers.

30.3: We will work with businesses, schools and other educational facilities, and other key destinations, to support them in delivering their travel plans and providing sustainable travel advice to their workforce.

Public Consultation and Engagement

5.110 Communication and engagement with local residents is vital to ensure their needs are considered and integrated at key points in scheme and strategy development and to maximise the benefits within local communities and the town as a whole.

Policy RTS31 | Public Consultation and Engagement

31.1: We will engage with residents, employees and other stakeholders to develop the details of our schemes and strategies from the early stages, so that the views of the local community are reflected in our approach.

31.2: We will develop evidence bases and technical assessments to support our schemes and strategies, and will make these publicly available where appropriate.

31.3: We will continue to engage with the public to make our consultations more accessible and make it easier for all to participate in the consultation process.

31.4: We will open-up our transport data for public use where possible.

31.5: We will undertake communication and educational activities promoting sustainable and low carbon transport, such as Bike Week and Clean Air Day, engaging with all groups, including those who are most disadvantaged.

Aviation

5.111 The Council's aviation policy covers both connectivity to airports for passenger services and also emerging Unmanned Aerial Vehicles (UAV) technology (Drones) which could deliver both freight and aerial taxi services in the coming years.

5.112 Reading is well connected to Heathrow and Gatwick airport and is a popular interchange for people travelling to the airports. Heathrow is accessible via Paddington Station using Heathrow Express trains, as well as directly from Reading via RailAir coaches. Gatwick is accessible via direct rail services. Anticipated future investment in the proposed Western Rail Link to Heathrow will enable direct rail access from Reading to Heathrow. In line with our Rail policy, the council will continue to push for this investment, as well as improvement to the North Downs Rail Line, which serves as a direct rail link to Gatwick Airport.

5.113 UAVs have a potential future role in freight delivery with expected applications which include last mile deliveries of small packages to homes or local collection points, deliveries between businesses, and medical applications such as transporting drugs between hospitals or to a patient at the roadside. UAVs have the potential to reduce congestion, removing delivery vehicles from the road, and reduce carbon where the alternative is using a larger vehicle for the delivery.

5.114 Despite high-profile trials and demonstrations from innovative tech start-ups and large household names, we are probably still a few years away from regular commercial UAV freight delivery. At present, Government legislation currently requires drones to have an operator and only flown out of sight of the operator if there is a spotter on the ground. Technology for fully automated operation needs to be approved for commercial viability that will operate safely in accordance with aviation regulations. In addition, there will be a range of issues to resolve around personal privacy, noise intrusion, the logistics of where to deliver to, and resilience of the services to different weather conditions.

5.115 The Council will closely monitor the development of UAVs for freight for policy development. We are directly engaged in discussions on a key Government funded drone project, Project Skyway, led by a Reading-based firm. Project Skyway is developing a 165-mile drone superhighway between Reading, Oxford, Milton Keynes, Cambridge, Coventry and Rugby. The superhighway will have continuous high-quality mobile communications and will demonstrate the potential for UAV operation. UAVs for small scale packages can be deployed from a range of places such as distribution centres, however for large scale freight delivery vertiports, heliports for larger UAVs with a large-scale charging hub for the electric UAVs will be required.

5.116 Whilst the Council expects that freight delivery is the most likely to be the first application of UAVs in Reading, UAVs are being developed to carry passengers and provide an alternative to taxis for shorter distances. Recent trials in the UK have included a temporary vertiport in Coventry to demonstrate UAV usage for freight and police surveillance. A UAV manufacturer, Volcopter, is hoping to run 'air taxis' between the airport and the centre of Paris for the Paris Olympics in 2024, subject to securing the necessary approvals. Around the world there are other developments of UAV taxis, including significant investment in China.

5.117 Whilst the technology development, regulations and approvals for the deployment of UAV services for freight and passengers is outside of the remit of the Council, we recognise that we will have a key role in the planning for UAVs, including bases for drone delivery and vertiports. We will seek opportunities to encourage the benefits of the technology to aid economic growth whilst respecting the need to understand and address various potential impacts and concerns around UAVs.

Policy RTS32 | Aviation

32.1 We will continue to lobby for access enhancements including improved rail access to Heathrow and Gatwick, and work with the rail industry and train operating companies to provide improved services to and from Heathrow and Gatwick Airports.

32.2 We will continue to monitor and engage with relevant projects into the development of Unmanned Aerial Vehicles (UAVs), or drones, for freight and passengers. We will seek to keep our polices up to date so that we can best support their role in delivering economic growth to Reading whilst respecting any potential impacts on residents and people who work in Reading.

Sub-Strategies

5.118 We expect to develop a number of sub-strategies to support the Reading Transport Strategy, and provide additional detail in relation to specific policies and schemes. These additional strategies may include (but are not limited to):

- Bus Service Improvement Plan (BSIP)
- Local Cycling and Walking Infrastructure Plan (LCWIP)
- Rights of Way Improvement Plan (ROWIP)
- Sustainable Modes of Travel Strategy (to School) (SMOTS)
- Electric Vehicle Charging Infrastructure Strategy
- Network Management & Road Safety Strategy
- Parking Strategy
- Highway Asset Management Plan and Strategy
- Smart City Strategy

6. Our Schemes and Initiatives

Introduction

6.1 We have identified a number of transport schemes and initiatives to help address the challenges and take advantage of the opportunities set out in the Challenges and Opportunities chapter to deliver the transport vision and objectives. These are intended to be flexible and to be responsive to innovation, technological advances, funding availability and to reflect delivery of the 15-year strategy.

6.2 The schemes are summarised in the following sections and more details are provided on the individual scheme pages.

6.3 The detailed design and alignment of infrastructure schemes are yet to be determined. Design of all physical infrastructure will take into account the environmental constraints identified in the About Reading chapter. When infrastructure schemes come forward, they will be supported by relevant technical information and assessments.

Multi-Modal Schemes

6.4 We have identified a number of schemes that will provide benefits to all road users providing benefits including smoothing traffic flow, more reliable journey times, improved air quality and productivity, these include:

- Transport Corridor Multi-Modal Enhancements
- Inner Distribution Road (IDR) Multi-Modal Enhancements
- Oxford Road Multi-Modal Enhancements
- Cross-Thames Travel
- Connecting Neighbourhoods
- Demand Management

Public Transport Schemes

6.5 We have identified a number of public transport schemes that will provide a step change in public transport provision in Reading including:

- Superbus Network
- Concessionary and Discounted Travel
- Community Transport
- Demand Responsive Transport
- South Reading Bus Rapid Transit
- Bus Rapid Transit Corridors

- Mereoak Park and Ride Mobility Hub Expansion
- Winnersh Triangle Park and Ride Mobility Hub Enhancements
- Park and Ride Mobility Hubs
- Reading Station Interchange Enhancements
- Reading West Station Upgrade
- Tilehurst Station Upgrade
- Mobility as a Service (MaaS)

Active Travel Schemes

6.6 We have identified a number of active travel schemes which will incorporate the principals of the healthy streets concept and best practice. The schemes will transform the transport network to make walking and cycling more attractive, enable improved air quality, improve health and wellbeing and reduce private car use and emissions. These include:

- Town and Local Centre Public Space Enhancements
- Strategic Pedestrian Routes
- Local Pedestrian Routes
- Strategic and Town Centre Cycle Routes
- Shinfield Road Active Travel Improvements

- Bath Road/Castle Hill Active Travel Improvements
- London Road Active Travel Improvements
- Local Cycle Routes
- Sustainable and Safer Travel to School
- Play and School Street Programme
- Cycle Parking Mobility Hubs and Facilities
- Micro-Mobility Hire Scheme

Network Management Schemes

6.7 We have identified a number of schemes to manage travel and improve the efficiency and safety of the transport network. This will include embracing and trialling new technologies, alongside more traditional forms of network management including:

- Neighbourhood and Highway Management
- Parking Schemes and Management
- Road Safety Schemes
- Electric Vehicle Charging
- Car Clubs
- Intelligent Transport Systems (ITS) – Managing Travel on the Roads
- Intelligent Transport Systems (ITS) – Improving Maintenance
- Smart City Initiatives

Communication and Engagement Schemes

6.8 To maximise the benefits of the schemes we deliver and achieve our overall objectives, it is vital to engage with local residents and key stakeholders to promote the benefits and enhancements that our schemes will bring to them, these include:

- Marketing and Promotion
- Travel Information and Advice
- Training, Education and Initiatives
- School Travel Accreditation Programme
- Progress Reporting and Public Engagement

Our Schemes and Initiatives

6.9 The following pages provide more detailed information on the individual schemes that in combination form our overall transport strategy.

6.10 The delivery of these schemes is subject to further scheme development, feasibility, consultation and funding. More information on funding, implementation and engagement with residents and delivery partners is outlined in subsequent chapters.

Multi-Modal

Transport Corridor Multi-Modal Enhancements

Delivery Partners:
West Berkshire Council
Wokingham Borough Council
Oxfordshire County Council
South Oxfordshire District Council
Local Parish and Town Councils

Summary:
Multi-modal enhancements to major transport corridors, which could include:

- Reallocation of road space to walking, cycling and public transport
- Improved pedestrian and cycle provision, including wider, more accessible routes and upgraded /new crossings
- Improved public transport provision, including bus priority infrastructure, travel information and stop facilities
- Increase in capacity at active travel and public transport pinch points
- Traffic signal upgrades
- Safety enhancements
- Removal of excessive street furniture
- Increased landscaping and vegetation
- Introduction of pedestrian and cyclist rest areas
- Delivery of digital roads, to enable improved management and maintenance

Issue

These highway corridors are key routes that connect the wider urban area and strategic highway network to the centre of Reading. The routes also serve a number of high-density residential areas. Therefore, traffic volumes are high, particularly during peak morning and evening hours as the roads carry both strategic and local traffic.

The high traffic volumes give rise to congestion, which, in many locations, is further exacerbated by local traffic pinch points. The congestion and relative lack of high-quality pedestrian and cycle infrastructure leads to public transport and active travel being seen as unattractive.

Outcome

- Reduced forecast congestion, improved forecast air quality and reduced carbon
- Increased walking and cycling levels through enhanced user experience, including improved safety, reduced delay and better accessibility
- Shift to public transport through improved public transport journey times and reliability, upgraded waiting environment, and potential for further bus services to increase capacity
- Economic benefits through improved journey time reliability and increased travel capacity

- Additional priority for sustainable modes will be provided for key corridors within the Borough, particularly where there is close proximity to residential areas such as Oxford Road.
- HGVs will be routed along the most appropriate routes and access times will be considered
- Enhanced townscape quality through additional landscaping, planting and removal of street clutter, leading to biodiversity and amenity benefits in the urban environment
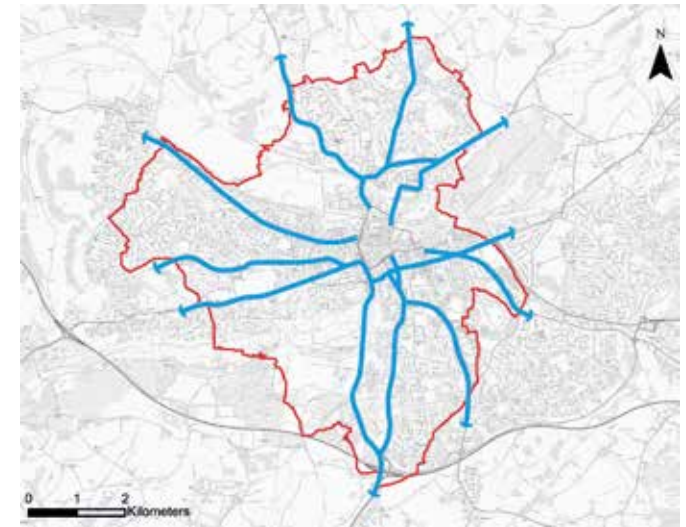
Multi-Modal

Inner Distribution Road (IDR) Multi-Modal Enhancements

Summary:
Multi-modal improvements to the IDR to reduce severance and reconnect communities, which could include:

- Reallocation of road space to walking, cycling and public transport

- Improved pedestrian and cycle provision, including wider, more accessible routes and upgraded /new crossings

- Improved public transport provision, including bus priority infrastructure, travel information and stop facilities

- Increase in capacity at active travel and public transport pinch points

- Traffic signal upgrades

- Safety enhancements

- Removal of excessive street furniture, such as guard railing

- Increased landscaping and vegetation

- Delivery of digital roads, to enable improved management and maintenance

The IDR forms a key part of the highway network in Reading, and as such, congestion and air pollution are major issues.

Issue

The IDR carries significant levels of traffic providing access to the town centre or carrying traffic around the town centre to and from the radial routes it connects. Facilities for other modes, such as public transport, walk and cycles are limited. Enhancement is therefore needed to improve the experience and safety for cyclists and pedestrians, particularly crossing the IDR.

Traffic congestion on the IDR has proved to be a continuous issue within Reading. The route itself is dominated by motor vehicles and the road environment acts as a major barrier to sustainable travel modes such as walking and cycling, due to a combination of traffic volumes and speeds.

The IDR is one of the busiest roads in Reading, with parts of the route carrying over 43,000 vehicles a day[81]. It encircles the town centre, causing high levels of severance, and is a significant barrier to pedestrian and cycle movements. The road suffers from high levels of congestion and poor air quality, with localised pinch points and very limited public transport priority.

Walking and cycling to and through the town centre are made less attractive by the significant barrier created by the IDR which disconnects communities, and public transport services experience delay, discouraging their use.

Outcome

- A package of multi-modal improvements will help to encourage more sustainable travel, reconnect communities, whilst removing active travel and public transport pinch points and enabling improved traffic flow, leading to reduced forecast congestion, improved forecast air quality and reduced carbon. This would offer health benefits to residents, employees and visitors to the town

- Improved journey time reliability would lead to economic benefit, and encourage the use of public transport, leading to a mode shift away from the private car

- An improved walking and cycling experience alongside better connectivity and reduced journey times for these modes and bus services would lead to a mode shift towards active travel and improved healthy lifestyles

- Enhanced townscape quality through additional landscaping, planting and removal of street clutter, leading to biodiversity and amenity benefits in the urban environment

Oxford Road Multi-Modal Enhancements

Summary:
Multi-modal improvements to the Oxford Road, Portman Road and Cow Lane corridor to create a safer and less traffic dominated environment on the Oxford Road, which could include:

- Reallocation of road space to walking, cycling and public transport

- Improved pedestrian and cycle provision, including wider, more accessible routes and upgraded /new crossings

- Improved public transport provision, including bus priority infrastructure, travel information and stop facilities

- Enhancements to the local centre and interchange facilities at Reading West Station

- Potential re-routing of freight traffic onto more suitable routes

- Traffic signal upgrades

- Safety enhancements

- Removal of excessive street furniture

- Increased landscaping and vegetation

The Oxford Road, Portman Road and Cow Lane corridor is a key arterial route in the overall highway network in Reading and suffers from congestion and air pollution issues, particularly for local residents.

Issue

The Oxford Road is a busy urban corridor that is both a local destination for retail, employment, healthcare and education, and a strategic corridor for buses, freight including through traffic and local deliveries, and cars travelling into Reading from the west. It is a key cycle route into Reading from residential areas in West Reading and Tilehurst, with topography making it less desirable to switch to other routes to the south. It is also provides direct access to rail with the recently upgraded Reading West station. The interaction of buses, local freight deliveries, and general traffic make this a poor environment for pedestrians and cyclists and congestion makes journey times unreliable for buses. The congestion also impacts on local air quality and safety is a concern for people using sustainable modes.

The upgrade to Cow Lane bridges to the north of the corridor, with removal of the shuttle working traffic lights as part of the National Rail mainline upgrade, has provided the opportunity to divert through freight traffic away from Oxford Road onto Portman Road and round to Caversham Road, which would reduce freight traffic on the corridor.

Outcome

- Reduced forecast congestion, improved forecast air quality and reduced carbon through removal of freight traffic from Oxford Road onto more suitable routes and mode shift reducing general traffic levels

- Increased walking and cycling levels through enhanced user experience, including improved safety, reduced delay and better accessibility. Including reallocation of roadspace, reducing street clutter and improving crossings and traffic signal operation to promote sustainable modes

- Shift to public transport through improved public transport journey times and reliability, upgraded waiting environment, and potential for further bus services to increase capacity

- Improved accessibility for taking public transport, walking and cycling to Reading West station

- Economic benefits through improved journey time reliability, increased travel capacity, and better local environment benefiting local businesses

- Enhanced townscape quality through additional landscaping, planting and removal of street clutter, leading to biodiversity and amenity benefits in the urban environment

Cross-Thames Travel

Delivery Partners:
Wokingham Borough Council
South Oxfordshire District Council
Local Parish and Town Councils
Oxfordshire County Council
National Highways
Department for Transport

Summary:
A fundamental review of travel options across the River Thames to enhance sustainable choices and help reduce the negative impacts of traffic congestion in residential areas of Reading, South Oxfordshire and Wokingham.

The focus of the scheme will be on promoting sustainable travel and addressing the issues resulting from the limited existing river crossings in Caversham, Sonning and Henley which cause significant congestion during peak times. This results in poor air quality, carbon emissions and travel delays for these local communities.

The scheme will include enhancing existing public transport, walking and cycle routes across the river, alongside fundamentally reviewing new options including the need for an additional river crossing and associated orbital route around the north of Caversham to link a new crossing with the A4074. Due to the scale of the scheme, it is likely to be delivered in phases, reflective of funding and land availability.

The Cross-Thames Travel Group has been formed to develop options to improve travel across the River Thames, including reviewing opportunities to improve existing routes and to review the need for a new river crossing to the east of Reading and associated mitigation measures.

This group works on a collaborative basis and includes representation from all key stakeholders and Local Authorities. Feasibility work carried out by the group to date has concluded that there is a strong case for a new river crossing and the preferred location is to the east of Reading, however this work will need to be updated by the group and more detailed business case work undertaken.

In order to facilitate real improvements within Caversham, Wokingham and South Oxfordshire, there must be careful consideration of vehicle routing to any new crossing. Improvements of existing routes or delivery of new routes connecting to any new river crossing could offer the opportunity to remove through-traffic from Reading town centre and Caversham local centre, enable the reallocation of road space for improved public transport and cycle facilities serving the local community and town centre. This will reduce dependency on the private car and encourage a shift to sustainable transport, in turn improving air quality and helping to mitigate the impacts of climate change.

Any new river crossing and associated orbital route would include bus priority and segregated walking and cycling facilities as fundamental aspects, alongside supporting measures to protect and bring benefits to local communities including healthy streets and improved quality of place. The scheme will be focused on improvement for sustainable modes of travel and would be developed to complement other proposed schemes including the BRT routes and Park and Ride facilities.

In addition, a new river crossing would also enable the reallocation of road space to provide bus priority for services between Caversham and Reading town centre via the existing crossings of the River Thames. This will help to achieve traffic reduction and air quality improvements.

We recognise that delivery of a new crossing without other supporting measures would not alleviate the current congestion issues both north and south of the River Thames. Therefore, a holistic approach to developing this scheme is being undertaken in partnership with all authorities.

The scheme has been included as a major transport scheme in the region's Transport Strategy by Transport for the South East. In addition, the group is working in full alignment with Oxfordshire County Council's motion that a new bridge should be for public transport only, or alternatively if general traffic is also allowed then it must not be considered as two separate projects, but as one project including suitable mitigation measures. The group is also working in line with Wokingham Borough Council's Member Decision that the new Thames Crossing should be a sustainable route corridor and not just an extension of the A3290/A329(M).

Multi-Modal

Issue

Reading, Caversham and Sonning suffer from through-traffic travelling between Oxfordshire and the M4 and southern England, as well as high levels of trips from Oxfordshire to and from Reading. Traffic is required to cross the River Thames using Reading, Sonning or Caversham Bridges. This causes significant congestion and air pollution in Reading town centre, east Reading, Caversham and Sonning. Routes to each of the existing bridges are along local roads in residential areas, further compounding congestion and air quality issues for local residents.

The transport network is significantly and adversely affected when there are incidents on or close to the bridges across the River Thames, such as traffic accidents and flooding. The approach to Sonning Bridge is vulnerable to flooding and this crossing becomes impassable during flood events. The diversion route from this bridge to Henley Bridge is also susceptible to flooding and this further reduces crossing capacity during flood events. This results in significant increases in traffic using Reading and Caversham bridges, and adds to the congestion within Reading and South Oxfordshire.

The current transport network has limited capacity to accommodate sustainable growth in travel demand to Reading town centre and the strategic road and rail networks. The lack of bus priority crossing the river leads to slow, unreliable buses serving Caversham, making public transport in the area unattractive and reducing commercial viability of higher frequency services. The existing highway network is constrained, and therefore there are limited opportunities to deliver bus priority to reduce the impact of congestion on services. Existing cycle links, including those to Thames Valley Park, are indirect.

Outcome

- Significant benefits including reduced journey times, more reliable journeys, congestion relief, air quality improvements and network resilience
- The crossing and the associated highway and junction access enhancements would provide an alternative route for traffic away from the existing river bridges reducing congestion in Caversham and enabling the reallocation of road space to sustainable travel modes
- Increased attractiveness of public transport, including through linking North Reading Park and Ride to the town centre, and potential to increase bus frequency due to improved journey times and reliability on the existing bridges in Reading and Sonning
- Increased attractiveness of cycling between, South Oxfordshire Caversham, Reading and Wokingham
- Associated mitigation measures protecting and bringing benefits to local communities, including improved quality of place, improved health and wellbeing outcomes and increased opportunities for social interaction.

Adapting to the Future

Whilst initially designed to carry, public transport, walking, cycling and general traffic, the bridge will be designed to be suitable in the future to carry other forms of public transport, such as micro-mobility vehicles, shared autonomous shuttles/buses, guided buses, trams or light rail.

The scheme would offer a potential testing site for trials and early adoption of emerging technologies and legislation to enable services, for example Mobility as a Service (MaaS), connected autonomous public transport services and demand responsive services.

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Multi-Modal

Connecting Neighbourhoods

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Oxfordshire County Council
South Oxfordshire District Council
Public transport operators

Summary:
The main objective of this scheme is to better connect neighbourhoods in the Reading urban area to enable direct trips between areas which do not need to enter central Reading.

Improvements in infrastructure and services for walking, cycling and public transport, linking key mobility hubs, residential areas and employment areas.

These improvements would reduce the need for people to travel into the town centre when they do not have an origin or destination within the centre, reducing the number of vehicles making through trips on the IDR. They will also enable around-town travel by public transport without needing to change services in the town centre.

Improvements to better connect neighbourhoods in Reading could include:

- Reallocation of road space to walking, cycling and public transport
- New and improved pedestrian and cycle routes, including wider, more accessible routes and upgraded /new crossings
- Improved public transport provision, including bus priority infrastructure, travel information and stop facilities
- New public transport routes
- Delivery of micro-mobility infrastructure and hire
- Increase in capacity at active travel and public transport pinch points
- Traffic signal upgrades
- Safety enhancements
- Removal of excessive street furniture, such as guard railing
- Increased landscaping and vegetation

Issue

There is significant demand for movements between residential, employment areas and railway stations/Park and Rides, which are outside of the Central Area. This demand is currently not adequately facilitated by sustainable travel modes, which leads to increased car travel and congestion within the town and wider urban area, alongside more car trips on the IDR which could use a more appropriate route.

Early evidence suggests that there is potential to reduce congestion in the central area and the IDR, however this can only be achieved by enabling people to move directly between neighbourhoods by sustainable modes.

Travel demand to access the strategic networks (rail and motorways) is expected to increase with recent and planned infrastructure investment, such as the Elizabeth Line, Western Rail Link to Heathrow and M4 smart motorway.

As such, there is a need to facilitate the demand between areas outside of the Central Area by sustainable modes and reduce the need for people to travel into the town centre by car by providing alternative attractive options to car travel.

Outcome

- Increased attractiveness of public transport and potential for significant increase in overall bus patronage
- Increased capacity for non-car travel around Reading, and reduced car commuter congestion leading to improved air quality
- Improved and sustainable accessibility to the strategic transport network to increase the catchment and travel benefits of the planned schemes
- Cost savings to businesses through improvements to travel capacity, journey time and reliability
- Reduced carbon emissions as a result of more sustainable travel patterns and reduced car trips

Multi-Modal

Demand Management

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Oxfordshire County Council
Department for Transport

Summary:
Demand for travelling in low occupancy vehicles will need to be managed in order to achieve the overall vision of this strategy, alongside providing better alternatives to travel by sustainable modes.

Managing demand will contribute towards overcoming key challenges including the declared climate emergency, high levels of through-traffic, vehicle emissions causing poor air quality and the forecast levels of housing and economic development.

Continuing with a high dependency on carbon intensive transport is not a sustainable option. Therefore, alongside providing sustainable alternatives we must manage demand on the network to help to achieve the overall vision for Reading. This will involve delivering some or all of the schemes set out in this section mindful of equity.

The introduction of demand management measures will provide revenue to enable investment in sustainable transport options to provide attractive alternatives to the private car, increasing options for sustainable travel around the town.

This scheme will investigate options to deliver demand management measures locally within Reading, whilst also acknowledging the potential for demand management to be delivered on a wider scale, such as a nationwide road user charging or mobility charging scheme. We will therefore monitor developments in this area and adapt our proposals in line with regional or national policy as required.

Demand management options could include:

- Green parking tariffs
- Roadspace reallocation
- Road user charging

Each demand management measure is highly flexible and able to be deployed either in isolation, or in combination with other measures. We will undertake further work to determine the best package of demand management measures to implement in Reading.

Whilst we will deliver demand management within Reading Borough, it should be noted that the administrative boundaries of Reading mean key employment sites, such as the University of Reading and Green Park, will be split across boundaries. In the case of Thames Valley Business Park and Arlington Business Park, these will be entirely outside of the Borough. Given the large number of trips that are generated by these sites, and scheme will need to be developed in partnership with Wokingham Borough and West Berkshire Councils from an early stage.

Demand management has an inherent risk of disadvantaging those on low incomes, and those who face barriers accessing public transport. To mitigate this risk as far as possible, we will design any demand management scheme with full consideration of potential equalities impacts. Revenue generated by demand management will also be able to be reinvested back into the sustainable transport network to reduce or remove barriers to travel for all, in line with policy RTS3 Equality and Inclusivity.

Green Parking Tariffs

Through emissions-based charging, drivers could be charged for various actions at a rate that is dependent on their vehicle's emissions. For example, drivers of more polluting vehicles parking in Reading could be charged a higher rate than low emission vehicles such as electric and ultra-low emission vehicles. The charges could vary across the Borough and change depending on time and day.

Road Space Reallocation

Reallocation of road space away from general traffic and to sustainable modes, including walking, cycling and public transport will be considered where appropriate. This would increase overall capacity for travel, and increase attractiveness of sustainable travel.

Car journeys would be made less attractive, support active travel and public transport for local trips, as well as reduce the attractiveness

of using Reading town centre as a through-route for vehicles with no purpose in Reading, including HGVs. Congestion, carbon, and air quality improvements would be realised.

Reallocation of existing parking bays to electric vehicle charging bays would also be considered to address the issue of non-electric vehicles blocking spaces next to lamp column charge points.

Road User Charging

Options to introduce a road user charge for low occupancy, highly polluting vehicles and/or through traffic with no purpose in Reading will be investigated to manage demand and reduce levels of congestion. A core objective of any scheme will be to achieve improvements for local communities including improved air quality, reduced carbon emissions and more investment in public transport services.

Road user charging schemes could be utilised to address specific issues, such as through traffic, more polluting vehicles, or inappropriate HGV movements. Early evidence suggests that there are high levels of through traffic with no purpose in Reading, therefore this scheme will investigate measures to manage this demand and encourage the use of more appropriate routes on the strategic road network for this traffic.

Complementary measures to minimise the risk of traffic re-routing along unsuitable alternative roads may potentially be required as part of any demand management scheme that is introduced.

The development of a Road User Charging scheme would require a full business case and Equality Impact Assessment to be undertaken, to establish whether the scheme would be viable. Any local scheme would be developed to work alongside or be replaced by a national Road User Charging scheme which may be introduced during the period of this strategy.

Issue

Reading is a densely populated town, with high economic and social activity, high levels of through-traffic, and high levels of travel demand. In order to facilitate continued economic growth and development, transport capacity needs to be increased to accommodate the corresponding increases in demand to travel. There is no longer the available land to continue to provide more capacity for private vehicle travel and the environmental and health consequences are not acceptable or desirable when seeking to realise the Reading 2050 Vision and meet the aim of the RTS 2040.

Evidence already indicates that Reading is unlikely to be able to meet the identified transport growth and air quality challenges without additional methods of managing traffic growth in parallel with investing in improving access for more sustainable means of travel. The RTS 2040 is reliant upon external funding being secured to develop and construct new transport infrastructure to improve air quality and reduce car congestion, therefore demand management could be a potential revenue stream in the future.

Outcome

- Reduced traffic, including through-traffic, leading to reduced congestion, improved air quality and reduced carbon

- Increased capacity for growth

- Reliable, ring-fenced income stream to allow us to deliver other elements of the RTS, including investing in alternative travel services, initiatives, and infrastructure

Adapting to the Future

Demand management can be inherently flexible, with the ability to change pricing or restrictions to adapt to a changing transport network over the long term, as well as dynamic pricing throughout the day or week.

We acknowledge that a demand management scheme cannot be delivered without reasonable alternative travel provision, such as public transport, in place. Therefore, we will implement demand management through a phased approach, which can adapt to changing travel patterns (such as a shift towards electric vehicles) and enable delivery of sustainable transport infrastructure in tandem.

In the long term, we expect that demand management will be seamlessly integrated with our MaaS scheme, and mobility demands via peak modes in peak locations at peak times would be subject to additional charges in comparison to off-peak travel.

Public Transport

Superbus Network

Delivery Partners:
Public transport operators
West Berkshire Council
Wokingham Borough Council
South Oxfordshire District Council
Thames Valley Police

Summary:
A network of high-quality, high-frequency branded bus routes and infrastructure (bus shelters, real-time information, accessible buses and bus stops, Wi-Fi and USB charging on buses etc.), with reduced fares.

Bus priority (potentially involving the reallocation of road space) should be further delivered to enable the bus services to avoid the impacts of congestion.

Additionally, the expansion of the red route scheme along high frequency routes to improve traffic flow.

Cyclists, motorcyclists and taxis will generally be permitted to use bus priority infrastructure provided to support our Superbus network.

Additional scheme information is included in the Bus Service Improvement Plan.

Issue

Car congestion is the single biggest factor limiting the delivery of quality reliable bus services as the bus services are hindered by congestion. This leads to increased journey times, reduced reliability and results in increased operating costs and limits the attractiveness of using bus services.

Outcome

- Improved bus journey times and reliability along the main corridors in and out of the town centre.

- Modernised, high quality bus infrastructure will further improve the perception of bus travel and be more attractive for main mode of travel

- The improved attractiveness of bus travel, therefore reducing private car trips, easing congestion, and enabling higher level of trips to be accommodated on the transport networks to enable economic growth

- Enhanced bus stop facilities with sustainable materials including green roof shelters

- Reduced car trips, leading to reduced journey times, improved journey time reliability, reduced forecast congestion and improved forecast air quality and reduced carbon

Reading
Borough Council
Working better with you

Concessionary and Discounted Travel

Delivery Partners:
Public transport operators Wokingham Borough Council West Berkshire Council Oxfordshire County Council Bracknell Forest Borough Council

Summary:
We provide statutory concessions in accordance with national legislation, which allow older and disabled people to travel on buses for free during off-peak times. Additionally, we also provide concessionary travel for disabled people and their carers during peak times, and travel at all times on dial-a-ride services for eligible pass holders.

We will investigate the potential to provide further concessions for other sustainable trips within Reading. Potential options for this could include discounted or free travel for:

- Different population sectors (for example people aged under 18 or people living in low-income households)

- Different trip types (for example travel to school or trips in certain parts of Reading)

- Different trip times (for example off-peak travel for more users or peak travel for older people.)

We will also work with operators to introduce a 'touch in, touch out' system with a daily capped fare, and a simpler fare structure.

To support an expanded concessionary fares scheme, we will need to identify a revenue stream, for example that which could be generated by a demand management scheme.

Issue

Disabled and elderly people are more likely to be reliant on public transport than other members of the population and are also more likely than others to be financially less well off. At present, the concessionary fares scheme only provides for free travel during off-peak times. However, many journeys made by those with concessionary passes need to be made at peak times (for example trips to work or healthcare appointments). This can lead to increased social isolation, increased deprivation, and poverty for those who struggle to pay for peak hour fares.

Reading suffers from congestion due to high levels of private car travel, leading to poor environmental quality and reduced productivity.

Over one in four cars trips on the network at peak times are related to school travel[82].

Some areas of Reading are relatively deprived, with people at risk of social isolation without affordable travel options.

Outcome

Expansion of the concessionary fares scheme would provide a financial incentive encouraging bus travel in Reading and leading to a mode shift away from the private car. Depending on the details of the scheme, the following benefits could be realised:

- People developing life-long sustainable travel habits, resulting in a permanent mode shift away from the private car

- Increased accessibility to services and employment, resulting in economic benefit

- Reduced peak hour traffic, leading to reduced journey times, improved journey time reliability, reduced forecast congestion and improved forecast air quality and reduced carbon

- Increased off-peak bus travel, leading to improved viability of bus services

- Mental health benefits (from social interaction and increased independence) and physical health benefits (from increased mobility)

Public Transport

Community Transport

Delivery Partners:
ReadiBus
Other community transport operators

Summary:
Reading is served by ReadiBus – a specialist transport service for people with restricted mobility in and around Reading. This operates as a 'dial-a-ride' service. Our strategy includes additional demand responsive travel services, which would serve all sectors of the population.

ReadiBus has been operating since the early 1980s, supporting 146,000 journeys made by 3,000 users and operating 300,000 miles in 2018/19. We will continue to support ReadiBus services, and investment in the scheme to enable more flexibility in booking.

Issue

People with restricted mobility are less likely to be able to travel by standard bus, or drive. Lack of suitable transport services can lead to isolation, alongside health and wellbeing impacts.

Currently, people using the ReadiBus service must book a set time in advance, using either the website or by phone. Furthermore, last-minute bookings cannot be made. This limits flexibility for travel.

Outcome

- People with mobility impairments will be able to travel much more flexibly and access opportunities to enhance quality of life

- People reliant on dial-a-ride services will be more able to travel freely, affording them greater independence and flexibility

- The scheme will reduce the likelihood of isolation, increase social activity and deliver associated health benefits

- People with mobility impairments are given priority access into the town centre

- Increased access to key services and facilities including food shopping and GP surgeries

Public Transport

Reading Borough Council
Working better with you

Demand Responsive Transport

Delivery Partners:
Public transport operators
Major Employers

Summary:
Introduction of demand responsive transport services, primarily in areas not otherwise serviced by public transport, and as flexible extensions of existing routes including to enable more direct journeys from residential areas to workplaces and other destinations outside the town centre.

Supporting technology would be implemented, which could include a mobile app, website and/or phone system, to facilitate the operation of the scheme.

This allows provision of flexible bus access at times when it is difficult or expensive to provide frequent fixed route bus services.

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Issue

Some areas of Reading are relatively isolated and have poor access to the town centre and local facilities. This is due to bus services not covering all areas of Reading. In particular, people with disabilities, young and older people and deprived communities are most at risk as they are less likely to be able to travel by alternative means.

Outcome

- Access to amenities would be improved in areas not currently served by public transport, providing affordable travel options for those on low incomes and encouraging reduced travel by car or taxi

- The scheme would also act as a feeder service to regular public transport services, providing door-to-door connectivity and increasing the attractiveness of public transport

- This would encourage a mode shift away from the private car and contribute towards reduced forecast congestion and improved air quality, as well as encouraging social interaction and allowing people to be independent for longer

- Investment in the system could provide a catalyst for the expansion of non-fixed route public transport services, with the emerging initiatives and technologies such as MaaS, autonomous and connected vehicles

Adapting to the Future

A step change in mode shift is required to meet our climate goals and demand responsive transit will be an integral part of providing services that provide a real alternative to the car.

Technological advances mean that Shared Autonomous Vehicles (SAVs) are likely to become a cost-effective solution for 'last mile' travel for people and deliveries within the plan period.

Currently, there are SAVs running in locations such as business parks across the world, although they currently require a driver except where they are operating on a fully private road. We expect UK legislation to remove this requirement for a driver in the relatively near future, and for the cost of vehicles to fall. Current SAVs are relatively small, carrying around 12 to 15 people, however the technology is scalable to any size of vehicle, and we expect there will be a much wider choice available over the coming years, enabling them to provide new opportunities for an integrated public transport service.

It is likely that the evolution of SAVs will become a part of Demand Responsive Transport services across Reading, and in the future, they will work together to provide high frequency door-to-door services to complement and enhance the fixed-route public transport network.

We will review all schemes and new development in the context of operation on opening but also suitability for the future deployment of SAVs, so that they are 'future ready'.

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Public Transport

South Reading Bus Rapid Transit Corridor

Delivery Partners:
Wokingham Borough Council
Public transport operators
Royal Berkshire Hospital
The University of Reading
Private sector (including business parks and major employers)

Summary:
Delivery of a BRT route along the A33, providing direct, frequent and reliable bus travel between Mereoak Park and Ride, south Reading business parks, Green Park Station, Kennet Island, Madejski Stadium and Reading town centre.

Initial phases of this scheme have been delivered as funding is secured, however there still remains significant sections along the A33, particularly northbound towards the town centre, where the BRT should be delivered to provide a continuous bus priority facility between Mereoak Park and Ride and Reading town centre.

The scheme will be developed to enable sustainable development on this key growth corridor in Reading, which includes a number of potential future development sites.

Issue

Car commuter congestion and lack of bus priority through junctions leads to delays to Greenwave and other bus services which use the BRT route on the A33 corridor, making public transport services along the A33 less attractive.

Planned development in and around the A33 corridor is expected to further increase demand for travel along this route, increasing congestion. Alternative travel options, traffic signalling improvements and capacity upgrades are required to support already increasing travel demand and unlock development sites.

Outcome

- Improvement of a service that provides a high quality viable alternative to the private car, that can make a real difference to mode shift that is required to meet our Climate Emergency targets.

- Increased attractiveness of public transport and potential to increase bus frequency due to reduced operating costs and/or increased patronage

- Increased capacity for travel into and out of Reading, and reduced congestion leading to improved air quality

- Significant cost savings to businesses through improvements to travel capacity, journey time and reliability

- Nearby sustainable development opportunities will be unlocked including Green Park Village and the Thames Valley Science Park

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Bus Rapid Transit Corridors

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Public transport operators

Summary:
There are high levels of congestion during peak periods and poor air quality along key corridors in Reading, which have a significant impact on the health and wellbeing of local residents. Therefore, the provision of high-quality Bus Rapid Transit (BRT) corridors will help to address these issues by providing a realistic alternative to the private car.

The BRT network will be designed to meet a set of standards above and beyond our Superbus Network, and will be futureproofed for future public transport modes other than bus. BRT will deliver dedicated public transport lanes and routes, allowing for segregation of public transport and general traffic. Reallocation of road space for the BRT will be considered, where land is constrained, in order to achieve traffic reductions and air quality improvements.

Provision of BRT along key corridors in Reading would provide a sustainable travel option, reducing congestion and improving air quality to deliver benefits to local residents.

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In addition to South Reading Bus Rapid Transit, Bus Rapid Transit will be provided along the following corridors:

- West Reading BRT: West Reading Park and Ride to Reading town centre
- South West Reading BRT: South West Reading Park and Ride to Reading town centre
- East Reading BRT: Thames Valley Park and Ride to Reading town centre
- South East Reading BRT: Winnersh Triangle Park and Ride to Reading town centre

Details of the schemes and routes will be developed over the plan period. We are committed to working with neighbouring Councils to provide enhanced sustainable travel options and develop BRT corridors to address issues facing local residents.

Issue

Traffic congestion and lack of bus priority along key corridors in the east, west and southwest of Reading leads to slow, unreliable public transport, increased operating costs and decreased service frequency. This makes bus travel less attractive, and limits opportunity to operate a greater range of bus services along the corridor.

Travel demand to access the strategic networks (rail and motorways) is expected to increase with recent and planned infrastructure investment, such as the Elizabeth Line, Western Rail Link to Heathrow and M4 smart motorway.

Planned development is also expected to increase travel demand and delay along the corridors, restricting growth. Enhanced travel options and capacity are required to unlock development.

Outcome

- Reduced congestion and improved air quality
- Provision of high-quality public transport services and connections to Park and Rides
- Increased attractiveness of public transport and increase frequency
- Significant benefits to residents and businesses through improvements to travel capacity, journey time and reliability
- Improved and sustainable accessibility to the strategic transport networks to increase the catchment and travel benefits
- Increased capacity for travel to help mitigate the impact of future development

Adapting to the future

Whilst initially designed to carry buses, the BRT network will be designed to be suitable to adapt in the future to carry other forms of public transport, such as guided buses, trams, trackless trams, light rail, or autonomous shuttles/buses.

The BRT network would offer a potential testing area for trials and early adoption of emerging technologies and legislation to enable services, for example: Mobility as a Service (MaaS); connected autonomous public transport services and demand responsive services.

Mereoak Park and Ride Mobility Hub Expansion

Delivery Partners:
Wokingham Borough Council
Transport operators

Summary:
Mereoak Park and Ride opened in 2015 with 570 spaces and is extensively used by people travelling from south of Reading, and the M4. It is served by Greenwave buses to Reading town centre, Madejski Stadium, Green Park and the Royal Berkshire Hospital. Mereoak is also the coach stop for Reading for National Express coach services.

There is potential for the Park and Ride to become a major transport interchange hub, encouraging further use of the Park and Ride, with the provision of additional facilities and car parking at the site.

We will deliver increased parking provision, new electric vehicle charging points, and a facilities hub (which could include toilets, a waiting room and café, for example).

This scheme would support proposed development on the A33 corridor, as well as within Reading town centre.

Issue

Planned development in and around the area is expected to increase demand for travel along the A33 corridor, adding further delays or restricting growth within the heavily congested local area. Alternative travel options are required to unlock development sites in the wider area, and to increase capacity for travel into Reading.

Mereoak Park and Ride does not benefit from enclosed passenger waiting facilities or toilets. Travel demand to access the strategic networks (rail and motorways) is expected to increase with recent and planned infrastructure investment, such as the Elizabeth Line, Western Rail Link to Heathrow and M4 smart motorway.

Mereoak Park and Ride Mobility Hub

Outcome

- Improved amenity offering will increase attractiveness of Park and Ride facility
- Attract more motorway coach services to stop at this facility
- Additional car parking will provide increased capacity to travel by Park and Ride. This would increase usage of the Park and Ride and reduce congestion into the town, which, in turn, could enable increased bus service frequencies to the Park and Ride
- Increased capacity for trips along the A33 corridor, facilitating economic growth
- Improved sustainable accessibility to the strategic transport networks to increase the catchment and travel benefits of the planned schemes.

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Public Transport

Winnersh Triangle Park and Ride Mobility Hub Enhancements

Delivery Partners:
Wokingham Borough Council
Transport operators

Summary:
Winnersh Triangle Park and Ride provides a key link for those travelling from the south and east of Reading. Further enhancements are proposed to increase parking capacity and improve for the Park and Ride services.

The improvements delivered will need to cater for the growth of future technologies including the provision of more electric charger points.

Wokingham Borough Council are extending parking provision by decking the car park that will allow an increase in the parking spaces. This will cater for the demand with an increase in provision of electric charging points for both cars and buses to adapt to changing technologies. Waiting facilities and associated amenities will also be upgraded to enhance user experience.

East Reading BRT would improve the journey times and reliability of the supporting bus services.

Issue

Winnersh Triangle Park and Ride opened in 2015 with nearly 600 spaces for those travelling from the east of Reading. The Park and Ride has been well used and providing this key link to the town centre with buses departing every 15 minutes. However, there are currently no waiting facilities for passengers and there is limited provision for electric vehicles.

There is currently no Park and Ride access to the Royal Berkshire Hospital from the East of Reading or Wokingham.

Outcome

- Improved amenity offerings will increase the attractiveness of the Park and Ride facility

- Additional car parking will provide increased capacity to travel by Park and Ride

- Combined, this would increase usage of the Park and Ride and reduce congestion

- Work with transport operators to improve services to key destinations, including the Royal Berkshire Hospital

Winnersh Triangle Park and Ride Mobility Hub

Park and Ride Mobility Hubs

Delivery Partners:
South Oxfordshire District Council
Oxfordshire County Council
West Berkshire Council
Wokingham Council
Local Parish and Town Councils
Transport operators

Summary:
The provision of a comprehensive Park and Ride network for Reading serving the town centre. These facilities will increase demand for public transport services, therefore enabling more viable services with greater frequency.

The provision of Park and Ride facilities alone will provide benefits. However, the benefits of this scheme will be maximised through the delivery of BRT corridors and the Superbus Network, which will introduce public transport priority and service frequency enhancements, alongside other supporting schemes.

We are committed to working with our delivery partners to deliver improved public transport services to Reading, for the benefit of their residents.

We will also work with landowners to consider the potential for utilising existing car parks to accommodate Park and Ride Mobility Hubs, where appropriate.

Issue

Reading suffers from high levels of congestion and is heavily constrained in many areas. Whilst the east and south of Reading are served by existing Park and Ride Mobility Hubs, the north and west are not, and congestion along key corridors in these areas is significant. This has negative impacts on public space and air quality within Caversham and West Reading.

Demand to access the strategic rail network and the town centre is expected to increase with the planned investment schemes and delivery of development, and existing routes have limited capacity to accommodate increases in travel demand.

Outcome

- Car trips from the north and west of Reading will be able to use the Park and Ride and associated bus services to access Reading town centre, increasing transport capacity into the town centre and facilitating economic growth. Residents of areas en-route will be able to access express services into the town centre

- Increased use of public transport services will lead to reduced congestion and improved air quality in north and west Reading, and will support reducing the reliance on the private car for journeys into Reading

- Create a network of Park and Ride sites at key points on the edge of the urban area including locations to the North and West of the Borough

Adapting to the Future

We expect in the medium term that our Park and Rides will evolve to provide higher levels of electric charging points for vehicles, as the adoption of electric vehicles increases. Given the strategic location of Park and Ride sites, there is opportunity for these to become electric charging stations for both vehicles using the Park and Ride facility, and vehicles otherwise passing by.

This will mean a proportion of drivers using the charging facilities will be waiting for a period of time at the Park and Ride sites, while their vehicles charge, creating demand for facilities and amenities such as retail. In light of the climate emergency and emerging circular economy, we will seek to create green mobility hubs at our Park and Rides to cater for this demand, which could include:

- Travel information station
- Parcel collection
- Recycling and waste point
- Household goods refill station
- Food share-house / community fridge
- Repair café
- Reuse shop / library of things

In the longer term, as there is a shift towards connected autonomous vehicles and a change in the ownership model, existing parking facilities at our Park and Rides will evolve to become charging, servicing and repair hubs, where autonomous vehicles will be kept when not active on the roads. Park and Rides will become green mobility hubs, where people will be able to transfer from low occupancy CAVS (and other modes such as cycling) to higher occupancy shared autonomous vehicles to travel into Reading town centre, and access a range of other facilities.

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Public Transport

Reading Station Interchange Enhancements

Delivery Partners:
Network Rail
Great Western Railway

Summary:
Further enhancements to the Reading Station interchange to prioritise pedestrians, cyclists and public transport, and deliver public realm benefits to enhance the area as a major welcome point and gateway to Reading, including:

- Upgraded public transport stops with real-time passenger information and improved infrastructure to enhance user experience and encourage sustainable travel

- Improve the north/south active travel spine through planned development in the station area. This will include delivering an improved connection between Reading Station and Christchurch Bridge

- Improved access to/from Reading Station for cyclists, including through the subway, and connectivity to key local and national cycle routes

- Improvements in cycle parking through the provision of secure cycle hubs

- Signage and digital wayfinding to help visitors find their way to and from the railway station

Issue

Reading station is a major transport mobility hub and, with increased passenger usage anticipated over the coming years, improved transport infrastructure will be required to keep up with the demand and to accommodate growth in the Reading area. In addition, cycle theft in Reading is high, and discourages people from cycling to the railway station.

Outcome

- Improved attractiveness for rail travel, therefore reducing forecast private car trips and forecast congestion, leading to improvements in forecast air quality and reduce carbon

- Reduction in cycle theft

- Increased attractiveness of active travel through reduction in severance between the station and town centre

- Improved interchange experience between modes, increasing the attractiveness of public transport and active travel

Public Transport

Reading West Station Upgrade

Delivery Partners:
Network Rail
Great Western Railway

Summary:
Delivery of a quality railway station upgrade, including:

- New station building and associated retail unit
- Improved interchange on Oxford Road, including cycle parking, provision of high-quality bus interchange and improvements to the pedestrian environment
- New access from Oxford Road to the south-bound platform
- Improvements to the Tilehurst Road entrance
- A ticket office, self-service ticket machines and barriers
- Toilets
- Platform widening
- Canopies on the platforms and improved signage
- Enhanced security, including CCTV
- Lift to both platforms

Issue

The access to Reading West Railway Station is concealed and signage is poor, so its visibility from the roadside is limited. Natural surveillance and visibility on the ramps and on the platforms are poor. The ramp from Oxford Road is steep and has a number of steps and is therefore difficult or impossible to access for mobility impaired people or those with children, buggies or heavy goods.

A stepped access is provided to both platforms. There is also a ramp from Tilehurst Road to the southbound platform but is isolated and natural surveillance is poor. The railway station is not secure. The platforms are narrow, and protection from the weather is very limited for both passenger and the part time railway station staff. Oxford Road suffers with significant congestion, which affects the journey times and reliability of the bus services accessing the railway station.

We secured funding for a large part of this scheme, and major upgrades to Reading West Station were completed in Spring 2023. However, to date, it has not been affordable to deliver lifts to both platforms, providing step-free access, as this would require the platforms to be fully rebuilt. We will seek opportunities to fund the remaining elements of the scheme, including lifts, to provide a fully accessible station for all.

Outcome

- Improved attractiveness for rail travel, therefore reducing forecast private car trips and forecast congestion, leading to improvements in forecast air quality and reduce carbon
- Improved connectivity to sustainable travel networks, reducing reliance on private car to access the rail network
- Oxford Road corridor would be enhanced to improve personal safety and discourage anti-social behaviour
- Improved accessibility for disabled people
- Railway station investment can act as a catalyst for wider development and regeneration

Tilehurst Station Upgrade

Delivery Partners:
Network Rail
Great Western Railway

Summary:
Improve visitor experience to Tilehurst station and make the station fully accessible by providing lifts to allow customers to access all platforms.

In addition, improve the access to the station by all modes to improve safety and user experience. This could include improved footways, crossings, drop-off/pickup layout and landscaping, and additional cycle and car parking.

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Issue

The access to Tilehurst Station is currently poor making the station inaccessible for some users. There are no lifts to access all of the platforms making the station unusable for some disabled users and therefore discouraging rail use.

The existing provision for people to cycle and walk to the station is unsatisfactory. The current cycle parking lockers are only available on a subscription basis and are currently over-subscribed leaving no facilities for cycle parking. The access from the highway and nearby bus stops is across the station forecourt and mixed with vehicle access with no pedestrian priority or safety measures. The access from Tilehurst Village does not follow the natural desire line making this route unattractive.

With upgrades made to the other stations in and around Reading and the new station at Green Park the lack of investment at Tilehurst Station is highlighted further.

Outcome

- Installation of lifts will ensure the station is accessible to all users

- Upgraded interchange facilities will improve the attractiveness for rail travel, therefore reducing forecast private car trips and forecast congestion, leading to improvements in forecast air quality and reductions in carbon

- Improved connectivity to sustainable travel networks, reducing reliance on private car to access the rail network

- New cycle security measures will encourage access via bicycle and encourage rail use as an alternative to private car trips

Mobility as a Service (MaaS)

Delivery Partners:
Private sector
Public transport operators

Summary:
Establish a sustainable MaaS scheme allowing residents, commuters and visitors to simply plan, pay for and undertake multi-modal journeys through an easy-to-use app linked to a single payment platform. MaaS can be set up as a pay as you go or as a monthly subscription for services.

This would link various modes and operators such as bus services, rail services, cycle hire, e-scooters, taxis, car share and car hire.

The principle behind MaaS is to reduce car ownership by providing a multi-modal service that gives users the confidence that all their travel needs can be conveniently and cheaply met without owning a car. In the first instance this may be giving up / not buying a second car. Research shows that without a car on the drive, people travel substantially more sustainably which is necessary to meet Reading's climate targets and improve air quality and health. Increased sustainable travel will make high quality public transport services more viable which will enable more investment in services and greater take up of MaaS. MaaS is not about preventing all access to a car, with car clubs and car hire being part of a scheme.

To be effective MaaS needs a good geographical coverage so that the majority of journeys made by the traveller are within the MaaS area. For example, if a family has a second car primarily used for commuting, MaaS should be able to provide an effective alternative.

We will look to work with neighbouring authorities, public transport operators and commercial providers to build a more integrated service. There are also commercial companies working to establish MaaS services on a fully commercial model although without success to date in the UK. Reading will monitor progress of these should it be beneficial to encourage a company to lead on MaaS services.

We will deliver a MaaS 'light' service in and around Reading working with neighbouring authorities and operators to quickly take practical steps towards a full MaaS service building on existing smart cards, apps and web services in the region in the first instance to actively encourage modal shift. Marketing and branding will be a key part of this. Should viable commercial services come forward then we will work with operators to facilitate the commercial MaaS service in place of a Council- led scheme.

We would expect MaaS to be accessible to users via a mobile app and other methods. For many people (including some older and disabled people) a service that brings together all travel options into one location and facilitates journey planning, booking and integrated payment is likely to be viewed as easy to use, and could lead to increased independence for some users.

However, we also recognise that some users, particularly some older or disabled people, may have difficultly using an app to plan, book and pay for their travel. To mitigate this risk as far as possible, we will design any MaaS scheme with full consideration of equalities, and provide alternative access and booking options, such as a website and a telephone service. We will also provide high-quality customer support and education programmes to enable these users to better access MaaS. We will carry out an Equalities Impact Assessment for any MaaS scheme, in line with policy RTS3 Equality and Inclusivity.

Public Transport

Issue

Currently there are no multi-modal travel planning services in Reading which streamline journeys and allow for users to make a single payment option for complete journeys. This can make public transport both complex and expensive for users, discouraging its use.

Outcome

- The availability of a sustainable MaaS scheme will offer improved mobility and access to services whilst reducing the use and consumption of transport resources

- A more streamlined transport system will create more reliable, convenient and cost-effective journeys which encourage the uptake of more sustainable travel. This will result in a reduction in private car use, carbon impact and will free up road capacity for further improvements for sustainable travel

- MaaS is expected to lead to reductions in car ownership which also reduces embodied carbon in addition to operational carbon savings from vehicle use

Figure 35: Proposed Future Public Transport Network

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Active Travel
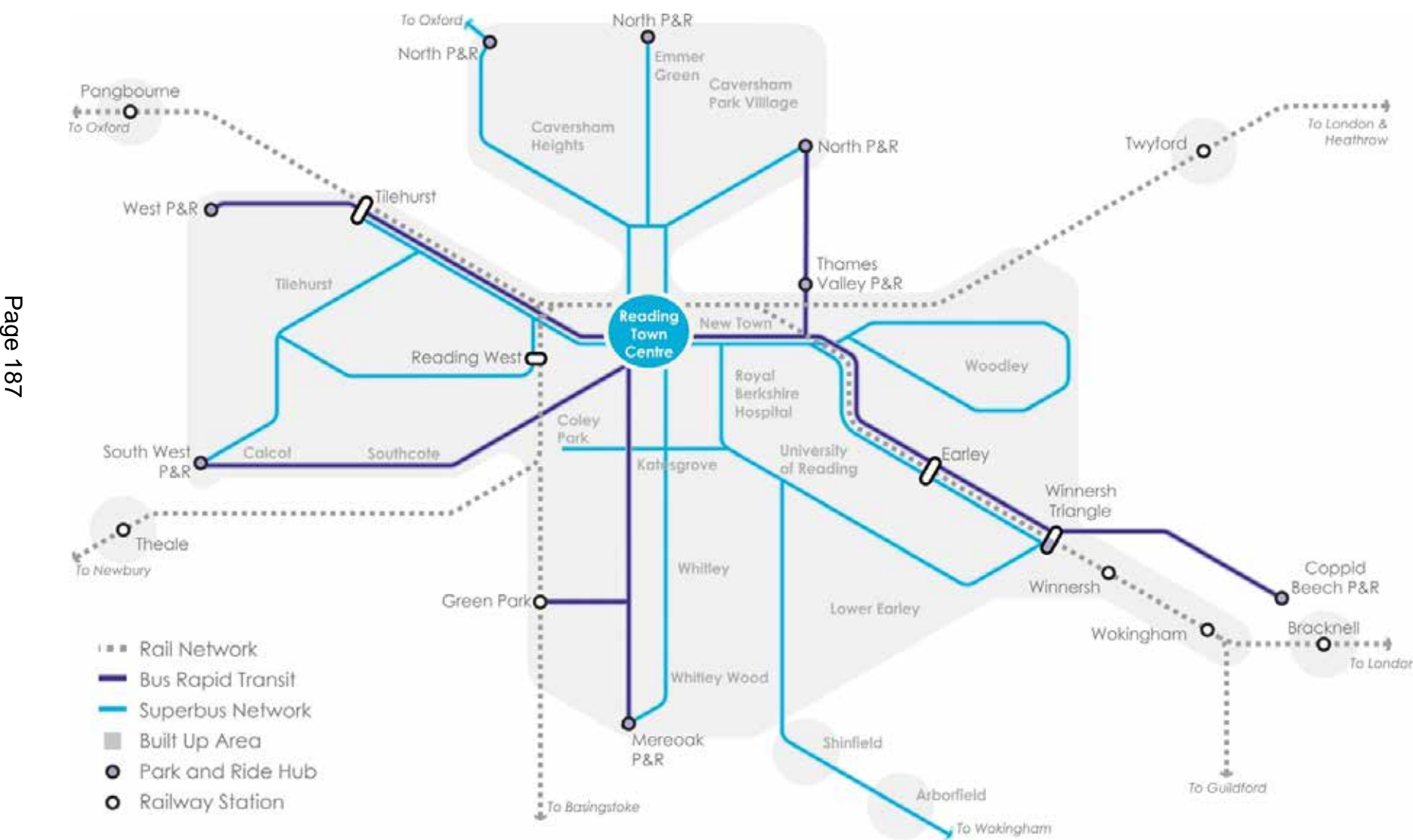
Town and Local Centre Public Space Enhancements

Delivery Partners:
Reading's Economic & Destination Agency
Reading Town Centre BID
Transport operators

Summary:
We will enhance the experience of visiting central Reading and local centres by focusing on sustainable travel modes and removing or reducing conflicts between motorised transport and walking and cycling. We will incorporate the Healthy Streets principles as part of these enhancements.

Improvements could include:

- Better access for walking and cycling in and around Reading town centre, including to Reading Station
- Improved walking and cycling connectivity over and through the IDR
- Better access for bus passengers to key interchanges in the town centre
- Creating car or vehicle-free areas
- Providing rest and amenity areas
- Managing available kerb space and providing adequate facilities for deliveries

- Removal of obstructions to free bus movement on approaches to central areas
- Effective management of deliveries, blue badge parking and on and off-street parking will all contribute towards a more accessible town centre.
- Enhanced public realm through use of high-quality materials, landscaping and design to encourage social interaction

Issue

The perception of safety for vulnerable road users along some of the key road corridors, at local centres and the town centre is poor. These roads experience high levels of congestion and suffer from poor air quality. Major road links, such as the IDR, cause significant severance, and make walking and cycling unattractive. Wayfinding has been introduced over time and is sometimes disjointed, and the wider public space environment has become cluttered and inconsistent.

Outcome

- Active travel would be enabled, and access would be improved to the local facilities and the town centre, leading to reduced car trips and forecast congestion and reduced carbon

Broad Street

- Increased green space leading to environmental benefits, including for wildlife
- Improved air quality and reduced exposure to pollution through greater separation of people and vehicles
- Road safety and perceived safety could be improved
- Improvements to public space could attract people and businesses to the area, leading to economic growth, increased social activity and improved health and wellbeing outcomes
- Reduced embodied carbon through careful consideration of materials used and construction methodologies

Strategic Pedestrian Routes

Delivery Partners:
Wokingham Borough Council
West Berkshire Council

Summary:
In line with our Local Cycling and Walking Infrastructure Plan (LCWIP), we will provide improvements that follow the Healthy Streets principles. This will encourage walking and improve options for multi-modal interchange on key walking routes which connect major employment areas, transport mobility hubs, the town centre and district hubs across the Reading area. Improvements should reduce conflict with traffic and other road users and improve safety and perception of safety. Further work will be undertaken to identify strategic pedestrian routes for improvements, which could include:

- Roadspace reallocation
- Enhanced public space
- Resurfacing
- Lighting and CCTV
- New/improved crossings
- Improved signage
- Street clutter removal and consolidation
- Introduction of pedestrian and cyclist rest areas
- Increased landscaping and vegetation

Issue

Strategic pedestrian routes are of variable quality in Reading, and areas of poor provision reduce the attractiveness of the routes and discourage people from walking, both as a main mode, or as part of a multi-mode trip. In many locations, private car travel is prioritised over pedestrian movements and pedestrian routes can be narrow and poorly maintained. This can make routes particularly difficult to use for disabled people and other vulnerable users such as parents with pushchairs.

Outcome

- Improved accessibility for all users
- Increased walking levels and shift away from private car travel, leading to reduced forecast congestion, improved forecast air quality and reduced carbon
- Increased levels of physical activity leading to improvements in mental and physical health
- Improved active travel journey times leading to economic benefit
- Improved access to public transport, leading to increased public transport use, potential for service frequency enhancements, additional capacity into Reading and reduced journey times

Reading Town Hall Square

- Enhanced public realm through use of high-quality materials, landscaping and design encouraging walking as a mode choice, increasing social interaction and leading to environmental benefits, including for local biodiversity
- Design and specification to reduced embodied carbon in works and equipment

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Active Travel

Local Pedestrian Routes

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Schools, Colleges and University

Summary:
In line with our Local Cycling and Walking Infrastructure Plan (LCWIP), we will create a network of local pedestrian routes that connect people to local facilities and provide feeder links to the strategic pedestrian network, as well as the wider transport network, including mobility hubs/key interchanges across the borough.

We will incorporate the Healthy Streets principles as part of these enhancements.

Issue

Local pedestrian routes connecting people to local facilities, such as schools, shops and healthcare are often indirect and poorly maintained, leading to high levels of car use for short trips. This contributes towards health issues and causes congestion.

The quality of routes can make active travel particularly difficult for disabled people and other vulnerable users such as parents with pushchairs.

Pavement parking creates difficulties and safety concerns for all users.

Many of our local centres are located on or adjacent to key transport routes, and local congestion caused by people using their cars for short trips has consequential effects on the wider network, such as delays to public transport.

Outcome

- Improved accessibility for all users

- Increased accessibility of local facilities

- Walking will be encouraged, increasing levels of physical activity

- Reduced walk journey times leading to economic benefit

- Mode shift away from private car leading to reduced congestion, reduced carbon, improved air quality and improved public transport reliability

- Safety benefits for people who walk, such as reduced obstructions on footways, including parked vehicles and street clutter

- Design and specification to reduced embodied carbon in works and equipment

Active Travel

Strategic and Town Centre Cycle Routes

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Oxfordshire County Council
Bracknell Forest Borough Council

Summary:
Given the compact nature of Reading Borough, there is significant opportunity for improvements to increase cycling levels and create a shift away from private car travel.

We will create a strategic cycle network based on the principles set out in our Local Cycling and Walking Infrastructure Plan (LCWIP) and Healthy Streets, connecting major destinations (including education, employment centres and transport mobility hubs) along key transport corridors and in the town centre. These routes include both radial and orbital routes as well as enhanced routes within the town centre.

Improvements will include reallocating road space, segregation from traffic for people who walk and cycle, surface improvements, crossing enhancements, parking restrictions, signage, reducing street furniture and increasing accessibility for all.

Associated public space improvements would enhance key corridors including those in deprived areas.

Key:
- National Cycle Network
- Strategic Cycle Routes
- Reading Borough Boundary
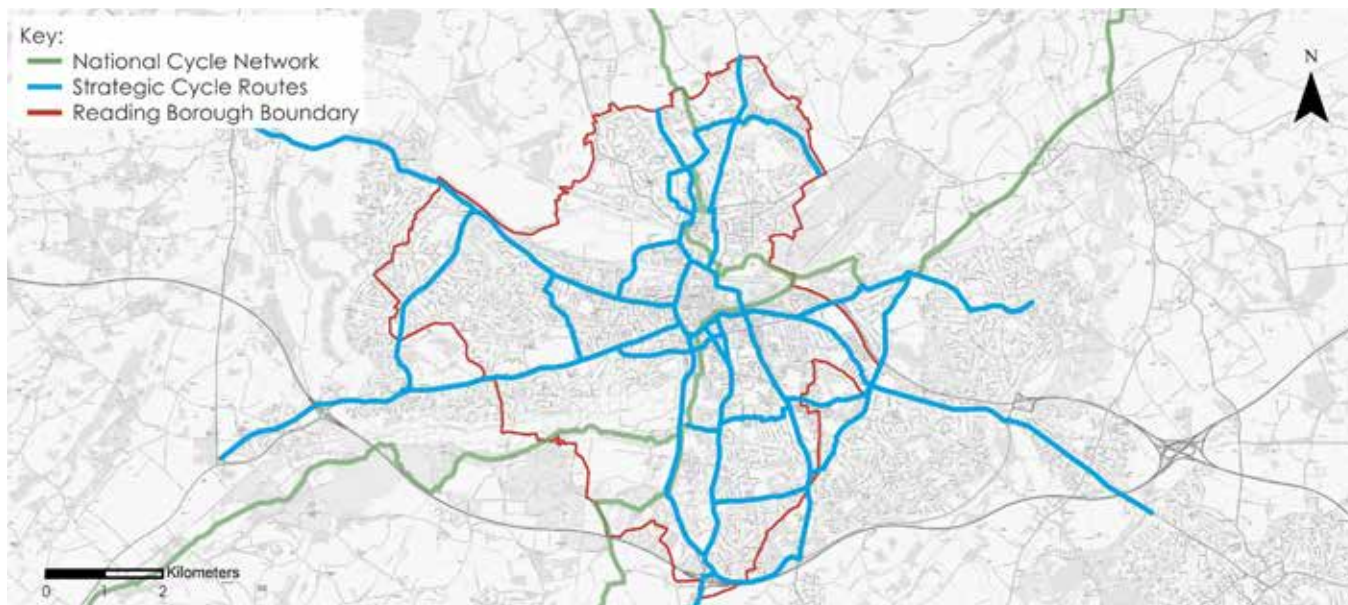
Issue

There are limited segregated cycle connections along key corridors. Lack of connectivity and directness between existing routes and key destinations. Low route quality in some locations can make routes particularly difficult to use for those with adapted cycles, such as tricycles, recumbent cycle, wheelchair cycles or cycles with trailers/ cargo bikes.

Outcome

- Improved accessibility for all users
- Increased cycling levels and shift away from private car travel
- Reduced pedestrian and cyclist conflict
- Increased levels of physical activity leading to improvements in mental and physical health
- Improved active travel journey times leading to economic benefit
- Improved cycle access to public transport, including key destinations such as mobility hubs and interchanges
- Dedicated cycle routes along key corridors including from Palmer Park to link to the Hospital and the wider cycle network
- Enhanced public realm through use of high-quality materials, landscaping, biodiversity and design, encouraging cycling

Shinfield Road Active Travel Improvements

Delivery Partners:
Schools and University

Summary:
We have secured funding from the Government's Active Travel Fund to deliver significant active travel improvements on Shinfield Road between Christchurch Green and Shinfield Rise.

Improvements include:

- Segregated cycle lanes in each direction
- Early release for cyclists at the three signalised junctions
- Improved cycle provision at all junctions
- Raised tables at select junctions to encourage lower vehicle speeds
- New and improved crossings of Shinfield Road
- Footway widening
- Introduction of double yellow lines to prevent parking obstructing active travel
- Bus stops marked on the carriageway
- A new shared space for pedestrians and cyclists near to the junction with Cedar Road/Elm Road

The scheme is expected to result in minimal increases in queuing and delay for vehicles at the three junctions along the route.

Issue

Shinfield Road is a key strategic corridor into Reading town centre, identified in the LCWIP, and provides direct access to key destinations such as the University of Reading, schools and local services and amenities. However, there is a lack of segregated cycling provision, and the overall route quality is not conductive to walking and cycling.

Outcome

- A high-quality facility on a key route between south Reading, the University, key local destinations and Reading town centre
- Improved accessibility for all users
- Improved active travel connectivity to the University and local destinations
- Increased walking and cycling levels and shift away from private car travel, leading to reduced forecast congestion, reduced carbon and improved forecast air quality
- Reduced conflict between cyclists and pedestrians
- Increased levels of physical activity leading to improvements in mental and physical health
- Improved active travel journey times leading to economic benefit

Active Travel

Bath Road / Castle Hill Active Travel Improvements

Summary:
We have secured funding from the Government's Active Travel Fund to deliver Active Travel improvements on Bath Road / Castle Hill between Berkeley Avenue and the IDR and Castle Street.

Improvements will include:

- Segrated cycle lanes in each direction along most of the route
- Segregated cycle facility across the IDR and reallocation of general traffic capacity to cyclists
- Improved cycle provision at all junctions
- Relocated bus stops
- New and improved pedestrian crossings
- Improved carriageway markings
- Introduction of double yellow lines to prevent parking obstructing active travel

This route will connect the residential areas of Southcote and West Reading to the town centre and its shopping areas of Broad Street Mall and The Oracle.

Issue

Bath Road / Castle Hill is a key strategic corridor into Reading town centre, identified in the LCWIP, and provides access to key local destinations nearby, including The Wren and Blessed Hugh Faringdon schools. However, there is a lack of segregated cycling provision, and the overall route quality is not conductive to walking and cycling.

Outcome

- A high-quality facility on a key route between west Reading, key local destinations and Reading town centre
- Improve connection to the National Cycle Network Route 422 at Berkeley Avenue
- Improved accessibility for all users
- Increased walking and cycling levels and shift away from private car travel, leading to reduced forecast congestion, reduced carbon and improved forecast air quality
- Reduced conflict between cyclists and pedestrians
- Increased levels of physical activity leading to improvements in mental and physical health
- Improved active travel journey times leading to economic benefit

Active Travel

London Road Active Travel Improvements

Delivery Partners:
Royal Berkshire Hospital
The University of Reading

Summary:
Delivery of a series of active travel improvements on the London Road corridor between Cemetery Junction, the Royal Berkshire Hospital, Sidmouth Street and the town centre. Improvements could include:

- Enhanced cycle lanes in each direction to enhance the existing shared facilities, potentially through the provision of segregated facilities with reallocation of general traffic capacity

- Improved cycle provision at all junctions

- Raised tables at select junctions to encourage lower vehicle speeds and provide enhancements for pedestrians

- New and improved pedestrian crossings

- Enhancements at bus stops and links to future bus priority measures on the London Road corridor which will be available for use by cyclists

- Improved carriageway markings

- Linkages to wider cycle network through connecting this facility with new cycle infrastructure being delivered through Woodley and the town centre and NCN 422 route via the existing facility in Sidmouth Street

This route would provide a key missing link in the existing cycle network by connecting the residential areas of East Reading to the hospital, town centre and wider cycle network.

Issue

London Road between Cemetery Junction and Sidmouth Street is a busy one way, 3 lane, highway corridor for traffic coming into Reading from the East and South East and through traffic. It is difficult to use as a cyclist due to the need to move across 3 lanes to turn right and being one way restricts West to east movements. There are three crossings along road however there is scope for more to reduce severance for pedestrians and cyclists. It serves the Royal Berkshire Hospital, the University of Reading London Road Campus and a number of healthcare, retail and other businesses.

The road is characterised by relatively wide pavements with buildings well set back from the road. On the north side the pavement is a shared pedestrian and cycleway and there is an established avenue of mature trees on each side which bring environmental and amenity benefits.

Shared foot cycleways provide a safe route for cyclists by taking them off the road, however they are not an optimum solution, particularly where the aim is to increase numbers of cyclists and where e-bikes are becoming more popular with higher speeds which impacts on the use of the pavement by pedestrians. They are also less accessible for adapted cycles, such as tricycles, recumbent cycles, wheelchair cycles or cycles with trailers / cargo bikes.

Outcome

- improved accessibility for all users

- Increased accessibility of local facilities including to the Royal Berks hospital and the University of Reading London Road Campus

- Cycling will be encouraged, particularly for shorter journeys, increasing levels of physical activity and improved health

- Reduced cycle journey times

- Mode shift away from private car to sustainable and more affordable modes for local journeys

- Safety enhancements for cyclists

- Congestion and air quality improvements and reduced carbon

Local Cycle Routes

Delivery Partners:
Wokingham Borough Council
West Berkshire Council
Schools, Colleges and University

Summary:
In line with our Local Cycling and Walking Infrastructure Plan (LCWIP), we will create a new or improved local cycle network along lightly trafficked routes, linking communities to local facilities such as shops, leisure facilities, healthcare and education.

Cycle facilities will include a mixture of shared or segregated foot/cycleways, on-carriageway cycle lanes, cyclist awareness signage and crossing facilities. Shared use facilities will have an interim role to play as we transition towards the provision of segregated cycle infrastructure.

Improvements to borough-wide local routes are proposed as part of the LCWIP. These routes will take into account different types of cycles for those with particular mobility needs.

We will incorporate the Healthy Streets principles as part of these enhancements.

Issue

The local cycle network is sometimes disjointed, following less direct and quieter routes, with missing connections. This can lead to higher levels of car use for short trips, contributing towards health issues and congestion.

Low route quality in some locations can make routes particularly difficult to use for those with adapted cycles, such as tricycles, recumbent cycle, wheelchair cycles or cycles with trailers/cargo bikes.

Many of our local centres are located on or adjacent to key transport routes with a lack of local cycle facilities. Local congestion caused by people using their cars for short trips has consequential effects on the wider network, such as delays to public transport.

Outcome

- Improved accessibility for all users
- Increased accessibility of local facilities
- Cycling will be encouraged, particularly for shorter journeys, increasing levels of physical activity and improved health
- Reduced cycle journey times
- Mode shift away from private car to sustainable and more affordable modes for local journeys
- Safety enhancements for cyclists
- Congestion and air quality improvements and reduced carbon

Mandatory Cycle Lane, Wokingham Road

Active Travel

Sustainable and Safer Travel to School

Delivery Partners:
Schools, Colleges and University
Local communities

Summary:
Introduction of a package of measures to encourage sustainable and safer travel to school, which could include:

- Local road closures at school start and
- finish times (School Streets)
- New and improved pedestrian and cycle
- crossings
- Reduced vehicle speed limits
- Traffic calming measures
- Increased cycle and scooter parking provision
- Set up Park and Strides, walking groups or bike groups

In addition, encourage schools to activity participate in Modeshift STARS (a national sustainable travel programme) to influence the modal shift of school travel for children and staff.

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Issue

Parents using cars when dropping off and collecting children from school contributes significantly to congestion in Reading. This leads to poor air quality on some of the main corridors and town centre, as well as around schools themselves. The issue at schools is made worse by vehicles waiting with engines on, particularly where there is limited parking space availability.

Congestion around schools also leads to roadsafety issues.

Usage of the private car to travel to and from school reduces activity in children and has impacts on their mental and physical health and wellbeing.

Outcome

- Health benefits of improved air quality and increased active travel levels
- Influencing long term travel behaviours by enabling and encouraging children to walk, cycle or bus to school rather than depend upon the car
- Improved road safety, leading to a reduction in accidents
- Shift to sustainable travel for journeys to school, leading to improved journey time reliability, improved air quality and reduced carbon

Signage at Caversham Primary School

Reading
Borough Council
Working better with you

Play and School Street Programme

Delivery Partners:
Local communities
Schools and Colleges

Summary:
We will support local communities and schools to organise temporary street closures, to create Play and School Streets. We will also promote the benefits that community and play events can bring to children and neighbourhoods.

Play Streets enable children to play safely in their street without any danger from traffic, with streets closed for up to three hours and a number of streets have successfully taken part in Play Street activities.

School Streets enable children to walk, cycle or scoot to school safely in the street of the school without danger from traffic. A School Street closes the road outside the school from traffic for up to 45 minutes, twice a day, during school term time only.

Monitoring of implemented School Streets, including of health and education outcomes, will be undertaken to provide evidence for expansion to other schools. In addition, air quality monitoring will be undertaken as part of a recent DEFRA funded project.

Data from the first School Street in Reading showed that:

- 32% more children walked to/from school
- Car travel amongst parents/carers decreased by more than 50%
- The number of cyclists using Downing Road has increased by 25%
- The local road network surrounding the School Street has not had significant issues with displaced parking

Following School Streets trials, School Streets are now permanent at three schools in Reading:

- Park Lane Primary School Street (Downing Road and Lambourne Close)
- Thameside Primary School (Harley Road)
- Wilson Primary School (Wilson Road)
- Crescent Road, which serves Maiden Erlegh School in Reading, UTC Reading and Alfred Sutton Primary School.

Issue

Traffic levels in Reading lead to a perceived lack of safety for children playing outside. Many minor roads have high numbers of vehicles travelling along them, leading to reduced opportunities for children to play outside. Additionally, many homes in Reading are some distance from significant outside play space.

Current evidence shows that the amount of time children play outside is reducing, and their independent mobility is declining.

Streets outside schools suffer from concerns around poor air quality, safety of children and congestion caused by vehicles dropping off/picking up.

Outcome

- Temporary street closures improve perceived safety and encourage children to play in the street and travel more actively to/from school.
- They have been shown to increase levels of activity, contributing to children's mental and physical wellbeing, and also increase social interaction between both children and adults
- The temporary closures build confidence to use street spaces more fully when the closures are not in place, and helps to re-establish the street as a shared space, rather than one dominated by vehicles
- Street closures have also been shown to encourage informal activities that help to develop cycle confidence, better providing children with the skills to enable to choose cycling as a mode of travel[83].
- Those who drop off/pick up children may consider alternative ways of travelling, such as walking, cycling or 'park and stride'
- Benefits to residents and businesses in relation to parking, air quality issues and the increased number of people walking within local shopping areas

Active Travel

Cycle Parking Mobility Hubs and Facilities

Delivery Partners:
Network Rail,
Great Western Railway, South Western Railway
Local residents and community groups

Summary:
Provision of secure, covered cycle hubs at transport interchanges, with the potential for manned security to provide additional reassurance at major hubs. Hubs can provide a large number of secure spaces with double height racks and include facilities including CCTV, lighting, electric charging points, bicycle repair stands, pumps, and 24-hour access with key cards.

Establishment of residential cycle parking facilities, particularly in areas of terraced housing. Provide communal cycle storage in residential areas which provide safe storage for residents who currently do not have the provision and as a result do not own a bike.

Issue

The lack of secure, covered and convenient cycle parking facilities, such as CCTV, electric charging points and maintenance stands, at origins and destinations is a key barrier to cycling and can reduce the attractiveness of cycling for both local and longer multi-modal journeys. In addition to the challenges faced when parking bicycles at key destinations, such as the town centre and transport interchanges, many residents also lack the necessary storage space to keep a bicycle at home and are therefore discouraged from owning a bike and cycling to work or for leisure trips. The lack of cycle parking hubs and facilities can encourage car travel, increasing congestion around the town centre and mobility hubs, and reduces levels of active travel.

Outcome

- New and improved cycle parking mobility hubs and secure facilities would encourage an increase in cycling as people would feel safe storing their bikes at key destinations, including transport interchanges and residential areas.

- By providing more residential secure cycle parking across the Borough, it will encourage more residents to own a bike and use it to travel to work and for leisure purposes. This will help to encourage a modal shift from car use to cycling, which in turn will reduce congestion and improve air quality around the town centre.

Two-Tiered Cycle Hub, Reading Station

Reading
Borough Council
Working better with you

Micro-Mobility Hire Scheme

Delivery Partners:
Private sector
Wokingham Borough Council
West Berkshire Council
Oxfordshire County Council
South Oxfordshire District Council

Summary:
The provision of a new cycle hire scheme to serve Reading through new infrastructure or upgrade the existing cycle hire infrastructure.

Develop the hire fleet to include the provision of e-bikes and/or e-scooters, with the latest technology, subject to appropriate legislation being in place.

Provision of further docking stations to improve affordable access to cycling across the wider Reading urban area.

Issue

Reading is not currently served by an active micro-mobility hire scheme. Opportunities to provide a new hire scheme around Reading are being explored. Micro-mobility hire stations will be located at key destinations across Reading, including mobility hubs, employment centres and near other local facilities and services. Existing infrastructure from the previous scheme will be upgraded, and new hire stations provided to serve the wider Reading area to encourage more cycle and scooter trips into the town centre.

Outcome

- Micro-mobility hire hubs would increase access to jobs, education and leisure, and provide an affordable option accessible by all

- Increased connectivity to cycling which complements other transport options/local mobility hubs

- It provides opportunity for those who do not currently own a bicycle, e-bike or e-scooter to try it out, potentially leading to significant increases in cycling and physical activity

- Provision of e-bikes and e-scooters would encourage people to make use of the hire scheme who may not normally chose to cycle, as well as facilitate longer trips

- Increasing access to cycling leads to corresponding reductions in car commuting and congestion, resulting in improved air quality and reduced carbon

Neighbourhood and Highway Management

Summary:
We will deliver infrastructure schemes to improve our network efficiency and encourage Healthy Streets and Quiet Traffic Areas, including:

- Removal of highway pinch points
- Traffic signal upgrades
- Easy crossing points on key desire lines
- Reallocation of road space
- Changes to junction layouts
- Delivery of public transport priority
- Delivery of pedestrian and cycle priority
- Creation of small spaces for community amenity, socialising and planting

These schemes will be supplemented with moving traffic enforcement and speeding enforcement, in line with our enforcement policy.

These improvements will support and actively encourage more people choosing sustainable ways to travel. This would result in improvements to people's health, wellbeing and air quality, and reductions in carbon emissions.

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Issue

Many parts of our highway network are not designed to accommodate the current level of multi-modal movements. There are local pinch points that cause congestion and areas that lack sufficient provision and priority for active travel and public transport. Parts of our network are also under-utilised and there is wasted space.

There are negative impacts of the highway in local neighbourhood, through congestion, air pollution, noise, severance and health related impacts.

Outcome

- Healthier neighbourhoods and improved quality of life
- Safer highway environment, particularly for vulnerable road users, in line with Healthy Streets and our Local Cycling and Walking Infrastructure Plan (LCWIP)
- Enhanced public realm through use of high-quality materials, landscaping and design encouraging active travel, and leading to environmental benefits, including for local biodiversity
- Prioritise sustainable travel choices
- Reduced nuisance from traffic noise
- Improved active travel and public transport journey times, leading to less reliance on the private car and reduced carbon

Modal Filter

- Improved bus journey time reliability
- Smoothed traffic flow, reducing localised queuing, and improving air quality

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Parking Schemes and Management

Summary:
Management of parking in the Borough, in line with our Parking Strategy, includes technological advances which now enable our kerbs and parking spaces to be managed dynamically, improving efficiency of usage.

This encompasses all types of parking including, on-street, off-street car parks, Park and Ride, and resident permit parking. This could also help better manage the impacts of streetworks on parking, through incorporation of our Streetworks Permits.

Kerb-space could be booked for a variety of uses, such as general parking, disabled parking, short-stay parking, loading, servicing or as a bus stop. Usage could be managed through dynamic pricing, with higher charges applied for certain booking types at particular times of day. Improved efficiency of kerbspace will allow us to remove on-street parking that obstructs pedestrian, cycle or public transport routes.

We will also be able to manage charges for on-street and off-street parking, to discourage travel during peak periods and to encourage modal shift away from car to sustainable transport such as buses or Park and Ride.

This scheme will be linked to green parking tariffs (as outlined in our Demand Management scheme) and our Electric Vehicle Charging scheme, as appropriate.

We would expect any parking management system to be accessible to users via a mobile app. However, we recognise that some users, particularly some older or disabled people, may have difficultly using an app to plan, book and pay for their parking. To mitigate this risk as far as possible, we will ensure our parking management schemes have full consideration of equalities, and provide alternative access and booking options, such as a website and a telephone service.

We will provide high-quality customer support and education programmes to enable these users to better access our parking management schemes. We will carry out an Equalities Impact Assessment for any parking management scheme.

Parking restrictions would be enforced in line with our enforcement policy. We will also take on moving traffic enforcement, which enable us to better manage inappropriate parking, such as parking in cycle lanes.

Issue

Kerb-space and parking in local centres and Reading town centre is limited. Unmanaged on-street servicing and deliveries combined with car parking can cause congestion and blocking of pedestrian and cycle movements as well as the ability for buses to access kerbs.

In some areas, parking is unmanaged and on-street parking is obstructing the use of footways and cycleways. Poor management of parking leads to more vehicles circling streets to find parking spaces and queuing to wait and leave car parks when they are already full.

Outcome

- Improved access to local facilities through increased parking provision at certain times of day, in particular for disabled people where disabled parking is currently limited

- Reduced obstruction of people and vehicle flows leading to reduced congestion, improved journey time reliability and associated economic benefit

- Improved public transport reliability leading to a mode shift away from private car and associated reduction in congestion and improvements in air quality

- Reduced emissions, carbon and economic benefits, as drivers would be directed automatically to either their pre-booked space or the closest available parking, so drivers (including of commercial vehicles) would not need to wait for spaces to become available

- Improved emergency service response times

- The management system will allow us to better address inappropriate parking practices such as the blocking of footways or parking on double yellow lines

- Improved transport data to inform future schemes and policies

Road Safety Schemes

Summary:
We will provide safe roads and pavements, including crossings, that prioritise and encourage walking, cycling and public transport.

Schemes will include:

- Improved crossings
- Remove street clutter
- Introduction of rest areas for pedestrians and cyclists
- Cutting back vegetation
- Traffic calming
- Reduced speed limits, including 20mph zones
- Improved parking and loading design
- Resurfacing
- Signage and lining
- Lighting and CCTV
- We will also effectively manage Streetworks Permits and carry out speeding and moving traffic enforcement to prioritise road safety.

Issue

Whilst a number of road safety schemes have been implemented in recent years in Reading, further improvements need to be delivered to improve the safety of vulnerable road users and to remove pinch points which can cause dangerous driver behaviour.

Outcome

- Better road user safety, leading to fewer collisions and less disruption
- Attractive journey times for active travel and public transport
- Improved public space, leading to less reliance on the private car, reduced congestion, reduced carbon and improved air quality
- Better journey time reliability leading to economic benefits

Raised Crossing

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Network Management

Electric Vehicle Charging

Key Delivery Partners:
Utility providers
Private sector

Summary:
Charging infrastructure needs to be provided around Reading to support the shift towards electric vehicles (EVs) and the Government commitment of no new petrol or diesel vehicles to be sold after 2030, and 2035 for hybrid vehicles.

It is acknowledged that it is not possible for every car journey to be replaced by a more sustainable mode, for instance people may need to drive on occasions due to. Therefore, the strategy includes the objective of a transition to electric vehicles in Reading which have a significantly reduced impact on carbon emissions and local air quality than diesel and petrol equivalents

We will install charge points in residential areas without off street parking. Where provision of on-street charge points is not feasible, we will explore potential for local amenities in which charge points could be installed for overnight charging. We will also provide charge points for use by people travelling who may need to recharge their vehicle during the day, and explore the potential for private car parks to install rapid charge points.

We will also install charge points in Council car parks and identify opportunities for charge points near local amenities, hospitals, visitor attractions, transport hubs and key highway corridors.

We will also embed capacity for EV infrastructure into other Highways and Transport projects and align these with the EV objectives as far as possible.Data can also be obtained from roadside ITS and from the private sector, such as Google and telecoms industry. We will continue to monitor where it is best to maintain our own equipment or pay for a service.

Issue

Reading has declared a climate crisis and needs to support the switch to low carbon vehicles, including electric vehicles.

Reading suffers from poor air quality, caused generally by the high volumes of traffic experienced in the town. The majority of vehicles using the roads in Reading are not low or no emission vehicles and contribute towards poor air quality conditions.

There are a limited number of electric vehicle charging points in Reading and nationally EV charging infrastructure is failing to keep up with demand due to growth in electric vehicle purchase. Central Government has committed to a ban on the sale of new petrol and diesel cars from 2030 and hybrid cars from 2035, and we anticipate that there will be a significant shift towards electric vehicles before this. One of the key factors in enabling this ban to come into place within this timescale is a high-quality, well maintained and reliable network of charging infrastructure to support this.

As a dense urban authority, Reading has a particular challenge due to a higher proportion of properties without of street parking which facilitates home charging.

Outcome

- Improved air quality and reduced carbon emissions, through encouraging a mode shift towards electric vehicles

- Economic benefits in terms of reduced vehicle operating costs

- Reading residents will not be disproportionately hindered in their switch to electric vehicles, compared to other authorities, due to the lack of EV charging infrastructure

Adapting to the Future

Access to public transport provision in Reading is excellent within the town centre area. There is opportunity to encourage the shift away from combustion vehicle use in this part of the town through conversion of existing on-street residents' parking bays to electric vehicle car club bays. This will enable residents to use an electric car when required, but also helps reduce the need for car ownership, removing polluting vehicles from our network at an accelerated pace.

Future proofing the EV charging network is essential for the following reasons:

- Less expenditure needed in the future to replace obsolete or unused EV infrastructure

- Public confidence in EV infrastructure decreases if it is not being replaced regularly.

- Having a practical and robust network will be important if emergency and essential services become dependent on charging infrastructure.

- Prevents issues of waste management when infrastructure 'false starts' and lead to working assets being removed and scrapped.

To future-proof the network, we will support smart charging facilities, plan and deliver for projected demand, carefully consider charge point design and placement, and consult with power distribution operators and utility companies at an early stage.

Developing battery technology, the take-up of EVs, and the challenges of providing sufficient peak power at homes to charge cars is likely to both enable and necessitate a different, filling station-style approach, to the current, predominately home-based EV charging model. Appropriate sites will be adapted to create charging hubs and interchange points for public transport including electric shared autonomous vehicles.

Car Clubs

Key Delivery Partners:
Car Club Providers
Peer to Peer Car Rental Companies
University of Reading
Business Parks

Summary:
Car clubs and Peer to Peer car rental companies allow users to access a vehicle without owning one and therefore offers a flexible, convenient alternative to private car ownership or leasing. Reduced car ownership levels can result in less trips made by cars and less demand for on-road parking.

Car clubs have dedicated vehicles which often have dedicated parking spaces which users collect and return, although there are other models which use a geofenced area or allow drop off at a different location. Vehicles are often newer and they tend to have lower emissions than private cars, which helps to reduce carbon emissions and air pollution. They will also include electric vehicles (EVs) and therefore offer the opportunity for people to drive an EV without the need to purchase one, which may be unaffordable.

Peer to peer car rental is a more recent car share model and the market is growing with schemes in cities such as London, Bristol and Edinburgh. These schemes allow individuals to rent out their own private vehicles via an online platform that covers insurance and vetting of both vehicles and hirers.

Measures to encourage car clubs include:

- Reallocating parking spaces (both on-street and off) for the dedicated use of Car Club vehicles.
- Providing dedicated charging facilities to encourage EVs in Car Clubs
- Working with car club providers to ensure equal spread of car club vehicles across the borough
- Working with other stakeholders who run Car Club schemes including University of Reading
- Working with others to encourage peer to peer schemes.

Issue

There is currently only a limited provision car club vehicles in Reading. This lack of provision results in more residents choosing to own a vehicle and results in more households owning more than one vehicle. Research indicates that where people own vehicles and have unrestricted use of these then they make more trips by private vehicle and less via public or sustainable travel modes.

The wider provision for car clubs and Peer to Peer car rental in Reading would provide an opportunity for residents across the whole of the borough to access to car, offer a greater range and variety of vehicles and provide residents with the opportunity to make use of electric cars.

Outcome

- Convenient access to a car without owning one for Reading residents and visitors.
- Improved air quality
- Improving vehicle occupancy rates
- Reducing parking pressures and congestion
- Potential to reallocate parking spaces as mobility hubs or to improve amenity
- Provides a sustainable transport option to work alongside public transport provision
- Reduced embodied carbon through fewer vehicles
- Contribution to net zero targets through reduced car use

Network Management

Intelligent Transport Systems (ITS) - Managing Travel on the Roads

Key Delivery Partners:
Public transport operators
Private sector
Neighbouring Local Authorities

Summary:
Smarter solutions (such as Big Data, machine learning and artificial intelligence) are transforming the way we understand how our networks are operating and our ability to predict future operation and the management decisions that can be made.

We are building a predictive system based on machine learning, which fuses a number of network datasets (for example Bluetooth journey time monitoring, Automatic Number Plate Recognition, traffic loops and bus position data). In addition, we are deploying an Internet of Things (IoT) communications platform that will help us collect real-time network condition data.

The system being built will provide network operators with enhanced information to both manage the network and provide traveller information. Further work is needed to fully integrate this system into the existing strategy management tools to fully realise its value to network management and develop a comprehensive digital roads network.

Data can also be obtained from roadside ITS and from the private sector, such as Google and telecoms industry. We will continue to monitor where it is best to maintain our own equipment or pay for a service.

We will use these improved insights and digital roads network to better manage the network and promote sustainable travel including:

- Direct peak traffic demand to more appropriate options, such as towards P&R Mobility Hubs instead of town centre parking

- Use media and traffic control measures to redirect traffic in emergency situations and enable effective emergency responses through integrated ITS, such as green light corridors

- Give people real-time information about air quality and the climate impacts of their travel choices, as part of encouraging more sustainable travel

- Provide network information to support the promotion of Mobility as a Service

- Develop smart alternatives to M4 closure diversions and subsequent gridlock in Reading through smart traffic management. Traffic lights dynamically respond to incidents and help redirect traffic around the town

- Use smart solutions to keep public transport out of congestion both at known hotspots and during periods of disruption

Issue

Reading suffers from high levels of congestion, and we currently do not have sufficient infrastructure to allow us to effectively manage our whole network in real-time, minimising delays and allowing us to respond effectively to changing demand or any incidents on the network.

Outcome

- Improved traffic management leading to reduced forecast congestion, reduced carbon and improved air quality

- Improved transport data to allow development of better applications and to inform future transport schemes and policies

- Smoother traffic flow and reduced congestion, leading to reduced noise levels and visual intrusion

- Improved public transport journey times, leading to increased attractiveness of public transport and a shift away from private car

- Ability to manage traffic to prevent disruption to pedestrians, cyclists and public transport

- Reduced emergency service response times through the ability to hold conflicting traffic back and automatically turn lights green for blue-lighted vehicles

Network Management

Intelligent Transport Systems (ITS) - Improving Maintenance

Summary:
Digital road technology can reduce the costs of monitoring condition and maintenance of highways and highway infrastructure and can improve safety for people travelling on Reading's roads by all modes.

Examples include:

- Pavement temperature sensors that can enable winter gritting to be much more targeted, maintaining safety whilst substantially reducing the amount of gritting which saves cost, reduces carbon and the environmental impacts of salt run off from the roads

- Pothole monitoring systems that can automatically monitor road condition and identify road defects and has the potential to predict road surface deterioration

- IoT stress monitors which can be used to monitor bridges and other highway structures and can give early warning of defects

- Gully monitors can automatically alert when a gully is becoming blocked

Issue

Our highways and associated structures require ongoing monitoring and maintenance to provide a safe highway network.

Maintenance budgets are very tight and spend must be carefully focused to get best value for money.

At the same time, repairing roads and structures at an early stage can save larger costs later on, and where road defects cause damage to vehicles, the council can be liable for damages.

Winter gritting is necessary for road safety, but a large proportion of the gritting that is undertaken, turns out not to have been necessary, resulting in unnecessary cost. This is because gritting forecasts are based on relatively few temperature sensors across Berkshire, and do not necessarily reflect the local conditions, such as it being warmer in the denser urban areas.

Road safety is the key issue, cyclists are particularly vulnerable to poor road surface quality and often key cycle routes are not on the priority highway routes. Freezing conditions in the winter contribute to not only traffic accidents, but also to falls on footways which are a particular issue for the elderly.

Outcome

- A safer and more reliable transport network

- A data driven approach to network maintenance that enables more effective predictive maintenance

- More cost-effective maintenance and winter gritting providing budget savings and / or increased investment in maintenance

- Reduced vehicle trips with better remote sensing, reducing the carbon impact of maintenance

- Improved monitoring and management of environmental effects of highway maintenance, such as water quality

Adapting to the Future

ITS development for highway maintenance and winter gritting will be an integral part of the Smart Cities initiative. The digital twin model for Reading will include fully integrated data relating to the transport network, enabling more effective asset management. AI and machine learning will be able to be applied to better predict the maintenance / gritting requirements enabling better optimisation of the targeting of limited resources and prioritisation of low carbon solutions.

Smart City Initiatives

Key Delivery Partners:
Private sector
Other public bodies

Summary:
Transport impacts on a wide range of services delivered by the Council, being a driver for everything from economic growth and business rate retention to social isolation, mental and physical health and education and to, most critically, meeting our climate targets.

Transport is a derived demand, meaning it is there to get people or goods from A to B, with the need to travel being defined by the activities that the individual is undertaking or the destination of the goods. Very few trips are made purely for the journey.

With transport having such a cross authority role, there is significant potential for our transport team to work more closely across the authority to tackle the challenges around the sustainable delivery of transport. This will build on previous initiatives such as the Beat the Street programme which was jointly delivered by health and transport teams to encourage active travel.

The Smart City approach will look to make best value of data from both the perspective of what it can tell us about our transport network and also from the perspective of its potential value to the local authority. We will use it to improve our understanding of people's travel needs and will work cross-sector and cross-authority to address the transport challenges, using data and technology to address these needs where they provide the optimum solution.

Issue

Technology is rapidly developing, whilst, at the same time, the need to respond to the transport and environmental challenges that face us from a cross-sector approach is increasing. Electric vehicles are a good example of this, where transport policy to encourage the take up of electric vehicles represents a huge energy supply challenge, and this requires an integrated approach. Setting policies that can respond flexibly and quickly to the adoption of changing technologies and enable good decision making to be made is a real challenge. There is significant pressure to quickly act to address the climate change, and technology coupled with a smarter cross-sector approach should be a significant part of this solution.

Outcome

• A smart city strategy for Reading, with transport fully integrated into this strategy, and cross-sector procurement and projects that tackle climate, sustainable travel and congestion. Considerations could include new procedures for procurement that can make decision-making quicker

• Growing further funding opportunities around the Thames Valley Berkshire Smart City Cluster project, working with neighbouring authorities and cross-sector to develop smart solutions

• Successful deployment of the Smart City project and the capitalisation of the outcomes of this, to maximise the value of data and improve the management of the transport network. This will allow movement of more people, supporting economic growth, whilst reducing their carbon footprint and not exacerbating air quality and congestion issues

• Traffic congestion and mobility are major transport challenges facing Reading today. These impact the daily lives of the residents, workers and visitors to the town. To meet these challenges, smart city initiatives will be utilised to optimise sustainable transport opportunities and reduce congestion. Smart initiatives will help to create a more effective transport network that help to improve safety, increase productivity and improve mobility

Network Management

- Reductions in congestion and improvements in sustainable mobility will contribute towards improving air quality, reducing carbon emissions, encouraging healthier lifestyles and attracting new business investment for the town. Additional benefits could include improvements in energy efficiency, resource efficiency and waste management

Adapting to the Future

We will change our internal processes, and lobby Government, to be able to undertake an approach of radical incrementalism to changing technology and tacking climate change. We need to be able to act quickly and implement technology and schemes to address the climate impacts of transport based on reasonable likelihood that it will take us in the right direction and be prepared to change direction if it does not work as expected. Large studies to identify the best solution can be overtaken by technological change and may lead to 'too little – too late'.

We will work to manage travel demand more intelligently. The response to Covid-19 has given us insight into those who can easily work at home and those for whom travel to work is critical. Intelligent network management will be able to prioritise travel information to different groups of people, reflecting their needs and providing capacity where it is needed.

We will work to develop a digital model of Reading (known as a digital twin), that will integrate real-time and historic transport data with other data such as that relating to health, air quality, noise, energy, waste and crime. This will allow us to quickly test schemes and policies prior to implementation, allowing us to refine our ideas and designs to best serve Reading, and expose unforeseen problems before they become a reality.

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Communication and Engagement

Marketing and Promotion

Delivery Partners:
Public transport operators
Media
Public services (for example schools and GPs)

Summary:
We will develop a comprehensive package of travel marketing, promotion and raising awareness so users are able to make informed travel choices and improve their understanding of new schemes and initiatives, which could include:

- Signage

- Supporting development of mobile travel

- Apps including behavioural change apps.

- Advertising on local and social media

- Real-time information and marketing on the transport network

- Promotional events, e.g. 'Clean Air Day'

- Promotional material at local facilities and services, such as healthcare facilities, schools and community hubs

- Promotional material for development travel plans

- Press releases to celebrate success and explain new schemes and initiatives

- Technical support for schemes

Issue

High volumes of private car trips in to, from and within Reading causes significant congestion in the town, with associated climate, health and wellbeing and economic impacts.

Currently, marketing and promotion of sustainable travel in Reading is limited and is not generally able to respond to rapidly-changing travel conditions.

Outcome

- Gives people in Reading a sense of ownership and involvement in the sustainable transport system

- Travel marketing and awareness campaigns using a wide range of media can be highly successful at increasing understanding across various population sectors of issues resulting from certain transport choices, and awareness of what can be done to resolve these issues, helping to deliver carbon net-zero

- Promotion of sustainable travel options and new schemes and initiatives will encourage less reliance on the private car, greater uptake/use and support for change. In turn, car mileage would decrease, leading to reduced congestion and improved air quality

- Real-time information allows dynamic decision-making and allows the users of the transport network to better respond to changes in demand or incidents

Communication and Engagement

Travel Information and Advice

Delivery Partners:
Neighbouring Local Authorities
Transport operators
Media
Private sector

Summary:
Travel information enables people to make informed choices about how they travel. We will provide or facilitate high quality, real-time travel information through a number of means, which could include:

- Mobile apps

- Real-time information boards

- Variable message signage

- Print (including accessible forms such as Braille and foreign language formats)

- Our website

- Personalised travel advice

- Information boards and signage

We will develop a wayfinding strategy to share our information and we will open up our data for public use, allowing the private sector to develop travel information apps

We recognise the diverse needs of our residents, and we will ensure travel information and advice is provided in accessible formats.

Issue

Reading suffers from high levels of congestion and less reliance on the private car is needed to reduce the negative impact traffic has on the town. Currently there is limited travel information available which enables people to make informed decisions about how they travel, including environmental factors such as air pollution exposure and carbon impact.

The network also struggles to respond well to disruption, as there are very limited means of publicising this disruption, potential travel impacts and alternatives to people.

Outcome

- Improved wayfinding and greater public knowledge of sustainable travel options, leading to less reliance on the private car, reduced congestion, improved air quality and lower carbon travel

- Improved ability to respond dynamically to network disruption, leading to reduced congestion

- Greater awareness of specific barriers to sustainable travel, enabling implementation of measures to overcome these where possible

- Digital wayfinding will provide an integrated product and digital platform that is inclusive and socially engaging for users. This would include various information shared by third parties such as development proposals, transport schemes and service changes

- Improved accessibility of information for all users of the transport network

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Communication and Engagement

Training, Education and Initiatives

Delivery Partners:
Schools, Colleges and University
Community groups
Private sector transport operators

Summary:
Training courses could include:

- Bikeability cycle training (for both children and adults)
- Road safety road shows
- Pedestrian, cycle and scooter road
- safety training
- Professional driver training course specification/skills refreshment training
- Young driver safety awareness training

We will work with schools to deliver age-appropriate training to all children, as well as offer training to adults in the community.

Issue

All road users need the necessary skills to be able to use our streets safely and travel sustainably.

Children travelling to and from school (and travelling at other times) risk conflict with other road users. Road safety training is critical to assist in development of awareness of risks and reduce the number of pedestrian and cyclist casualties on our roads.

Young drivers are over-represented in accidents; drivers aged 17 to 19 make up only 1.5% of drivers on the roads but are involved in 9% of fatal and serious collisions. One in four 18- to 24-year-olds crash within two years of passing their test[71]. Young drivers are much more likely to be over-confident, take excessive risks and be less able to identify and assess hazards.

Outcome

- Development of cycling skills leading to potential for life-long behaviour change
- Fewer pedestrian and cyclist casualties
- Increased levels of walking and cycling to and from school, leading to reduced congestion and improved air quality around schools
- Fewer road traffic collisions
- Health and wellbeing benefits for all

Bikeability

Communication and Engagement

School Travel Accreditation Programme

Delivery Partners:
Local schools

Summary:
Modeshift STARS is an accreditation scheme that operates nationally, and supports schools, pupils and parents to make sustainable and healthy travel choices, through an easy-to-use online platform. The scheme recognises excellence through accreditation and a national awards programme.

Four schools in Reading have already gained awards. Building on the success of these schools, we will encourage more schools to take an active part in the scheme and support them to work towards both accreditation and national and regional awards.

Modeshift STARS is currently the overarching school travel initiative, however other initiatives complement this, such as Bikeability cycle training, WOW (the year round walk to school challenge), School Streets, Play Streets and Eco Schools.

Issue

Car travel to and from school contributes heavily to traffic on the road network, leading to increased congestion and air pollution. Children are particularly vulnerable to the effects of air pollution, with studies showing that this can lead to decreased lung capacity and increased likelihood of developing asthma.

A high proportion of children in Reading are overweight or obese by the time they leave primary school, and across the UK, only 17.5% of children meet daily guidelines for physical activity72.

Outcome

- The travel planning programme will encourage children, parents and staff to make more sustainable travel choices, leading to a mode shift away from the private car

- This will help to reduce congestion, improve air quality and reduce carbon, as well as improve the health and wellbeing of children

- Develop life-long sustainable travel behaviour

The Heights and Moorlands Primary School's

Communication and Engagement

Progress Reporting and Public Engagement

Delivery Partners:
Neighbouring Local Authorities
Schools, Colleges and University
Businesses and Organisations
Community Groups
Local Residents
Public Service Providers
Statutory Stakeholders
Public Transport Operators
Media

Summary:
We will provide regular updates on progress in delivering the RTS and associated transport projects and schemes. This will include updates through a variety of measures such as press releases, residents' newsletters and via social media platforms to inclusively engage with Reading's residents, businesses and visitors.

Consultations will be undertaken to inform and engage Reading's residents on the development of schemes and initiatives, and ensure wider public support.

Engagement with residents within and outside the Borough will be undertaken to spread awareness and help achieve the goals set out in this Strategy.

Issue

Wide ranging public engagement in the development of transport schemes can be difficult to achieve. Engaging with more residents on schemes and initiatives will more fully take account of everyone's needs, and therefore should encourage a higher degree of support.

It is difficult to achieve unanimous support for all transport schemes and initiatives, however wider engagement will help better understanding of the reasons behind these schemes and initiatives.

Public engagement and support will be critical to the success of the RTS, and meeting our climate targets of carbon net zero.

Outcome

- Public engagement in the RTS and development of schemes will result in improved scheme designs that better respond to public opinion and needs

- This will reduce the risk of non-approval and increase the speed at which we will be able to deliver our vision and achieve carbon net zero

- Proactive promotion of the successful delivery of the Strategy and available travel choices will encourage more people to choose sustainable ways of travel

Transport Strategy Visioning Consultation, School Workshop
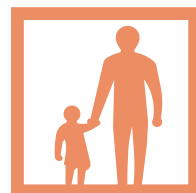
Prioritising Our Schemes

6.11 The schemes and initiatives have been identified to best meet the RTS objectives listed below. We have compared the likely outcomes of each scheme and initiative against the RTS objectives in order to prioritise these.

6.12 The delivery of the schemes and initiatives will be subject to funding availability, status of any supporting development, land availability (if third party land requirements), and engagement of delivery partners. We have ranked each scheme or initiative towards each objective. The scores are summarised in the following tables, the darker colours represent higher scores. Each objective has been weighted equally when assigning an overall score to each scheme or initiative.

Creating a Clean and Green Reading

Provide transport options to enhance quality of life, reduce emissions and improve air quality to create a carbon neutral town

Supporting Healthy Lifestyles

Create healthy streets to encourage active travel and lifestyles, improve accessibility to key destinations and increase personal safety

Enabling Sustainable and Inclusive Growth

Enable sustainable growth and connect communities so that everyone can benefit from Reading's success

Connecting People and Places

Promote the use of sustainable modes of transport by providing attractive alternatives to the private car, helping to provide a transport network that is fast, affordable, connected and resilient

Embracing Smart Solutions

Use technology to manage the network efficiently and allow informed travel choices, whilst enabling Reading to become a smart, connected town of the future

Multi-Modal Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Transport Corridor Multi-Modal Enhancements	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓
IDR Multi-Modal Enhancements	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓
Oxford Road Multi-Modal Enhancements	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓
Cross-Thames Travel	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Connecting Neighbourhoods	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓
Demand Management	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓

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Public Transport Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Superbus Network	✓✓✓	✓✓	✓✓	✓✓✓	✓✓
Concessionary and Discounted Travel	✓✓✓	✓✓	✓✓	✓✓✓	✓✓
Community Transport	✓✓✓	✓✓✓	✓	✓✓	✓
Demand Responsive Travel	✓✓✓	✓✓	✓✓	✓✓✓	✓✓✓
South Bus Rapid Transit Corridor	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Bus Rapid Transit Corridors	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Mereoak Park and Ride Mobility Hub Expansion	✓✓✓	✓✓	✓✓✓	✓✓	✓✓

Public Transport Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Winnersh Triangle Park and Ride Mobility Hub Enhancements	✓✓✓	✓✓	✓✓✓	✓✓	✓✓
Park and Ride Mobility Hubs	✓✓✓	✓✓	✓✓✓	✓✓✓	✓✓
Reading Station Interchange Enhancements	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓
Reading West Station Upgrade	✓✓✓	✓✓	✓✓✓	✓✓	✓
Tilehurst Station Upgrade	✓✓✓	✓✓	✓✓✓	✓✓	✓
Mobility as a Service	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓

Active Travel Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Town and Local Centre Public Space Enhancements	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓
Strategic Pedestrian Routes	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
Local Pedestrian Routes	✓✓✓	✓✓✓	✓	✓✓✓	✓
Strategic and Town Centre Cycle Routes	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
Shinfield Road Active Travel Improvements	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
Bath Road / Castle Hill Active Travel Improvements	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
London Raod Active Travel Improvements	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
Local Cycle Routes	✓✓✓	✓✓✓	✓	✓✓✓	✓
Sustainable and Safer Travel to School	✓✓✓	✓✓✓	✓	✓✓	✓
Play and School Streets Programme	✓✓✓	✓✓✓	✓	✓	✓
Cycle Parking Mobility Hubs and Facilities	✓✓✓	✓✓✓	✓✓	✓✓	✓
Micro-Mobility Hire Scheme	✓✓✓	✓✓✓	✓✓	✓✓	✓✓✓

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Network Management Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Neighbourhood and Highway Management	✓✓	✓✓	✓✓	✓✓	✓✓
Parking Schemes and Management	✓✓	✓	✓✓✓	✓✓	✓✓✓
Road Safety Schemes	✓✓	✓✓✓	✓	✓✓	✓✓
Electric Vehicle Charging	✓✓	✓	✓✓	✓✓	✓✓✓
Car Clubs	✓✓	✓	✓✓	✓✓	✓✓✓
Intelligent Transport Systems (ITS) - Managing Travel on the Roads	✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Intelligent Transport Systems (ITS) - Improving Maintenance	✓	✓✓	✓	✓✓	✓✓✓
Smart City Initiatives	✓✓✓	✓✓✓	✓✓	✓	✓✓✓

Communication and Engagement Schemes	Creating a Green and Clean Reading	Supporting Healthy Lifestyles	Enabling Sustainable and Inclusive Growth	Connecting People and Places	Embracing Smart Solutions
Marketing and Promotion	✓✓	✓✓	✓	✓✓✓	✓✓✓
Travel Information and Advice	✓✓✓	✓✓✓	✓	✓✓✓	✓✓✓
Training, Education and Initiatives	✓✓	✓✓✓	✓	✓	✓
School Travel Accreditation Programme	✓✓	✓✓✓	✓✓	✓✓	✓
Progress Reporting and Public Engagement	✓✓	✓✓	✓	✓✓✓	✓

Complementary National and Regional Schemes

National Schemes

6.13 We will lobby external stakeholders to secure investment in the national transport networks to enhance the connectivity of Reading.

6.14 This will include schemes such as enhancements to the major road network, electrification and other measures to de-carbonise the railway network and the proposed Western and Southern Rail Links to Heathrow.

6.15 This may also include national demand management measures such as a national road user charging scheme. Any local demand management schemes will need to be complementary to this.

6.16 We will continue to lobby for safety improvements to the M4 Smart Motorway scheme in line with the Council's original objections to the scheme.

Regional Schemes

6.17 We will work with neighbouring authorities to build on the schemes within our strategy to improve connectivity to the wider region.

6.18 The BRT network could be enhanced through the south east public transport corridor within Wokingham's current strategy which includes proposals for high-quality express bus services along the A329 corridor.

6.19 The comprehensive Park and Ride network set out in our strategy would be complemented by other Park and Rides in the region.

6.20 For example, a Park and Ride at Coppid Beech will provide a facility to serve people travelling to Reading from the eastern parts of Wokingham, and from Bracknell. This would link to the overall network through the East and South BRT corridors and would provide an attractive alternative to the private car for those travelling to Reading from the east.

6.21 We will support further improvements to the rail network at stations both within and outside the Borough. This includes Reading West Station, Tilehurst Station and Theale Station upgrade which is included in West Berkshire Council's strategy.

Major Development Sites

6.22 We will work with neighbouring authorities to ensure that transport infrastructure improvements are delivered as part of any major development sites.

6.23 To accommodate development, comprehensive packages of sustainable transport and infrastructure measures will be required to be delivered alongside any significant new housing coming forward.

6.24 We will also work with the Royal Berkshire NHS Foundation Trust to investigate opportunities as part of their wider estate masterplanning work, including the Royal Berkshire Hospital.

6.25 We will work with developers of major destinations in the Borough including University of Reading, Green Park and Thames Valley Science Park.

Figure 36: Proposed Future Regional Transport Network


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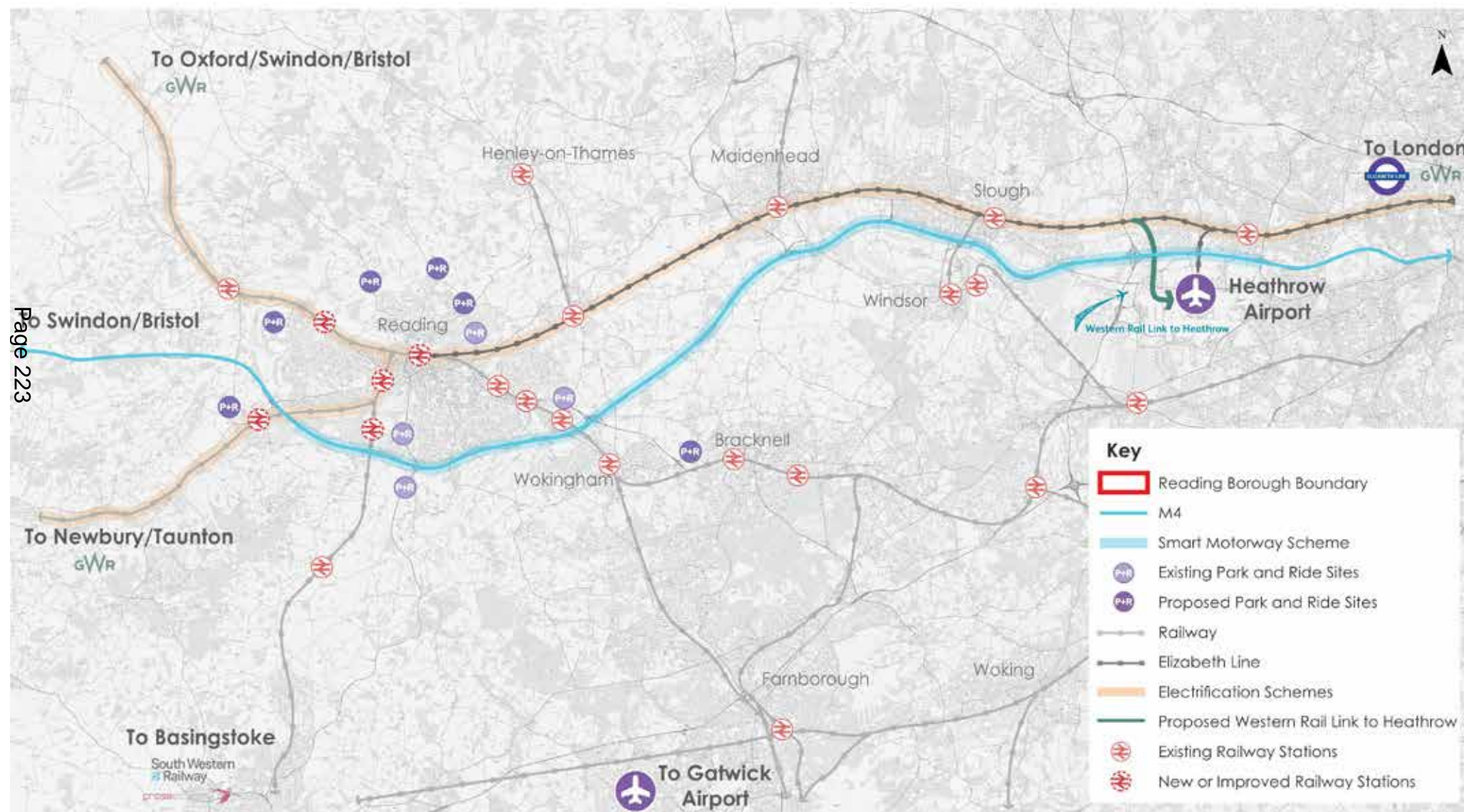
7. Funding and Implementation

Potential Funding Sources

7.1   We are under increasing financial pressure, with cuts to our budget and inconsistent streams of funding available. Figure 37 shows how our transport budget has decreased by nearly 30% in real terms per resident of Reading since 2015[84], and we expect this to continue to reduce further in future years.

7.2   Therefore, we must work hard to secure funding from other sources, to enable us to deliver the infrastructure Reading needs to support its residents, employees, visitors and economy.

Figure 37: Historic Transport Budget Changes

Transport Budget — Population — Inflation — Transport Budget per Head of Population (2015 prices)
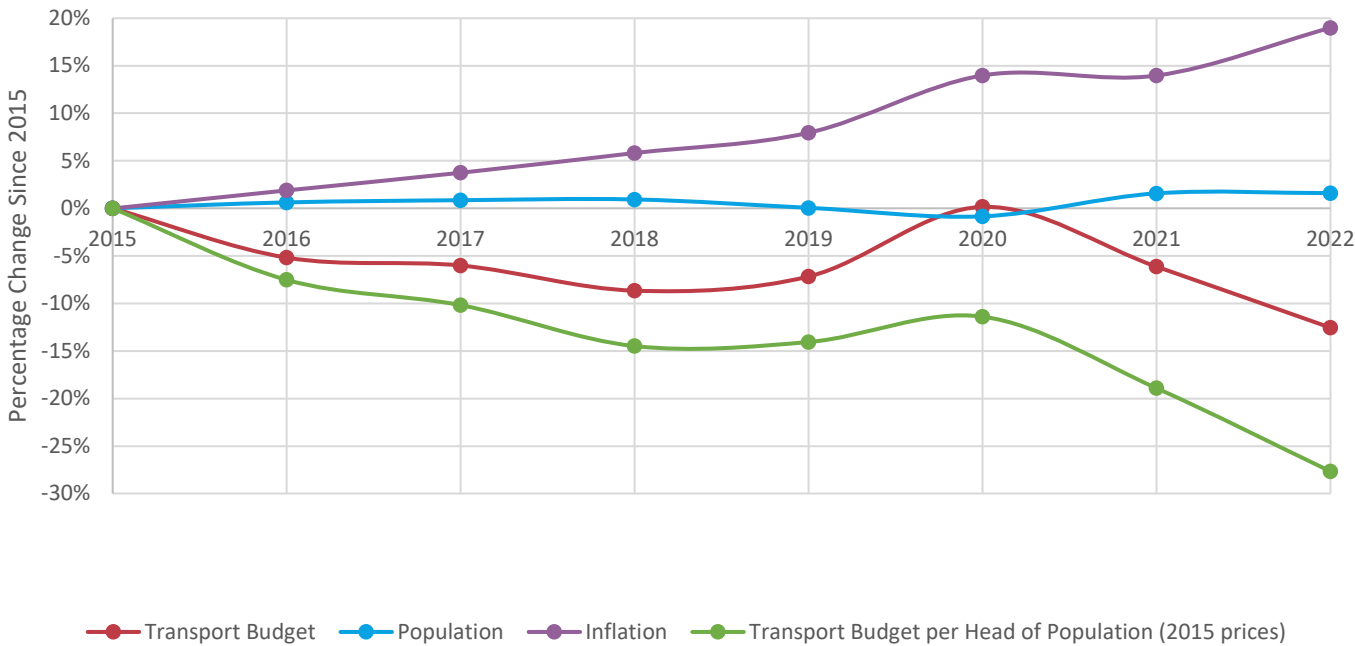
Funding Bids

7.3 We have an excellent track record for successfully bidding for funding from Central Government and obtaining funding from a range of other sources, including the Department of Transport, Thames Valley Berkshire Local Enterprise Partnership and the European Union.

7.4 Funding from successful bids has been used previously to deliver schemes such as Christchurch Bridge, South BRT, Mereoak Park and Ride, Winnersh Park and Ride, NCN Route 422, Reading West Railway station, and major upgrades to Reading Railway Station, the M4 Junction 11 and Emergency Active Travel Fund schemes.

Parking and Enforcement

7.5 Our enforcement of traffic restrictions is proposed to continue, including bus lanes and parking, as set out in Chapter 6. We have seen an increase in compliance over recent years which is the objective of our enforcement, rather than for revenue generation.

7.6 We also charge for on-street pay and display parking, Council-owned car parks and resident parking permits in Reading. Revenue from parking and from penalty charge notices is ring-fenced for transport-related schemes, in accordance with the Road Traffic Regulation Act 1984, and so cannot be spent on other Council services. In previous years, we have used revenue from parking and enforcement to fund schemes such as supported bus services and discretionary concessionary fares, road safety schemes, and highway drainage improvement works.

Developer Contributions

7.7 We also use developer contributions (through Section 106 obligations and the Community Infrastructure Levy) to deliver many of our schemes. Developer contributions are also used to complement other funding streams, particularly for large schemes.

7.8 Developers can be required to deliver infrastructure needed to support proposed development. We also collect developer contributions to fund new bus services for developments in their early years.

7.9 We will continue to work with developers to negotiate funding and delivery of transport infrastructure identified in this strategy that supports new developments. However, some of the schemes identified in this Local Transport Plan will require a significant level of capital funding, alongside revenue funding to help operate and maintain the new infrastructure.

Demand Management

7.10 As set out in Chapter 6, we are investigating the delivery of demand management measures in Reading. Further work is being carried out to determine which measures would be most effective.

7.11 Demand management offers the opportunity to better manage traffic growth, whilst also providing a reliable, continuous funding stream for Reading. Revenue raised from demand management will allow us to accelerate delivery of elements of the RTS, as the funds will be reserved for transport projects.

7.12 A continuous funding stream also allows us to more easily deliver transport schemes which require revenue (rather than capital) funding, such as an expanded concessionary or discounted travel scheme.

Our Implementation Plans

7.13 Many of the potential funding mechanisms to support delivery of our transport strategy are still evolving, and so our implementation plan will be refreshed every three years, to allow our funding plans to be updated.

Implementation Plan

7.14   Our implementation plan sets out our indicative delivery programme and mechanisms for our transport schemes. We will publish a detailed delivery programme on an annual basis, which will allow us to adapt to changing technologies, budgets and development proposals. We will also develop strategies to provide further detail and implementation strategies to support our policies.

Delivery Partners

7.15   We have identified a number of key delivery partners in our implementation plan. Further information on our stakeholders and partners is detailed within the individual scheme description in Chapter 6 - Schemes and Initiatives, further information is provided in Chapter 8 - Partnerships and Stakeholders.

Delivery Mechanisms

7.16   We will deliver our schemes through a number of mechanisms:

- Major Capital Schemes (MCS): Our major capital-funded schemes will be delivered as individual projects, and are dependent on the availability of capital funding, among other factors.

Figure 38: Neighbourhood Area Action Plans

- Revenue Schemes (RS): Our revenue schemes will be delivered as on-going projects, and are dependent on the availability of revenue funding, among other factors.

- Neighbourhood Area Action Plans (NAAP): Our Neighbourhood Area Action Plans, covering the areas shown in Figure 38, will be used to deliver local interventions, working closely with local communities to develop scheme details.

	Timescale			Delivery Mechanism
	2023-2028	2028-2034	2034-2040	
Multi-Modal Schemes				
Transport Corridor Multi-Modal Enhancements	▶	▶	▶	Major Capital Schemes
IDR Multi-Modal Enhancements	▶	▶	▶	Major Capital Schemes
Oxford Road Multi-Modal Enhancements	▶	▶		Major Capital Scheme
Cross-Thames Travel	▶	▶	▶	Major Capital Schemes
Connecting Neighbourhoods	▶	▶	▶	Major Capital Schemes / Neighbourhood Area Action Plans
Demand Management	▶	▶	▶	Revenue Schemes
Public Transport Schemes				
Superbus Network	▶	▶	▶	Major Capital Schemes / Neighbourhood Area Action Plans
Concessionary and Discounted Travel	▶	▶	▶	Revenue Schemes
Community Travel	▶	▶	▶	Revenue Schemes
Demand Responsive Travel	▶	▶		Revenue Schemes
South Bus Rapid Transport Corridor	▶	▶		Major Capital Schemes
Bus Rapid Transport Corridors	▶	▶	▶	Major Capital Schemes

	Timescale			Delivery Mechanism
	2023-2028	2028-2034	2034-2040	
Mereoak Park and Ride Mobility Hub Expansion				Major Capital Schemes
Winnersh Triangle Park and Ride Mobility Hub Enhancements				Major Capital Schemes
Park and Ride Mobility Hubs				Major Capital Schemes
Reading Station Interchange Enhancements				Major Capital Schemes
Reading West Station Upgrade				Major Capital Schemes
Tilehurst Station Upgrade				Major Capital Schemes
Mobility as a Service (MaaS)				Major Capital Schemes

	Timescale			Delivery Mechanism
	2023-2028	2028-2034	2034-2040	
Active Travel Schemes				
Town Centre and Local Centre Public Space Enhancements	██	██		Neighbourhood Area Action Plans
Strategic Pedestrian Routes	██	██	██	Major Capital Schemes
Local Pedestrian Routes	██			Neighbourhood Area Action Plans
Strategic Cycle Routes	██	██	██	Major Capital Schemes
Shinfield Road Active Travel Improvements	██			Major Capital Schemes
Bath Road / Castle Hill Active Travel Improvements	██			Major Capital Schemes
London Road Active Travel Improvements	██	██		Major Capital Schemes
Local Cycle Routes	██			Neighbourhood Area Action Plans
Sustainable and Safer Travel to School	██	██	██	Neighbourhood Area Action Plans
Play and School Streets Programme	██	██	██	Neighbourhood Area Action Plans
Cycle Parking Mobility Hubs and Facilities	██	██		Neighbourhood Area Action Plans
Micro-Mobility Hire Scheme	██	██		Major Capital Schemes

	Timescale			Delivery Mechanism
	2023-2028	2028-2034	2034-2040	
Network Management Schemes				
Neighbourhood and Highway Management				Neighbourhood Area Action Plans
Parking Schemes and Management				Revenue Schemes
Road Safety Schemes				Neighbourhood Area Action Plans
Electric Vehicle Charging				Major Capital Schemes
Car Clubs				Revenue Schemes
Intelligent Transport Systems (ITS) - Managing Travel on the Roads				Revenue Schemes
Intelligent Transport Systems (ITS) - Improving Maintenance				Revenue Schemes
Smart City Initiatives				Revenue Schemes

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	Timescale			Delivery Mechanism
	2023-2028	**2028-2034**	**2034-2040**	
Communication and Engagement Schemes				
Marketing and Promotion				Revenue Schemes
Travel Information and Advice				Revenue Schemes
Training, Education and Initiatives				Revenue Schemes
School Travel Accreditation Programme				Revenue Schemes
Progress Reporting and Engagement				Revenue Schemes

8. Partnerships and Stakeholders

Introduction

8.1 Our Strategy is ambitious, therefore working in partnership with key stakeholders is vital to its successful delivery. Transport issues are paramount for many activities, services, agencies and organisations. One of our major strengths is the interest and involvement of our local communities, businesses and other stakeholders and our commitment to consultation and consideration of their different viewpoints in all aspects of scheme design and implementation.

8.2 We actively participate in numerous formal and informal, internal and external partnerships to support a joined up approach to delivery of our key services and future plans. We will continue to engage with local residents and members of the business community when forming transport policies and strategies, and proposals are framed to take account of the diverse needs and aspirations of local stakeholders. We also receive and review communication from partners and the public on transport matters on an ongoing basis.

8.3 Partner involvement and public engagement allows us to access both expert and local knowledge, and this helps to inform our approach. We can outline specific interventions or local initiatives at an early stage of option development or

8.4 scheme design to seek public contribution to help shape them. We seek feedback during implementation and on scheme completion. It also encourages partner and local community involvement in schemes and the decision process, to build greater confidence in, and ownership of improvements in the local community.

8.5 A range of consultation techniques and methods are used. These include partnerships and various channels of communication. Innovative ways of keeping up with social change, social media and building better engagement are part of our long-term strategy.

Partnerships

8.6 Reading is at the heart of a wider economic area within the Thames Valley. It is part of a variety of partnership groups in this area, reflecting the need to work across Local Authority boundaries for different levels of service delivery, lobbying for investment and prioritising transport projects to support Reading's role as a major hub in the Thames Valley and wider south-east region.

8.7 Embracing new technology will enable us to make the most efficient use of our limited available resources, it is important that we work positively with our strategic partners, which include neighbouring Local Authorities and Local Highway Authorities, the Thames

Valley Berkshire Local Enterprise Partnership and strategic transport bodies including Transport for the South East, the Berkshire Strategic Transport Forum and the Berkshire Local Transport Body.

8.8   We also partner with other bodies, such as Reading's Economic & Destination Agency (REDA) and the Community Safety Partnership.

8.9   Our key delivery partners include:

National / Regional

- Central Government including Department for Transport
- Transport for the South East
- Network Rail
- National Highways

Neighbouring Local Authorities

- Wokingham Borough Council
- West Berkshire Council
- Bracknell Forest Borough Council
- Hampshire County Council
- Oxfordshire County Council
- South Oxfordshire District Council
- Local Parish and Town Councils

Transport Operators

- Train operators including Great Western Railway and South Western Railway
- Bus operators including Reading Buses
- Community transport operators including Readibus
- Reading taxi associations

Local Community

- Community groups and local residents
- Private sector including local businesses
- Education providers including the University of Reading, colleges and schools
- Public services including the Police, Fire Service and the NHS
- Media

8.10   We will seek to work collaboratively with our partners to:

- Develop shared ideas and solutions to deliver our transport Strategy
- Widen the beneficial impacts of our schemes and policies to surrounding areas and communities
- Deliver sustainable economic growth
- Seek greater levels of funding to allow us, and our partners, to accelerate our delivery plans.

Transport for the South East

8.11   Reading Borough Council is a partner in Transport for the South East (TfSE) – a new body which brings together representatives of 16 transport authorities and five local enterprise partnerships to improve the transport network and grow the economy of the whole South East area. Its key aim is to support and grow the economy by delivering a quality, integrated transport system that makes the region more productive and competitive and improves the quality of life for all whilst protecting the environment. TfSE is already working closely with Central Government and is intended to become a statutory body. We will continue to work closely with TfSE in the future.

Local Businesses

8.12   Reading is a key hub in the Thames Valley with a high concentration and key offices for international businesses, alongside many small and medium enterprises and startups, bringing innovation and employment opportunities across the Borough and wider travel to work area. We have worked closely with local businesses to deliver many elements of our previous LTPs, and our relationship will continue to be important in the delivery of our vision for the RTS.

Berkshire Strategic Transport Forum

8.13 The Berkshire Strategic Transport Forum (BSTF) similarly brings together the six unitary authorities (including Reading Borough Council), DfT, National Highways, Network Rail, Heathrow Airport Limited, and various train and bus operating companies to discuss and consult on cross-boundary strategic transport issues. The BSTF co-ordinates transport policy across Berkshire covering a range of issues and opportunities.

Berkshire Local Transport Body

8.14 The Berkshire Local Transport Body (BLTB) was established in March 2013 in response to the Department for Transport's wish to devolve Local Transport Major Schemes Capital Funding to local control. The Body consists of six elected members and private sector representation. This is a competent publicly accountable Joint Committee which can prioritise and implement transport capital schemes.

Neighbouring Authorities

8.15 Delivering our vision for transport will require effective working with neighbouring local transport authorities and local transport operators to deliver effective cross-boundary transport networks that respond to the needs

8.16 of all users. Working in partnership with other organisations will help to provide better outcomes for door-to-door journeys and deliver value for money results.

8.17 We recognise the importance of ensuring maintenance, infrastructure and transport services are not affected by authority boundaries, particularly with substantial growth in neighbouring areas which will likely increase movement to, from, and through the Borough. Our partnerships with neighbouring authorities are particularly important to us and the implementation of cross-boundary schemes, and we will continue to work closely with them to develop and deliver these schemes that support growth in the area, including:

- Demand management
- Key transport corridor multi-modal improvements
- Cross-Thames travel
- New and upgraded railway stations
- Bus rapid transit
- New and expanded Park and Ride mobility hubs
- Superbus network
- Concessionary travel schemes
- Strategic pedestrian routes
- Strategic and town centre cycle routes

- Cycle parking mobility hubs and facilities
- Micro-mobility hire scheme
- Intelligent transport systems – managing travel on the roads
- Smart city initiatives
- Travel information and advice
- Progress reporting and public engagement

Reading's Economic & Destination Agency

8.18 Reading's Economic & Destination Agency (REDA), formerly Reading UK, is a community interest company created in 2007, which operates as a private sector-led partnership with the public sector, to create opportunities and remove barriers to growth in Reading. REDA's Economic Recovery & Renewal Strategy 2021-2024 has been developed to support economic recovery following the Covid-19 pandemic, and also to address the inherent challenges in the local economy that existed prior to the pandemic, and to continue to deliver the Reading 2050 vision. We will continue to work closely with Reading UK to deliver our vision for transport in line with the wider Reading 2050 vision and to support economic growth in Reading.

Community Safety Partnership

8.19   No one agency can tackle crime, or fear of crime, by working alone, particularly in the current economic climate. In Reading, we believe that crime, disorder, anti-social behaviour and the fear of crime can only be tackled through partnership working.

8.20   The Community Safety Partnership comprises of statutory agencies, including Reading Borough Council, Thames Valley Police, the National Probation Service, the Community Rehabilitation Company, Royal Berkshire Fire and Rescue Service and Public Health. These agencies have joined forces to tackle crime, anti-social behaviour and the fear of crime, and are committed to supporting and working alongside our communities in reducing the impact of crime and disorder that concern them locally, including transport issues.

Forums

8.21   Various information and consultation forums have been set up for members of the public and transport-user groups, to facilitate engagement and discussion around a number of topics. Forums particularly relevant to the delivery of the RTS include those opposite.

8.22   We will continue to engage and consult with these forums to deliver the RTS and vision for Reading.

- The Cleaner Air & Safer Transport Forum, made up of local interest groups and key partners, influences and facilitates the development of the Council's sustainability agenda, including climate change, transport and air quality.

- The Reading Climate Change Partnership, is a network of people and organisations that are actively trying to improve our town's response to climate change, and the challenges this brings.

- The Mid and West Berkshire Local Access Forum, which comprises membership from Reading, Wokingham and West Berkshire unitary authorities, local landowners and user groups, and has been instrumental in the preparation and delivery of our Rights of Way Improvement Plan.

- The Access and Disabilities Working Group, which facilitates discussion on improving accessibility in Reading, ensuring that the needs of disabled transport users are considered through the RTS and delivery.

- The Older People's Working Group, which identifies and promotes awareness of issued facing older residents and provides a channel for older people to influence the development of local services, including transport.

Policy Committee

The cross-party committee oversees the overall direction of the Council's strategy, policy and budget, including economic development and regeneration.

Strategic Environment, Planning and Transport Committee

The cross-party committee is responsible for statutory and non-statutory functions relating to Environment, Planning, Highways and Transport.

Traffic Management Sub-Committee

The sub-committee acts as a consultative body to promoting public transport, walking and cycling within Reading.

Reading Area Transport Strategy Delivery Group

Led by RBC and attended by representatives from all key stakeholders including neighbouring local authorities.

9. Monitoring & Review

Introduction

9.1 Performance monitoring is key to ensuring the successful delivery of this strategy and monitoring progress against our objectives. We will undertake monitoring and surveying, and collect data to support this, to inform our evolving transport programme and keep it under review.

Data Collection

9.2 We will collect a wide range of data to support us in developing our schemes and initiatives to best deliver our vision. This will include maintaining a network of multi-modal data collection sites such as traffic surveys, parking surveys, pedestrian and cycle counts, and the annual town centre monitoring surveys. We will do so by making use of new and evolving technology.

Figure 39: Annual Town Centre Monitoring Survey Locations

Performance Indicators

9.3 We have identified a number of key performance indicators and targets against which we will monitor our progress which are set out in the following tables.

9.4 Progress towards our targets and delivering our vision for transport in Reading will vary year on year, depending on when individual schemes are delivered. We have therefore set overall targets for the RTS to achieve by 2040.

		Performance Indicator	Data Source	Baseline	Target By 2040	Monitoring Frequency
		Multi-Modal Indicators				
	1	Car trips to,from and through the town centre	Annual cordon count (Reading Borough Council)	25.4% mode share (2022)	10% mode share	Annual
	2	Road transport carbon emissions	Carbon Dioxide Emissions Statistics (Department for Business, Energy & Industrial Strategy)	100.4 kt CO_2 (2020)	54 kt CO2 emissions	Annual
		Public Transport Indicators				
	3	Bus usage in the Borough	Bus Statistics (Department for Transport)	14 m (2021/22)	28 million passengers	Annual
	4	Annual bus use per head of population	Bus Statistics (Department for Transport)	81.2 (2021/22)	162.4 trips per head	Annual
	5	Park and Ride usage	Bus ticketing data (Reading Buses)	100,000 per year (2021/22)	1 million passengers	Annual
	6	Rail usage – entries and exits for all stations	Office of Rail & Road	9.3 m per year (2021/22)	20 million passengers	Annual
	7	Public transport trips to the town centre	Annual cordon count (Reading Borough Council)	39.2% mode share (2022/23)	50% mode share	Annual
	8	Overall Bus Passenger Satisfaction	National Highways & Transport Networks Survey	92% (2019/20)	96% satisfaction	Annual

	Performance Indicator	Data Source	Baseline	Target By 2040	Monitoring Frequency
Active Travel Indicators					
9	Proportion of adults walking at least 3 times per week for main journey purpose	Walking and Cycling Statistics (Department for Transport)	45.8% (2021/22)	66% of adults walking at least 3 times per week	Annual
10	Proportion of adults cycling at least 3 times per week for main journey purpose	Walking and Cycling Statistics (Department for Transport)	5.8% (2021/22)	15% of adults cycling at least 3 times per week	Annual
11	Active travel trips to, from and through the town centre	Annual cordon count (Reading Borough Council)	35.4% mode share (2022/23 average)	40% mode share	Annual
Network Management Indicators					
12	All people killed or seriously injured on the highway network in the Borough	Road Safety Statistics (Department for Transport)	36 per year (2019-21 average)	Reduce by at least 50%	Annual
13	Public satisfaction with highway maintenance (including roads, footways and street lighting)	Highway & Transport survey (Ipsos MORI)	50% satisfied (2022)	75% satisfaction	Annual
Communication and Engagement Indicators					
14	School travel planning Modeshift STARS accreditation	Modeshift STARS data (Reading Borough Council)	4 schools achieved accreditation (2022)	All schools	Annual

Reviewing Our Strategy

The Oracle

9.5   Given the longer-term time scales for this Strategy, it will be regularly reviewed to ensure it remains current and that it is best placed to respond to future needs and opportunities as they arise.

9.6   Our Strategy has been developed in partnership with local residents, businesses and stakeholders through extensive consultations undertaken during 2019 and 2020. It is underpinned by statutory assessments relating to the environment, health and equality to ensure the impacts of the plan provide positive benefits and meet relevant legislation in these key areas.

9.7   Challenges and opportunities have been identified based on robust data and adopted policy, with priorities and policy approaches identified to deal these challenges and embrace opportunities as they arise.

9.8   Further engagement and analysis will be undertaken as individual schemes and initiatives are developed. We will work with a range of partners and technical and academic research groups in order to support the robust technical work of developing, testing and validating options, particularly on innovative projects.

9.9   As elements of the Strategy are delivered, we will monitor, benchmark and measure the results to monitor progress, and influence the methodology by which future actions are prioritised and approved.

9.10   This approach allows the Reading Transport Strategy 2040 to be continuously reviewed and updated to ensure the overall vision and objectives of the Strategy are delivered.

Glossary

Artificial intelligence
The capability of a machine to imitate intelligent human behaviour, like visual perception, speech recognition and decision making

Autonomous vehicles
Vehicles that can operate without a driver

Big data
Extremely large datasets that can be analysed to reveal patterns and trends

Biodiversity
The variety of all living things, including plants, animals and habitats, and their interactions together within a particular area

Bus Rapid Transit (BRT)
Public transport that uses dedicated lanes and routes, and so is separated from general traffic, and has limited numbers of stops so it is a faster service serving key destinations

Carbon emissions
The release of carbon dioxide (CO_2) and other greenhouse gases (CO_2 equivalent) into the atmosphere

Carbon neutral
Achieving an overall balance between Greenhouse Gases (GHG) produced and GHG taken out of the atmosphere

Connected autonomous vehicles
Vehicles that are both connected and autonomous

Connected vehicles
Vehicles that can talk to both each other and the infrastructure around them (for example traffic lights)

Decarbonisation
The reduction or removal of CO_2 emissions from a product or process

Digital twin
A digital model of a town, which includes networks such as transport and power, and historical and real-time data.

GVA
A measure of the value of goods and services produced in an area, industry or sector of the economy

IDR (Inner Distribution Road)
The ring road that surrounds Reading town centre, which comprises Vastern Road, Forbury Road, part of the A329 and Caversham Road

Interchange
The action of switching between transport modes or services, or a place where this happens (such as a railway station)

Internet of Things
A network of all devices that are connected to the internet, for example computers, phones, as well as things like some traffic lights, cars, washing machines and fridges

Local Cycling and Walking Infrastructure Plan (LCWIP)
A sub-strategy to the Local Transport Plan, setting out our vision and strategy for walking and cycling in the Borough.

Local Transport Plan
A statutory document setting out the objectives, policies and schemes intended to improve transport in an area. The Reading Transport Strategy is Reading's Local Transport Plan to 2040.

Machine learning
Where a computer programme can access data and use it to learn for themselves, rather than being explicitly programmed by a person

Mode
The method of travel, such as walking or by bus

Mode shift
A change in the mode of transport

Natural surveillance
Where something is naturally visible by other people, for example from passing traffic or nearby homes

Orbital movements and routes
A movement or route that is around Reading, rather than to, from or across the town centre

Particulate pollution
A mixture of tiny solid and liquid droplets that float in the air

Pinch point
A part of the public highway where congestion is particularly likely to occur (whether vehicle congestion or congestion of pedestrians, cyclists or public transport)

Public Right of Way
A path that anyone has the legal right to use on foot, and sometimes using other modes of transport

Quality of life
The conditions in which we live, including social factors such as environment and physical and mental health, as well as material and economic factors

Real-time data
Data that is delivered immediately after collection

Shared autonomous vehicle
An autonomous vehicle that can carry many people and operates as a public transport service

Sustainability
Meeting the needs of the present, without compromising the ability of future generations to meet their needs

Traffic Regulation Orders
A legal tool which allows local authorities (like us) to restrict, regulate or prevent the use of any public road, or right of way

Wayfinding
The process of working out where you are, how to get to where you want to be and following the route accordingly

References

1	National Infrastructure and Construction Pipeline – KPMG Analysis 2018

2	Infrastructure and Projects Authority, Analysis of the National Infrastructure and Construction Pipeline 2021

3	Office for National Statistics, Table 2: 2016-based sub-national population projections for local authorities and higher administrative areas in England

4	Office for National Statistics, Table 2: 2018-based sub-national population projections for local authorities and higher administrative

5	Office for National Statistics, Population Estimates Mid-2029 Table MYE5

6	Office for National Statistics, LI01 Regional labour market: Local indicators for counties, local and unitary authorities, July 2021 to June 2022

7	Nomis, Labour Market Profile – Reading, https://www.nomisweb.co.uk/reports/lmp/la/1946157285/report.aspx?town=Reading#tabempunemp

8	Centre for Cities, https://www.centreforcities.org/city/reading/, 2020

9	Thames Valley Berkshire Local Skills Report, TVB, 2022

10	GlobalData Consulting Top 50 UK Shopping Centres, October 2018

11	Centre for Cities, https://www.centreforcities.org/city/reading/, 2021

12	Centre for Cities, https://www.centreforcities.org/city/reading/, 2021

13	Thames Valley Berkshire Impact Report 2019-2020 https://www.thamesvalleyberkshire.co.uk/2020-impact-report/

14	Centre for Cities, https://www.centreforcities.org/city/reading/, 2016

15	Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2010, English Indices of Deprivation: Overall

16	Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2015, File 1: Index of Multiple Deprivation

17	Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2019, File 1: Index of Multiple Deprivation

18	EY, UK Regional Economic Forecast – News Release January 2022

19	Office for National Statistics, 2011 Census Table WD1101EW

20   Department for Transport Statistics, Road Congestion Statistics Table CGN0504d, 2021

21   EY, UK Attractiveness Survey 2019

22   Centre for Cities, https://www.centreforcities.org/city/reading/, 2019

23   PwC, Good Growth for Cities 2022

24   GL Hearn, OAN Sensitivity Testing – Western Berkshire Housing Market Area, March 2018 (assuming 5000 homes of West Berkshire's need are delivered within the city region)

25   Public Health England, Spatial Planning for Health: An evidence resource for planning and designing healthier places, June 2017

26   Public Health England, Spatial Planning for Health: An evidence resource for planning and designing healthier places, June 2017

27   Chartered Institute for Highways & Transportation, 'Better Planning, better transport, better places', August 2019

28   Journal of Environmental Planning and Management. Pretty, J. Peacock, J. Hine, R. Sellens, M. South, N & Griffin, M. (2007) Green Exercise In The UK Countryside: Effects On Health And Psychological Well-Being, and Implications For Policy And Planning

29   The NHS Information Centre for health and social care. McManus, S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016). Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014. Leeds: NHS Digital

30   Public Health England, Spatial Planning for Health: An evidence resource for planning and designing healthier places, June 2017

31   Office of Rail and Road Estimates of Station Usage 2020-21, November 2022

32   Society of Motor Manufacturers & Traders https://www.smmt.co.uk/2018/08/feature-how-apps-are-transforming-bus-travel/

33   Reading Buses https://www.reading-buses.co.uk/about-us

34   Reading Buses, Fleet List January 2022, https://images.reading-buses.co.uk/downloads/Fleet%20List%202022-01.pdf

35   Department for Transport Statistics, Bus Statistics Table BUS01f, January 2023

36   Office for National Statistics, Regional Gross Value Added (Balanced) by Industry: City and Enterprise Regions, Table B3 Enterprise Regions Current Price Estimates, May 2022

37   Office for National Statistics, Subregional Productivity Labour Productivity Indices by Economic Enterprise Region, Table A3 GVA (B) per hour worked, July 2022

38   Department for Transport Statistics, Road Congestion Statistics Table CGN0504d, 2021

39   Office for National Statistics, Labour Force Survey, https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/adhocs/008005traveltoworkmethodsandthetimeittakestocommutefromworklabourforcesurvey2007to2016

40   Reading Council, Transforming Cities Fund Bid, http://www.reading.gov.uk/media/8934/ Central-Berkshire-Growth-City-Region--- Transforming-Cities-Fund-Application-Form/pdf/Central_Berkshire_Growth_City_Region_-_Transforming_Cities_Fund_Application_form_only. pdf

41   Network Rail, https://www.networkrailconsulting.com/our-capabilities/network-rail-projects/reading-station-area-redevelopment/

42   http://news.reading.gov.uk/red-route-goes-live/

43   Department for Environment, Food & Rural Affairs, UK Climate Change Risk Assessment 2022

44   Department for Transport, Transport and Environment Statistics 2022

45   https://www.iea.org/commentaries/growing-preference-for-suvs-challenges-emissions-reductions-in-passenger-car-market

46   https://www2.deloitte.com/uk/en/pages/press-releases/articles/21-million-more-electric-vehicles-expected-worldwide-by-2030.html

47   Klaus Schwab, The Fourth Industrial Revolution, 2016

48   Department for Transport, Taking Flight: The Future of Drones in the UK, 2018

49   PwC, Skies Without Limits, 2018

50   https://www.racfoundation.org/media-centre/cars-parked-23-hours-a-day

51   Public Health England, Associations of long-term average concentrations of nitrogen dioxide with mortality, 2018

52   B Miller & F Hurley, Comparing estimated risks for air pollution with risks for other health effects, Institute of Occupational Medicine, Report TM/06/01, 2006

53   Public Health England, Public Health England, Estimating Local Mortality Burdens associated with Particulate Air Pollution, 2014

54   Public Health England, Public Health Profiles, Indicator 40701 Under 75 mortality rate from respiratory disease (Persons, 3 year range) - Reading, 2017-19

55   V Timmers & P Achten, Non-exhaust PM emissions from electric vehicles, Atmospheric Environment 134 (2016) 10-17

56   Department for Transport Statistics, Bus Statistics Table BUS01e, January 2023

57   Office for National Statistics, 2011Census Table WU02EW

58   Reading Transport Model, 2015 Baseline AM Peak. Proportion of modelled traffic using IDR that does not have an origin or destination in Reading town centre and could route via alternative roads, either currently, or if new/improved orbital links were available as set out within this strategy

59   Office for National Statistics, 2011Census Table WU02EW

60   Department for Transport Statistics, Bus Statistics Table BUS0109a, 2021

61   Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2019

62   Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2019

63   Ministry of Housing, Communities & Local Government, English Indices of Deprivation 2019

64   Office for National Statistics, 2011 Census Table QS303EW

65   Office for National Statistics, 2011 Census Table QS103EW

66   Office for National Statistics, 2011 Census Table LC1109EW

67   Office for National Statistics, 2011 Census Table KS102EW

68   Department for Transport, National Travel Survey Table NTS0201

69   Office for National Statistics, 2011 Census Table LC3407EW

70   Department for Work and Pensions, Economic Labour Market Status of Individuals Aged 50 and Over, Trends Over Time, September 2022

71   Office for National Statistics, Table 2: 2018-based subnational population projections for local authorities and higher administrative areas in England

72   Office for National Statistics, Population of the United Kingdom by country of birth, July 2020 to June 2021, Table 1.1

73   Office for National Statistics, Median age of population for local authorities in the UK mid-2020, Table MYE6

74   Department for Transport, National Travel Survey Table NTS0503, 2021

75   NHS National Child Measurement Programme, Table 2_6, 2021/22 (school year)

76   Department for Transport, National Travel Survey Table NTSQ03004A

77   Reading Council, Transforming Cities Fund Bid, http://www.reading.gov.uk/media/8934/Central-Berkshire-Growth-City-Region---Transforming-Cities-Fund-Application-Form/pdf/Central_Berkshire_Growth_City_Region_-_Transforming_Cities_Fund_Application_form_only.pdf

78   Reading Borough Council Local Plan, November 2019

79   EY, UK Regional Economic Forecast – News Release January 2022

80   Department for Transport, Road Safety Statistics, STATS19, 2001 to 2021

81   Department for Transport, Road Traffic Statistics Manual Count Points Site Number 99740, AADF 2021

82   Department for Transport, National Travel Survey Table NTSQ03004A

83   Play England, Why Temporary Street Closures for Play Make Sense for Public Health: Street Play Evaluation Report, 2016

84   Reading Borough Council, Transport Budgets

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Reading
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Working better with you

Strategic Environment, Planning and Transport Committee **29 June 2023**	Reading Borough Council — Working better with you

Title	Electric Vehicle Charging Infrastructure Strategy – Draft for Consultation
Purpose of the report	To make a decision
Report status	Public report
Report author	Chris Maddocks
Lead councillor	Cllr John Ennis
Corporate priority	Healthy Environment
Recommendations	The Committee is asked to: 1. Note the work which has been undertaken to prepare the draft Electric Vehicle Charging Infrastructure Strategy for Reading. 2. Provide approval to undertake a public consultation on the draft strategy, alongside the proposed statutory consultation on the new Local Transport Plan.

1. Executive summary

1.1. The purpose of this report is to provide an overview of the work undertaken to prepare a draft Electric Vehicle Charging Infrastructure Strategy for Reading, and to seek approval to undertake a public consultation on the draft strategy as part of the proposed statutory consultation on the new Local Transport Plan (for which approval is being sought under a separate Committee item).

2. Policy context

2.1. The Department for Transport (DfT) published the Transport Decarbonisation Plan 'Decarbonising Transport: A Better, Greener Britain' in July 2021 to set the pathway and key principles underpinning the approach to delivering net zero transport in the UK by 2050.

2.2. This was followed by the publication of 'Taking Charge: The Electric Vehicle Infrastructure Strategy' in March 2022. The strategy sets out Government's vision and action plan for the rollout of electric vehicle charging infrastructure in the UK, ahead of the dates to end the sale of new petrol and diesel vehicles by 2030 and for all new cars and vans to be fully zero emission at the tailpipe by 2035.

2.3. The transition to electric vehicles will help to achieve a number of Council strategies and objectives including those within the Corporate Plan, the Climate Emergency Strategy with its core objective of Reading becoming a net zero carbon town by 2030, the Local Transport Plan (LTP) and the Air Quality Action Plan. It is a core element of the LTP vision to promote a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing.

2.4. The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:

- Healthy Environment
- Thriving Communities

- Inclusive Economy

2.5.   These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:

- People first
- Digital transformation
- Building self-reliance
- Getting the best value
- Collaborating with others

2.6.   Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the [Council's website](#). These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

3.   The proposal

3.1.   The main focus of the Council's Transport Strategy is to promote sustainable alternatives to the private car, such as public transport, walking and cycling; as this will be fundamental to achieving our overall vision and wider objectives relating to health and wellbeing, reducing inequalities and sustainable economic growth. However, the transition to electric vehicles will also play an important role in achieving the carbon and air quality elements of the strategy and it is acknowledged that it is not possible for every car journey to be replaced by a more sustainable mode, for instance people may need to drive on occasions due to reasons relating to work, family, safety, gender differences or equality issues. It should be noted that this transition alone will not achieve the overall objectives of the wider transport strategy as electric vehicles still produce particulates which lead to poor local air quality, do not reduce traffic congestion nor encourage more active travel with the associated health and wellbeing benefits.

3.2.   The Electric Vehicle Charging Infrastructure Strategy will become a sub-strategy to the Local Transport Plan, with the aim of accelerating the transition to electric vehicles for necessary travel in Reading. The strategy sets out the current position of electric vehicle take-up in Reading as well as setting the future pathway to support increased uptake of electric vehicles for residents, visitors and local businesses. The strategy includes reference to the charging infrastructure needs of all electric vehicles, including electric buses, car clubs, e-bikes and e-scooters.

3.3.   The key elements of the draft strategy document are set out below:

- Introduction – this sets out the context and rationale for developing an electric vehicle strategy for Reading, including the leadership role for the Council in this area.

- Policy Context – this section provides a summary of the national, regional and local policy context for the strategy, including how it will contribute towards the Council's objectives as set out in the Corporate Plan, Climate Emergency Strategy and Local Transport Plan.

- EV Charging Infrastructure in Reading – this sets out the range of current electric vehicle infrastructure in the borough which is available to the public, an overview of the different types of charging infrastructure currently on the market alongside the relevant standards and regulations, and our aspirations for charging infrastructure for all modes including buses, car clubs, e-bikes and e-scooters.

- Charging Infrastructure Options Appraisal – this section explores the different options that are available to increase the provision of electric vehicle charging infrastructure in the borough, including an appraisal of the advantages and disadvantages of the different approaches and a quantification of the level of infrastructure that is likely to be required in the future.

- Funding Options & Opportunities – this provides a summary of the different funding options and opportunities that are available to increase the take-up of electric vehicles, including the need to coordinate provision in the borough with the plans of neighbouring local authorities and the private sector. The section will also explore opportunities for joined up working with other authorities.

- Charging Infrastructure Delivery Plan – this section sets a delivery plan for increasing the provision of electric vehicles in Reading in the short, medium and long-term, including the role of the Council and key partners from both the public and private sectors. This includes working with owners/ operators of existing combustion engine infrastructure, such as petrol stations and car parks, regarding the potential to convert this existing usage into charging for electric vehicles.

3.4. Engagement with suppliers of electric vehicle charge point infrastructure has been undertaken to ensure the strategy is based on the latest available information in this rapidly evolving market. The strategy takes into account the latest projections for electric vehicle uptake and therefore the requirements for different types of charging infrastructure to ensure that a lack of charge points is not a barrier to the future take-up of electric vehicles.

3.5. The strategy acknowledges the role the Council has in providing local leadership in this area to set an example for residents and local businesses to follow, however also highlights the key areas which are outside of the control of the Council. External funding has previously been secured to implement a range of charge points in the town, including rapid charge points at Mereoak and Winnersh P&R sites, fast charge points in some Council owned car parks and slow charge points in a number of residential streets throughout the borough. It is considered that the further provision of charge points for residents living in streets without off-street parking is a particularly important role for the Council moving forward. Therefore, further installations of charge points in streets without off-street parking is included as a key action within the strategy.

3.6. The Council is committed to ensuring our in-house vehicle fleet is fully electric by 2030 and good progress is being made in this area, with our current fleet including 7 electric small vans, 6 electric refuse collection vehicles, 2 electric pool cars and an electric litter collection vehicle. In addition, work is currently being progressed to upgrade the power supply into the depot at Bennet Road to ensure further charging infrastructure can be provided to cater for future electric vehicles in the fleet.

3.7. In addition to the strategy for the borough, officers are working with colleagues from the other Berkshire authorities to identify how delivery of charge points can be coordinated across the county. Options being considered to ensure charging infrastructure is delivered in the most joined-up and cost-effective way include the possibility of joint bidding opportunities, sharing resources where appropriate and exploring the potential advantages of pursuing a pan-Berkshire supplier arrangement. This could be achieved through a 'concession framework' to procure an operator(s) to provide charging facilities on appropriate highway land across the county, with associated revenue income.

3.8. It should be noted that whilst there is currently no statutory guidance for local authorities for the development of electric vehicle strategies, it is envisaged that further direction will be included within the Department for Transport's new guidance for local authorities on the development of Local Transport Plans. However, engagement on development of the strategy has been undertaken with the Energy Savings Trust and feedback has been incorporated within the latest version of the document.

3.9. In conclusion, the draft Electric Vehicle Charging Infrastructure Strategy sets out the context and Council's ambitions to provide the infrastructure required to enable a rapid transition to electric vehicles in Reading, in line with our wider climate and transport ambitions. The Committee is therefore asked to provide approval for a public consultation to be undertaken on the draft strategy, after which feedback will be incorporated into an updated strategy which will be brought back to the Committee to seek adoption by the Council.

4. Contribution to strategic aims

4.1. The delivery of the Electric Vehicle Charging Infrastructure Strategy will help to deliver the three service priorities in the Council's Corporate Plan, particularly the creation of a healthy environment. This will be achieved by increasing usage of electric vehicles which have a significantly reduced impact on carbon emissions than diesel and petrol equivalents.

5. Environmental and climate implications

5.1. The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in our Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency declared by the Council in February 2019 and to help achieve our target of a carbon neutral Reading by 2030.

5.2. A Climate Impact Assessment has been completed which suggests a 'net medium positive' impact arising from adoption of the strategy. In order to achieve the Council's sustainable transport vision and meet our climate change goals, we will need to reduce car use both within and through the borough by providing attractive and viable alternatives through prioritising and promoting public transport and active travel schemes. However, our Transport Strategy recognises that private vehicle use, car and van trips, will remain for many the most appropriate mode of transport. Therefore, by encouraging the adoption of electric vehicles for the trips that still need to be made they can be made to be more sustainable with a lower impact on the environment and climate change as well as reducing the impact of poor air quality in Reading.

5.3. A key driver to the successful adoption of electric vehicles is the ability to adequately charge vehicles. For some the natural choice will be through home charging in an off-street setting, but this will not be available for many, and Reading has a particularly high proportion of homes that do not have off-street parking. Our Electric Vehicle Charging Infrastructure Strategy will provide a framework for a network of charging points across the borough and to remove barriers to EV ownership and help achieve our targets from our Climate emergency Strategy of increasing uptake of zero emission vehicles.

6. Community engagement

6.1. As set out within the report, it is proposed that a public consultation is undertaken to seek feedback on the draft Electric Vehicle Charging Infrastructure Strategy as part of the proposed statutory consultation to be undertaken on the Council's new Local Transport Plan, the Reading Transport Strategy 2040.

7. Equality impact assessment

7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7.2. The strategy has been developed in line with these requirements and the delivery of individual elements of the strategy be subject to further Equality Impact Assessments (EIA) as they are developed.

8. Other relevant considerations

8.1. There are none.

9. **Legal implications**

9.1. There is no current statutory requirement for the Council to produce an Electric Vehicle Charging Infrastructure Strategy, however it is anticipated that the new Local Transport Plan guidance being prepared by the Department for Transport may place this duty on Local Transport Authorities.

10. **Financial implications**

10.1. Development of the Electric Vehicle Charging Infrastructure Strategy has been funded by existing transport budgets to date.

11. **Timetable for implementation**

11.1. The delivery of individual schemes included within the strategy will be subject to future funding being secured.

12. **Background papers**

12.1. There are none.

Appendices

1. **Electric Vehicle Charging Infrastructure Strategy – Draft for Consultation (June 2023)**

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Reading Transport Strategy 2040 Sub-Strategy:

Electric Vehicle Charging Infrastructure Strategy 2023

Draft for Consultation - June 2023

Reading
Borough Council
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CONTENTS PAGE

This document is available in accessible formats on request by email to transport@reading.gov.uk

FOREWORD

Our new draft Electric Vehicle (EV) Charging Infrastructure Strategy has been developed as a sub-strategy to the emerging Reading Transport Strategy 2040, which aims to deliver a sustainable transport system in Reading to create an attractive, green and vibrant town. This EV Strategy is also an important element in achieving the aims and objectives of Reading's Climate Emergency Strategy, including the ambitious target of achieving a net zero carbon town by 2030.

Central Government has brought forward plans to ban the sale of new petrol and diesel cars in the UK by 2030, and over the past few years there has been a significant growth in the proportion of new EV sales across the country, including in Reading. This growth is set to increase as we experience volatility with fluctuating petrol and diesel prices, EVs becoming a more affordable option as technology advances, and as residents look to make more environmentally conscious choices.

As a major hub for employment, leisure, retail and key services, Reading attracts many visitors. One impact of this success is high levels of traffic congestion as people travel to and through Reading by private car. This is despite us having an extensive bus network in the borough and a major rail hub at Reading Station. As a result of congestion, Reading also suffers with air pollution and a large part of the town centre and key corridors in the borough are covered by an Air Quality Management Area (AQMA).

This poses considerable health risks to residents and visitors, particularly younger or older members of the community and those with underlying health conditions. The further uptake of electric vehicles to replace petrol or diesel vehicles will have a positive impact on air quality, and therefore on the health and wellbeing of everyone in Reading.

We are aware that EVs still emit fine particulate pollution and do not address congestion. Therefore, increasing the uptake of EVs is only part of the answer, and a reduction in private vehicle usage is still needed. However, as we note in the Reading Transport Strategy 2040 and Climate Emergency Strategy, even after reducing demand and encouraging modal shift to other modes, there will still be a significant need for motorised transport for necessary journeys. As electricity supply is decarbonised, replacing fossil fuel-based vehicles with EVs will be a key element and one of the most important contributors to a net zero carbon Reading.

One of the significant barriers to adopting EVs is the ability for people to charge their vehicle, particularly if they do not have a driveway to install charging facilities at home. The Council has a key role in facilitating the roll-out of charging infrastructure, and this strategy has been developed to bring forward measures to tackle this issue, particularly to address any gaps in provision which are not adequately catered for by the private sector. In addition, we are aware of the issue of a lack of capacity in the overall power network. Whilst this is not within the Council's control, we are working with suppliers including Southern Electric Power Distribution as a matter of urgency to ensure sufficient supply is available to facilitate the transition to EVs and encourage wider adoption of EVs across the borough.

It is recognised that EV charging is a rapidly changing area, therefore this strategy will be regularly reviewed as technology advances and new national policies and funding streams are brought forward. This strategy is currently in draft form, and we welcome all feedback received through the public consultation to help shape the final strategy. This will ensure that we are best placed to deliver the wider benefits that the transition to EVs will bring to our town.

Councillor John Ennis
Lead Councillor for Climate Strategy and Transport
Reading Borough Council

Introduction

1. INTRODUCTION

Electric Future for Reading

1.1 The Reading Electric Vehicle (EV) Charging Infrastructure Strategy forms part of the Reading Transport Strategy 2040, which aims to address environmental, air quality, and health and wellbeing issues associated with our transport choices. The transport strategy vision is to promote a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing. Through the Reading Transport Strategy, we are committed to providing transport options that enhance quality of life, reduce emissions and improve air quality. The EV Charging Infrastructure Strategy also supports the wider objectives contained within the Reading Climate Emergency Strategy and Air Quality Action Plan (AQAP). The Climate Emergency Strategy seeks to achieve net zero carbon dioxide emissions in Reading by 2030, whilst the AQAP aims to address areas of poor air quality in the borough.

1.2 In order to achieve our sustainable transport vision and meet the wider environmental goals, we aim to reduce car use (both within and through the borough) by providing attractive and viable alternatives through enhanced public transport and active travel options. However, it is recognised that private vehicle use, car and van trips, will remain for many the most appropriate mode of transport. Therefore, by encouraging the adoption of electric vehicles for essential trips, they can be made to be more sustainable with a lower impact on the environment and climate change.

1.3 A key driver to the successful adoption of electric vehicles is the ability to adequately charge vehicles. For some the natural choice will be through home charging in an off-street setting, but this will not be available for many as Reading has a particularly high proportion of homes (approximately 45%), such as Victorian terraced housing, that do not have off-street parking in the borough.

1.4 A range of charging infrastructure options will therefore be required to complement home charging and provide options when this is not available, including destination and workplace charging as well as 'en-route' charging. Having comprehensive, accessible, equitable and efficient charging infrastructure is essential in enabling the rapid adoption of electric vehicles and is the key focus of this strategy.

1.5 However, the transition to electric private cars will only partially address wider objectives relating to the environment, health and wellbeing, and the economy. Around 85% of fine particulate pollution from vehicles does not come from exhausts but from wear and tear on tyres, brakes and road surfaces, with the particles being lifted back into the air through vehicle movement. In addition, reducing single/low occupancy road travel will be required to achieve improvements in air quality and levels of congestion as this will not be addressed by the transition to electric vehicles. A further core element of this strategy is therefore the provision of charging infrastructure for electric buses, car clubs, taxis, e-bikes and e-scooters* to help promote these sustainable forms of travel. *It should be noted that the use of e-scooters is currently illegal on the public highway, except through a Government approved e-scooter public hire scheme. The use of privately owned e-scooters on the public highway is therefore subject to Government bringing forward a change in legislation to allow their use.

Reading Electric Vehicle Charging Infrastructure Strategy: Aims and Objectives

1.6 The objective of the Reading EV Charging Infrastructure Strategy is to set out the current position and to light the future pathway supporting the uptake of electric vehicles for the residents, visitors and businesses of Reading.

> **Electric Vehicle Charging Infrastructure Strategy Aim:**
>
> Our EV Charging Infrastructure Strategy aims to accelerate the transition to Electric Vehicles for necessary travel in Reading in the context of wider Local Transport Plan aspirations to reduce the need to travel, reduce carbon emissions, improve air quality and promote sustainable and active travel.

1.7 The EV Charging Infrastructure Strategy is part of a wider suite of policies to drive towards a cleaner and greener Reading. The strategy is therefore put forward to enable and encourage the uptake of more sustainable transport cross Reading in tandem with promoting and enabling modal shift, active travel opportunities and cleaner carbon reduced travel options for all communities, businesses and visitors to Reading.

1.8 Reading's EV Charging Infrastructure Strategy will also play a significant role in driving toward a carbon neutral Reading by 2030.

1.9 The objectives of Reading's EV Charging Infrastructure Strategy are set out below:

Electric Vehicle Charging Infrastructure Strategy Objectives:

1. Develop a Reading-wide approach to facilitate the transition to the use of electric and zero emission vehicles (including electric buses, car clubs, taxis, e-scooters and e-bikes) for residents, businesses and visitors in Reading.

2. Increase public electric vehicle charging point provision to enable forecast growth in EVs so far as practicable, and prevent infrastructure becoming a constraint to EV take up. Have an adaptable policy that can respond to changes in actual demand.

3. Provide socially equitable and disability aware access to charge points wherever possible.

4. Provide reliable charging infrastructure that the public can rely on and can provide confidence in purchasing an EV.

5. Take account of the needs of other highway users in the location of charging points.

6. Recognise the role of homeowners, workplaces and business in providing for the overall charging provision and focus the Council's investment into delivery and facilitating the required EV infrastructure that will not be provided in a fair and equitable way by the market.

7. Work with bus operators, car clubs and taxi drivers to identify how the Council can help provide the infrastructure that will encourage a greater shift to electrification.

8. Seek to provide charging infrastructure for e-bikes and e-scooters (subject to legislation) to encourage their usage.

9. Ensure the Council leads by example by adopting EV technology and continue to adapt the Council's fleet to EV/ULEV where possible to further reduce the environmental impact of our day-to-day operations.

10. Seek to provide a renewable energy source for charging points on Council land or highway by 2030.

11. Respond flexibly to fast-paced and changing technologies within the EV sector and changes in EV take up.

12. Keep this strategy updated and under regular review.

Strategy Framework and Scope

Strategy Framework

1.10 The Reading EV Charging Infrastructure Strategy has been developed to:

- Provide a framework which links across Reading's current policy areas as well as national policies and strategies.

- Be focused but not inflexible to the evolving and growing EV market and other zero emission transport opportunities in the UK market.

- Be inclusive and seek to enable opportunities for all communities (economic, social and those with disabilities) and businesses across Reading and inter-connect with other authorities and business partners across the region.

Scope of EV Charging Infrastructure Strategy

1.11 The scope of the strategy is to:

1. Provide an understanding of the current and emerging market of electric vehicles (EVs) and infrastructure.

2. Map out current and future demand for EVs and infrastructure.

3. Set out an options appraisal of the types of infrastructure options available, requirements to install and potential installation locations.

4. Identify potential investment/funding opportunities and market opportunities to support the ramping up of infrastructure.

5. Identify potential external partnership opportunities, such as park and ride with partner authorities, private sector investment.

6. Consider the Council's own fleet requirements as well as specific transport sectors such as taxi's/private hire vehicles (PHVs), buses and businesses vehicles.

7. Recommend a delivery plan to target the ramping up of EV infrastructure.

1.12 The strategy focusses on EV charging for cars, car-based vans, and taxis (hackney carriage and private hire vehicles), however it does include current EV and low carbon initiatives for buses, micro-mobility (e-scooters and e-bikes) and large/heavy goods vehicles (HGVs) and other service vehicles.

1.13 The strategy also looks at other developing technologies such as hydrogen and include modal shift opportunities such as enabling EV car clubs and linking to potential future policy areas such as clean air or zero emission zones.

Terms

1.14 In this document we use the terms 'Infrastructure' or 'Electric Vehicle Charge Points' (EVCPs), these are terms for the electric charging devices for vehicles to recharge through an electric cable connection. We recognise that there are trials of wireless EV charging which may become a viable alternative in the future and we will evolve our strategy as required for new technologies.

1.15 Electric vehicles (EVs), sometimes referred to as Ultra Low Emission Vehicles (ULEVs), or 'plug-in' vehicles including pure Battery Electric Vehicles (BEVs) and Plug-in Hybrids (PHEVs),all require charging from the electrical distribution network which will continue to have associated carbon emissions far into the future even though the vehicles travel with zero tailpipe emissions. ULEVs also include other zero emission (at tailpipe) vehicles such as hydrogen Fuel Cell Vehicles (FCEVs) which generate their own electricity on-board from a fuel such as hydrogen, and do not need to plug in to the electricity grid to recharge. Hybrids (HEVs) which do not plug in have a much smaller battery which is recharged while driving (regenerative). HEVs can drive in electric mode for only a few miles at the most.

Strategy Delivery

Delivery

1.16 This strategy includes an Action Plan with key objectives to direct and deliver future infrastructure needs of Reading. The action plan identifies specific actions regarding the objectives and both the immediate actions as well as the longer-term tasks.

1.17 It is acknowledged that the delivery of EVCPs requires a significant level of resourcing and funding either from public funds (local or national) or private sector funds or more likely a combination of both. It is also recognised that local authority budgets are already constrained and future spending more uncertain against the backdrop of the impact from the Covid pandemic. Local authorities will need to take careful consideration to ensure investment in EVCPs delivers good value for money whilst also not becoming obsolete within its expected timeframe.

1.18 Local authorities also need to define the role they will play in the delivery of EVCPs compared to private providers, home charging and other options available. This strategy and the commitments outlined in the action plan will take account of these issues working with stakeholders and suppliers to provide the Council with a coherent plan for the whole of the borough. It will also look to capitalise on existing budget as well as future Government grants and funding opportunities whilst developing partnerships with the private sector to deliver an EV charging network for Reading.

1.19 The EV Charging Infrastructure Strategy traverses across a wide area of Council policy areas from environment and energy, climate change, air quality to planning and transport, health and wellbeing and will be fully consulted with each as well as external stakeholders to ensure we have developed the right policy and measures for Reading.

Stakeholder Engagement and Consultation

1.20 The EV Charging Infrastructure Strategy will require further stakeholder engagement and consultation before policies and actions are put in place. Key delivery and partner stakeholders are identified in this document, however these and other stakeholders will need to be consulted further following the publication of the draft EV Charging Infrastructure Strategy.

Social Inclusion

1.21 While many areas of Reading are affluent, and likely to be among the first to see early mass adoption of EVs, there are also areas where income is low. Lower income households are often disproportionately affected by poor air quality and are also the sector of society least able to adopt EVs early.

1.22 While the Council is limited in the actions it can take to support low-income households with the direct purchase of EVs, action can be taken to be mindful of equitable access to EV charging and EVs wherever possible. Electric car clubs and the chargers needed to power them are identified as a valuable measure to help improve social inclusion within the EV Charging Infrastructure Strategy and this will be a key priority moving forward.

1.23 Access to on-street charging is underway in Reading to enable EV drivers access to local charging locations where people have no off-street parking. The Council is also supporting the introduction of low emission buses into Reading Buses fleet through the Air Quality Action Plan as well as introducing policies for cleaner taxis to improve air quality across all areas of Reading.

Policy Context

2. POLICY CONTEXT

National Policy

Road to Zero

2.1   In 2018, the government launched a 'Road to Zero Strategy' and has since confirmed that new petrol and diesel cars and vans will not be allowed to be sold in the UK from 2030. The strategy sets out plans and targets to enable a massive expansion of charging infrastructure across the country, reduce emissions from the vehicles already on the UK's roads, and drive the uptake of zero emission cars and vans.

2.2   The main objective of the Road to Zero strategy is to put the UK at the forefront of the design and manufacturing of zero emission vehicles. The policies identified the government's long-term ambitions as:

- Reduce emissions from the vehicles already on our roads.

- Drive the uptake of the cleanest new vehicles.

- Reduce emissions from heavy goods vehicles and road freight.

- Put the UK at the forefront of the design and manufacturing of zero emission vehicles.

- Support the development of one of the best electric vehicle infrastructures in the world.

- Support local action.

Transport Decarbonisation Plan

2.3 The UK Government (Govt.) has published the Transport Decarbonisation Plan (TDP) Decarbonising transport: a better, greener Britain[1] in July 2021. The TDP outlines the Government's current position of transport emissions, including highlighting current policies and strategies in place to decarbonise the transport sector. The TDP targets:

- Increasing cycling and walking

- Zero emission buses and coaches

- Decarbonising our railways

- A zero-emission fleet of cars, vans, motorcycles, and scooters

- Accelerating maritime decarbonisation

- Accelerating aviation decarbonisation

2.4 The TDP strategic priorities are:

- Priority 1: Accelerating modal shift to public and active transport

- Priority 2: Decarbonisation of road vehicles

- Priority 3: Decarbonising how we get our goods

- Priority 4: Place-based solutions

- Priority 5: UK as a hub for green transport, technology, and innovation

- Priority 6: Reducing carbon in a global economy

2.5 Govt. announced a commitment to end the sale of new petrol and diesel vehicles by 2030, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035. As a result, the Govt. also published the Transitioning to zero emission cars and vans: 2035 delivery plan[2].

[1] DfT (2021), Decarbonising transport: a better, greener Britain. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002285/decarbonising-transport-a-better-greener-britain.pdf
[2] DfT, 2021- Transitioning to zero emission cars and vans: 2035 delivery plan

2.6 Additionally, Govt. have published a consultation on ending the sale of all non-zero emission HGVs from 2040, with lighter HGVs from 2035[3].

National Infrastructure Commission's National Infrastructure Assessment

2.7 The National Infrastructure Commission was set up to address the problems with long term infrastructure planning in the UK. This first National Infrastructure Assessment builds on the analysis in the Commission's interim report, Congestion, Capacity, Carbon: Priorities for national infrastructure, to set out a long-term vision for high quality, good value, sustainable economic infrastructure for the UK, and a clear plan to achieve it.

2.8 The relevant core principles include:

- Half of the UK's power provided by renewables by 2030

- £43 billion of stable long-term transport funding for regional cities

- Preparing for 100 per cent electric vehicle sales by 2030

Automated and Electric Vehicles Act 2018

2.9 This legislation is part of the Government's industrial strategy to promote the development and deployment of both automated and electric vehicles and is in line with policies on climate change. The purpose of this legislation is both to amend the existing compulsory third party insurance framework by extending it to cover the use of automated vehicles and deal with electric and hydrogen powered vehicle charging infrastructure.

2.10 Part 1 of this Act relates to motor insurance for automated vehicles (i.e., vehicles that can drive themselves without human intervention) and determines liability where an accident caused by an automated vehicle occurs.

2.11 Part 2 of this Act relates to electric vehicle charging. It is intended to address incompatibility of charge points by requiring standard connectors for vehicles.

2.12 It also improves access to charge points by requiring that they be accessible without membership, certain information is made available on charge points and there is a common method of payment.

The Government's Clean Air Strategy 2019

2.13 The Government's Clean Air strategy, which was published in January 2019, set out plans to meet ambitious legally binding international targets to reduce emissions of the five most damaging air pollutants by 2020 and 2030. This strategy outlines the government's ambitions relating to reducing air pollution, making air healthier to breathe, protecting nature and boosting the economy. The strategy sets out a clear direction for

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[3] DfT (2021) Heavy goods vehicles: ending the sale of new non-zero emission models. Available at: https://www.gov.uk/government/consultations/heavy-goods-vehicles-ending-the-sale-of-new-non-zero-emission-models

future air quality policies and goals. Emissions from road transport have been in the spotlight because of their impact on local air quality, but the government is committed to cutting air pollution from all forms of transport.

Climate Change Policy

2.14 The Climate Change Act 2008 sets up a framework for the UK to achieve its long-term goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impact of climate change. The Act saw the UK set a legally binding target of reducing emissions by at least 80% by 2050. The legislative framework enabled the target to be amended and a more ambitious target of achieving a 100% reduction in emissions (compared to 1990 levels), otherwise known as 'net zero', was adopted in law by the Government in 2019.

2.15 In April 2021, the UK Govt. announced that it will build on its Nationally Determined Contributions (NDC) commitments to 2030, by setting ambitious climate change targets into law to reduce emissions by 78% by 2035 compared to 1990 levels.

2.16 In line with the recommendation from the independent Climate Change Committee, this sixth Carbon Budget (Carbon Budget 6) limits the volume of greenhouse gases emitted over a 5-year period from 2033 to 2037, taking the UK more than three-quarters of the way to reaching the net zero by 2050.

2.17 The 26th UN Climate Change Conference of the Parties (COP26)[4] was held in Glasgow in late 2021. COP26 produced key goals for countries to target net zero carbon emissions by the mid-century and keep global warming under 2 degrees (centigrade). Countries will be updating their plans for reducing emissions and as part of that, a key target for countries is to 'speed up the switch to electric vehicles'[5].

2.18 The 27th UN Climate Change Conference of the Parties (COP27) held in Sharm el-Sheikh, reached agreement on an outcome that established a funding mechanism to compensate vulnerable nations for 'loss and damage' from climate-induced disasters.

Accessibility

2.19 Accessibility standards have been developed for EV charge-points across the UK by the Department for Transports Office for Zero Emission Vehicles (OZEV), in partnership with British Standards Institute (BSI) and Motability[6]. The standards have been developed to allow disabled drivers to easily identify which models are suitable for their needs.

2.20 Although not policy yet, the standards industry with:

- guidance on how to make individual charge-points more accessible; and
- guidance on aspects such as kerb height, adequate space between bollards and charge-points being of a height suitable for wheelchair users.

[4] UN Climate Change Conference of the Parties (COP26) https://ukcop26.org/
[5] COP26 (2021) https://ukcop26.org/cop26-goals/
[6] PAS 1899:2022 https://www.bsigroup.com/en-GB/standards/pas-1899/

Local Policy

Climate Emergency Declaration

2.21 Reading Borough Council declared a climate emergency in February 2019 which highlighted its commitment to playing a full role and leading by example in achieving a carbon neutral Reading by 2030.

Climate Emergency Strategy 2020-2025

2.22 The Reading Climate Emergency Strategy 2020-25 sets out the actions required during the five-year period to work towards the objective of a net zero carbon, resilient Reading by 2030, the target adopted in the climate emergency declaration. There are several actions from this document that relate to this strategy:

> T13: Develop a zero-emission vehicle strategy for the Borough
>
> T14: Decarbonise the Council Vehicle Fleet
>
> T15: Increase Public Electric Vehicle Charging Points
>
> T16: Increase Zero Emission Vehicles Uptake
>
> T18: Planning Policy for EV Charging in new properties
>
> T19: Reduce emissions from the Taxi Fleet
>
> T20: Improve Electric Vehicle Charging Infrastructure

Air Quality Action Plan

2.23 Reading currently has a single Air Quality Management Area AQMA declared due to exceedances of the annual air quality objective for nitrogen dioxide (NO_2). The AQMA is not borough wide but does cover the central Reading area and the main arterial routes into Reading. The improvement of air quality is therefore a key driver for the EV Infrastructure Strategy.

2.24 The current Air Quality Action Plan (AQAP) sets out policies and measures to address air quality issues in the AQMA and across the borough. The AQAP also provides interventions that are required for meeting the national *Air quality plan for the achievement of EU air quality limit values for*

nitrogen dioxide (NO$_2$) in the UK[7]. The following actions relate to this strategy:

- Work towards the electrification of the vehicle fleet;

- Introduction of charging points into car parks and as part of new developments;

- Replacement of Council fleet vehicles with electric vehicles where feasible.

2.25 The forthcoming update of the AQAP will also look to encourage and develop policy areas and schemes that can support the strategy.

Carbon Plan 2020-25

2.26 The Carbon Plan sets out policy and targets on the Council's corporate energy and water management and identifies actions to achieve these within the time period 2020-2025. The plan includes actions to ensure the authority is compliant with relevant legislation (such as Energy Performance in Buildings legislation) and national reporting requirements (such as Greenhouse Gas Protocols). The Plan will assist the council in making energy and water management an integral part of its decision-making processes, to ensure efficient use of these resources today and in the future.

2.27 Crucially, the implementation of the Plan will:

- Contribute to the Corporate Plan aim to 'Build a Council fit for the future' by improving the efficiency of our operations and minimising costs

- Deliver many of the Council's commitments as set out in the Reading Climate Emergency Strategy 2020-25

- Enable the Council to lead by example as we encourage Reading businesses, organisations, and residents to reduce their own environmental impacts.

2.28 The Carbon Plan includes actions which relate to this electric vehicle strategy:

- Rationalisation of the Council's vehicle fleet

- Electrify the Council's LCV fleet

- Installation of charging units at the Council's Bennet Road depot

- Electrify the Council's fleet of pool cars

- Electrify the Council's HGV fleet

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[7] Defra (2018) https://uk-air.defra.gov.uk/library/assets/documents/no2ten/Reading_FINAL.pdf

- Electrify the Council's RCV fleet

Reading Transport Strategy 2040

2.29 The Reading Transport Strategy 2040 (RTS) sets out a plan for developing the town's transport network to 2040 and beyond. The RTS has several policies in place that related to this strategy which are:

- **Policy RTS10 | Taxis and Private Hire**
  - o 10.2: We will work with taxi and private hire services, offering support and incentives to encourage a shift towards the use of cleaner vehicles.
  - o 10.3: We will require all taxis operating in Reading to be electric or hybrid vehicles by 2030.
- **Policy RTS24 | Freight and Sustainable Distribution**
  - o 24.3: We will work with operators to explore and support more sustainable delivery methods, such as cargo bikes and electric micro-vehicles, for the last mile delivery.

Reading Local Plan

2.30 The Local Plan for Reading is a document that contains the policies for how Reading will develop up to 2036. The document identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided. The Local Plan includes a policy which relates to this strategy:

- TR5: Car and Cycle Parking and Electric Vehicle Charging.

2.31 The above policy states that development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport. Development should make the following provision for electric vehicle charging points:

- All new houses with dedicated off-street parking should provide charging points;

- Within communal car parks for residential or non-residential developments of at least 10 spaces, 10% of spaces should provide an active charging point.

Reading Corporate Plan 2022-25

2.32 The Council's Corporate Plan outlines the visions and priorities for Reading in the form of a three-year strategic plan for the period 2022-25.

2.33 The plan outlines the vision of "to help Reading realise its potential – and to ensure that everyone who lives and works here can share the benefits of its success."

2.34 The Corporate Plan has a series of major change projects under three themes to set out how it will achieve the vision for Reading:

- Healthy environment
- Thriving communities
- Inclusive growth

Taxi Fleet Policy

2.35 Reading Borough Council have proposed new emissions policy for black cabs which will remove older polluting vehicles from Reading's roads and incentivise owners to replace them with newer taxis.

2.36 The schedule for the introduction of Taxi emissions policy is set out in Table 2.1.

Table 2.1: Taxi Fleet Policy

Date	Proposed Standard
23 Oct 2019	Vehicle Age policy 15 years for all vehicles, 100% electric 20-year Vehicle Age Policy
23 Oct 2019 (Currently paused)	All Replacement vehicles will be a min of Euro 5b and less than 8 years old. This rule will apply regardless of whether the vehicle is new to fleet or an existing vehicle.
1 Oct 2021 (Currently paused)	1 Oct 2021 Vehicle Age Policy 14 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/07 only)
1 Oct 2022 (Currently paused)	Vehicle Age Policy 13 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/09 only)
1 Oct 2023	Vehicle Age Policy 12 years for vehicles up to and including Euro 5a (vehicles registered later than 1/10/11 only)
1 Oct 2025	All Replacement vehicles are minimum ULEV and less than 8 years old. This rule will apply regardless of whether the vehicle is new to fleet or an existing vehicle.
1 Oct 2028	All vehicles to be minimum ULEV

2.37 The Taxi fleet policy is currently on 'pause' until Oct 2023 due to the impact of Covid on the trade, hence only the 1st phase policy (15-year age policy) is in place.

EV Infrastructure in Reading

3. EV CHARGING INFRASTRUCTURE IN READING

Local Context

3.1 Reading is an urbanised generally affluent authority in Berkshire. Incomes in Reading are generally high, especially in the outer areas, however there are areas of income deprivation, particularly in the Whitley, Tilehurst and Lower Caversham areas.

Figure 3.1: Wards within Reading

3.2   Parts of the Reading borough have relatively high levels of health and disability deprivation, particularly in the town centre, Whitley, Coley and West Reading. There are high levels of vehicle congestion on roads around the town centre and along key corridors in Reading. This causes low environmental quality and high levels of air pollution, negatively affecting people's mental and physical health.

3.3   It is estimated that 35% of the country's drivers have no off-street parking which is mainly in urbanised areas and an evaluation of Reading has identified that this is around 45% of the town's drivers. As such this will significantly influence the uptake of EVs in Reading unless sufficient on street charging is provided.

Current Level of EV Uptake

3.4   Despite the rise in the number of licensed ULEV cars on UK roads, as a proportion of the total number of cars licensed, ULEVs still represent a tiny share. In 2021 around 58.0% of licensed cars were petrol, 36.9% diesel and 5.0% were either a plug-in-hybrid, battery electric (BEV), range-extended electric (REV), or fuel cell electric cars (FEVs).

3.5   ULEVs are however on a significant upward trajectory in numbers as the latest Department for Transport figures in Table 3.1 show the number of electric vehicles in the UK is increasingly rapidly. The number of plug-in battery electric vehicles (BEVs) in the UK has risen from roughly 10,000 in 2012, to nearly 1m in 2022. A similar trend is occurring in Reading where registered BEVs in 2012 went from 5 plug-in vehicles to over 1,300 by the third quarter of 2022 Industry figures suggest that 12.5% of all new car registrations in the UK during 2022 were pure-electric, a further 7.9% plug-in hybrids, 13% mild-hybrid petrol and 5% mild hybrid diesel.
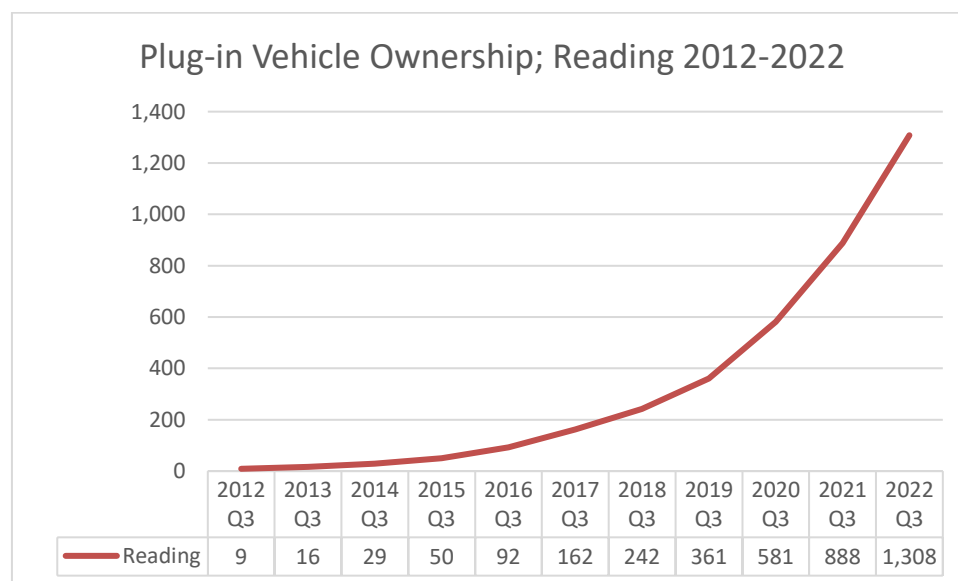
Table 3.1: Numbers of EVs in Reading and UK (2012 - 2022)

	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	9	16	29	50	92	162	242	361	581	888	1,308
UK	10,026	12,741	22,468	47,260	83,875	129,006	182,289	243,992	372,136	643,543	991,419

3.6   There is a clear and evident increase in electric vehicle ownership in the borough as highlighted by the graph (Figure 3.2) below. This increase is likely to continue given the policies being implemented by central government and local government.

3.7 It is evident that advances in electric vehicle technology are also making EVs a more affordable and practical option for many. The ranges of EVs are increasing to comparable ranges of petrol and diesel vehicles with prices of vehicles and leasing options for EV also reducing.

Figure 3.2: EV Ownership in Reading (2012 - 2022)

Plug-in Vehicle Ownership; Reading 2012-2022

|	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	9	16	29	50	92	162	242	361	581	888	1,308

Projected EV Uptake

3.8 EV uptake for residents of Reading has been projected to 2040 based on the DfT's Web-based Transport Analysis Guidance (TAG) and this is shown for Reading in Figure 3.3 In addition this figure also shows the Commission for Climate Change projections of what they believe the take up of EVs should be to meet our 2050 climate goals. Reading's TAG projection tracks the Commission for Climate Change estimates up to around 2030, but then diverges indicating that a far greater take up of EVs will be required.

Figure 3.3: Projected Number of EVs for Reading
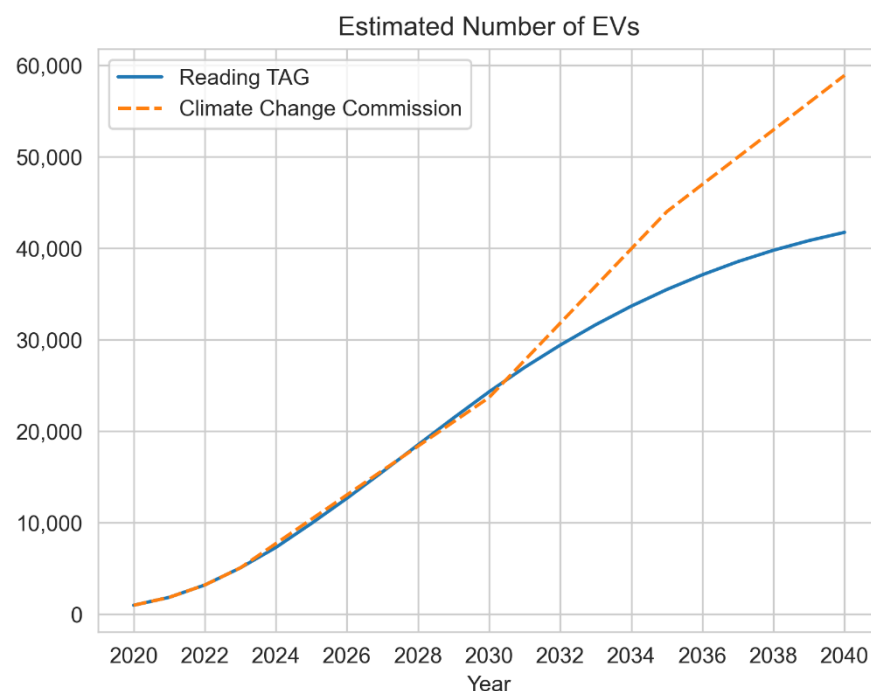
3.9 Figure 3.4 shows the estimated number of resident's EVs that we are expecting to be parked on street based on approximately 45% of dwellings not having off-street parking. This simply assumes that the EV growth is evenly distributed across the town and hence growth may be less in the early years as EVs remain expensive and are generally being purchased by the more affluent who are more likely to have off-street parking for home charging. However, EV prices are falling and more used EVs are coming onto the market and the desire of individuals to reduce their carbon footprint is not necessarily linked to affluence and hence this provides a good basis for projecting on street charging needs.

Figure 3.4: Projected Number of On-Street EVs
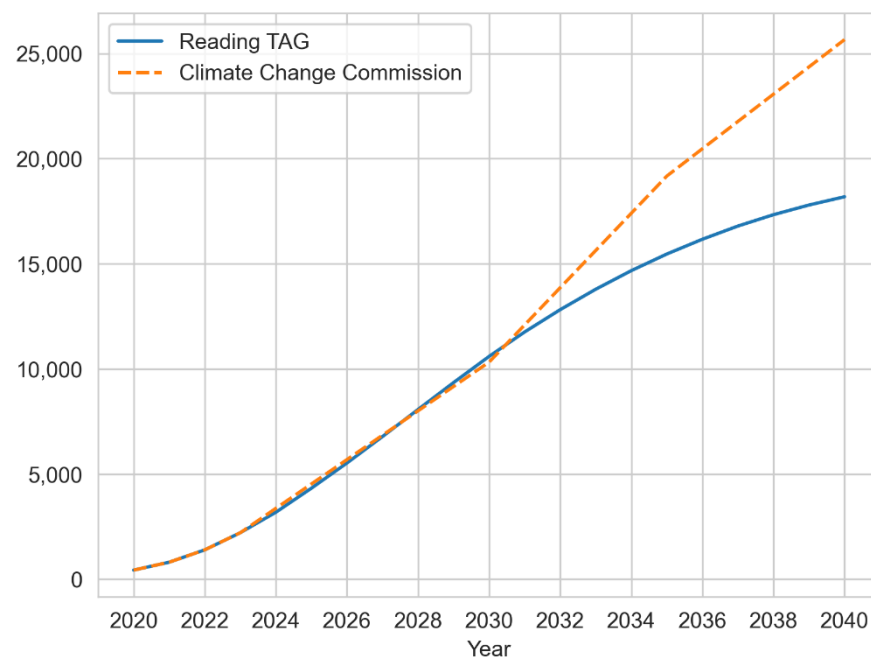
EV Infrastructure in Reading

3.10 There are currently 116 publicly usable electric vehicle charging points available within the borough of Reading[8] as shown in the Table 3.2 below. 21 of these charge points were installed by Reading Borough Council in their car parks.

Table 3.2: Number of EVCPs across UK and Reading

	Jan-20	Apr-20	Jul-20	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	Apr-22	July-22	Oct-22	Jan-23	Apr-23
Reading	34	50	50	51	57	58	59	62	64	96	101	115	111	116
United Kingdom	16,505	17,947	18,265	19,487	20,775	22,790	24,374	25,927	28,375	30,290	32,011	34,637	37,055	40,150

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[8] DfT, Electric vehicle charging device statistics: April 2021 - Electric vehicle charging device statistics: April 2021 - GOV.UK (www.gov.uk)

3.11 Table 3.3 below sets out the location of public charge points available within the borough. These are a mix of slow, fast and rapid chargers[9]. Note that the table also includes 34 EV charge points associated with the Reading Rail Station car park, where 160 charge points are planned to be installed by Network Rail. Charge Point Operators (CPOs) provide the charge points and charge for their use through contact-less charging, membership fees or are part of the EV ownership fees, such as Tesla[10].

Table 3.3: Location of Public EVCPs in Reading (2023)

Location	No. of CP	Charge Connector	Power	Provider	Location Type
Rose Kiln Lane	2	3-pin	3kW	POD Point	Other
Bridge Street	3	Type 2, CCS, CHAdeMO	22kW	Equans EV Solutions	On-street
Henley Road	3	Type 2, CHAdeMO, CCS	43-50kW	Equans EV Solutions	Service station
Cavendish Road	4	CHAdeMO, CCS	50kW	InstaVolt Ltd	Retail car park
Reading Rail Station	34	Type 2	11kW	APCOA	Public car park
Rose Kiln Lane	2	Type 2	7-22kW	BP Pulse	NHS property
Unit 250 Longwater Avenue	2	Type 2	3.7kW	BP Pulse	Other
1 Station Hill	2	Type 2	7-22kW	BP Pulse	Other
500 Basingstoke Road	2	CHAdeMO	50kW	BP Pulse	Private home
387 Basingstoke Road	2	CHAdeMO	50kW	BP Pulse	Retail car park
St. Bartholomews Road	2	Type 2	3.7kW	CityEV/Joju Ltd	On-street
The Oracle Shopping Centre	12	Type 2	22kW	POD Point	Retail car park
Oldfield Retail Park	4	Type 2	7kW	POD Point	Retail car park
Tesco Extra - Reading West	4	Type 2	7kW	POD Point	Retail car park
Tesco Extra - Reading	4	Type 2	7kW	POD Point	Retail car park
24 Robert Cort Industrial Estate	2	Type 2	22kW	POD Point	Workplace car park

[9] NCR Database and Open Charge Map https://www.gov.uk/guidance/find-and-use-data-on-public-electric-vehicle-chargepoints, https://openchargemap.org/site
[10] Tesla charge points are not shown as publicly accessible charge points as these are reserved for Tesla owners only.

| Location	No. of CP	Charge Connector	Power	Provider	Location Type
Chester Street Car Park	2	Type 2	7kW	Mer	Public car park
Thames Promenade Car Park	2	Type 2	7kW	Mer	Public car park
Kensington Road Car Park	2	Type 2	22kW	Mer	Public car park
585 Basingstoke Road	3	Type 2, CCS, CHAdeMO	43-50kW	Shell Recharge	Service station
Friar Street	4	Type 2	22kW	Drax Energy Solutions Limited	Hotel / Accommodation
Shell, Shinfield Rd	3	Type 2, CHAdeMO, CCS	43-50kW	Equans EV Solutions	Service station
Chatham Street	8	Type 2	22kW	EB Charging	Public car park
Wantage Road	3	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Anstey Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
East Street	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Caversham Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Coventry Road	2	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Filey Road	1	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street
Manchester Road	2	Type 2	1.3-7kW	CityEV/Joju Ltd	On-street

3.12 Many of Readings charge points are on residential streets, such as the CityEV units. These units are using the existing electrical supply to lamp posts, the charge points have been installed and are operational on Coventry Road, Filey Road, Manchester Road, St Bartholemews Road, East Street, Anstey Road Caversham Road and Wantage Road. The locations were selected following the Council's 'Go Electric' public consultation where Reading residents who either owned an electric vehicle or had an interest in buying one in the future.

3.13 Many EVCP sites are at commercial, or retail locations and are used as "destination charging" locations. These sites are often Slow to Fast EVCP sites. Rapid charge sites in Reading located in Henley Road and Basingstoke Road are commercial refuelling stations which indicates a shift in the market of major fuel providers entering the electric charging market and providing "en-route charging" facilities.

3.14 EV charge point usage is being monitored and there has been a solid growth in the use of the EV chargers in the car parks as shown in Figure 3.5, however this is not reflected in the same way for the CityEV lamp columns on street. Initial higher usage dropped after February 2021 when they switched from being free to being paid for chargers and it is likely that those originally using them were not local residents, but instead specifically parking there for a free charge. Since charging was introduced, around a third of the chargers are regularly used indicating a local resident with an EV, or hardly used at all, reflecting that there are no EVs on the street. Hence, whilst the lamp column infrastructure is under-utilised at present, this should not be seen as a reflection that significant investment in on-street chargers is not required.

Figure 3.5: EV Charge Point Usage – Reading Car Parks
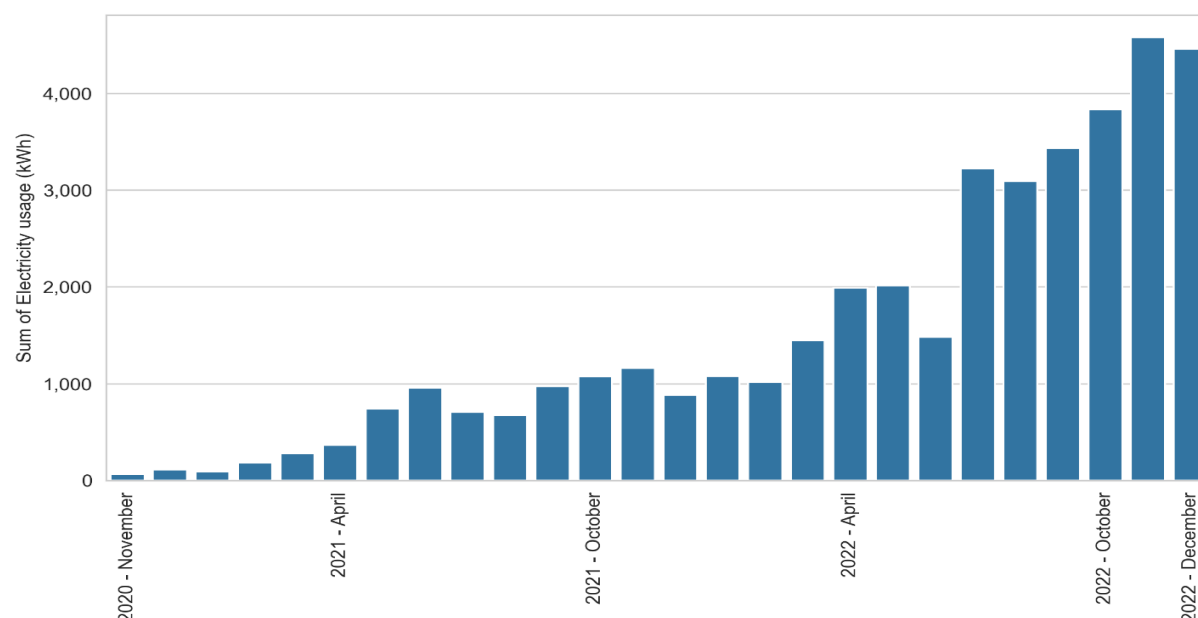
3.15 These initial figures would seem to indicate that actual demand in Reading is substantially lower than that estimated as projected EV uptake for the on-street charging however, with only a limited number of on-street charging, there is not the critical mass that would give people the confidence to purchase an EV and rely on the infrastructure and this is expected to change with a substantial investment in EV charging provision set out in this strategy.

Figure 3.6: Location of Public EVCPs in Reading (2021)
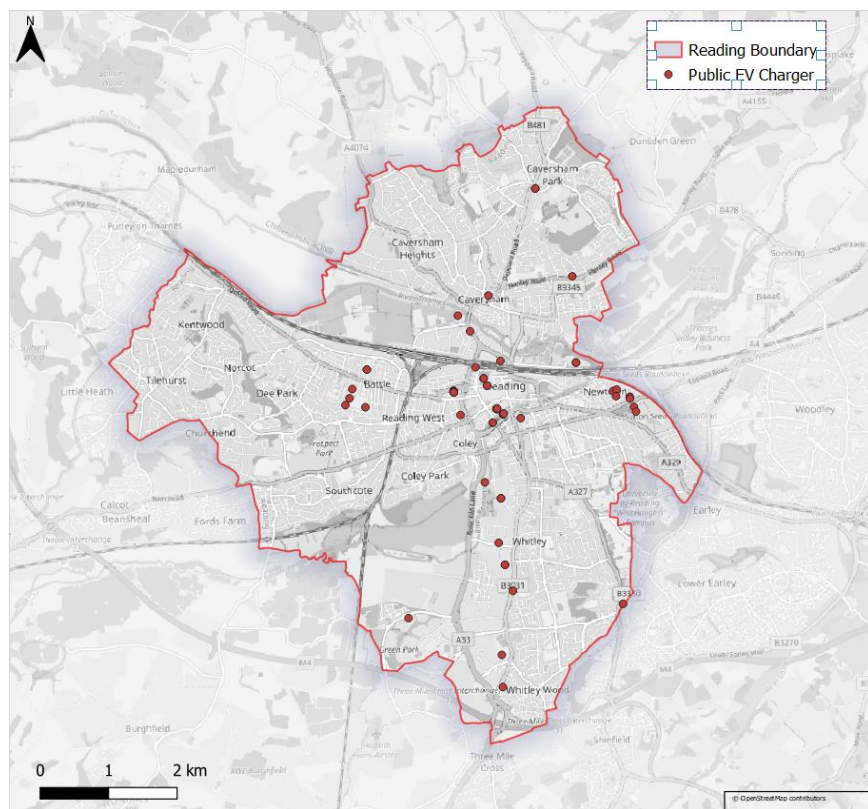
Other EVCP sites near Reading

3.16 EVCP infrastructure is also available to EV drivers in the vicinity of Reading and provide locations for "en-route charging" such as at Motorway Services or "destination charging" such as at a Park and Ride facility.

3.17 These facilities provide EV drivers with the opportunity to recharge when visiting Reading and/or for residents and businesses to recharge if en-route to other destinations. Table 3.4 provides locations of nearby EVCPs for en-route or destination charging.

Table 3.4: Location of EVCPs near Reading (2021)

Location	No. of CPs	Charge Connector	Power	Type	Provider
M4 Moto Services Burghfield (East)	2	CCS, CHAdeMO, Type 2	43kW-50kW	Rapid	Ecotricity/Gridserve
M4 Moto Services Burghfield (West)	2	CCS, CHAdeMO, Type 2	43kW-50kW	Rapid	Ecotricity/Gridserve
Mereoak Park & Ride (A33)	2	CCS, CHAdeMO, Type 2	43kW-50kW	Rapid	Charge Your Car
Winnersh Triangle Park & Ride (A2320(M))	2	CCS, CHAdeMO, Type 2	43kW-50kW	Rapid	Charge Your Car
Green Park	4	Tesla	120kW	Rapid	Tesla
Thames Valley Park	4	Type 2	7kW	Slow	POD Point
IKEA Reading Car Park	5	CCS, CHAdeMO, Type 2	43-50kW	Rapid	Ecotricity/Gridserve

Infrastructure Demand

Requests for Charge Points

3.18 In order to identify potential charge point locations where there is already demand for infrastructure, Reading Borough Council invited residents to suggest a location for an EV charging point online. The map (Figure 3.7) below shows the locations of 152 suggestions received to date (May 2023).

3.19 In addition to charge points, Reading Borough Council has also offered to install either slot-drain in the pavement or cable covers that enable residents to connect a cable to a home charge point and charge vehicles on street. Take up has been very low with only 4 installed to date. At present dedicated parking bays are not being installed for residents requesting this infrastructure.

Figure 3.7 - EVCP Location Request Map
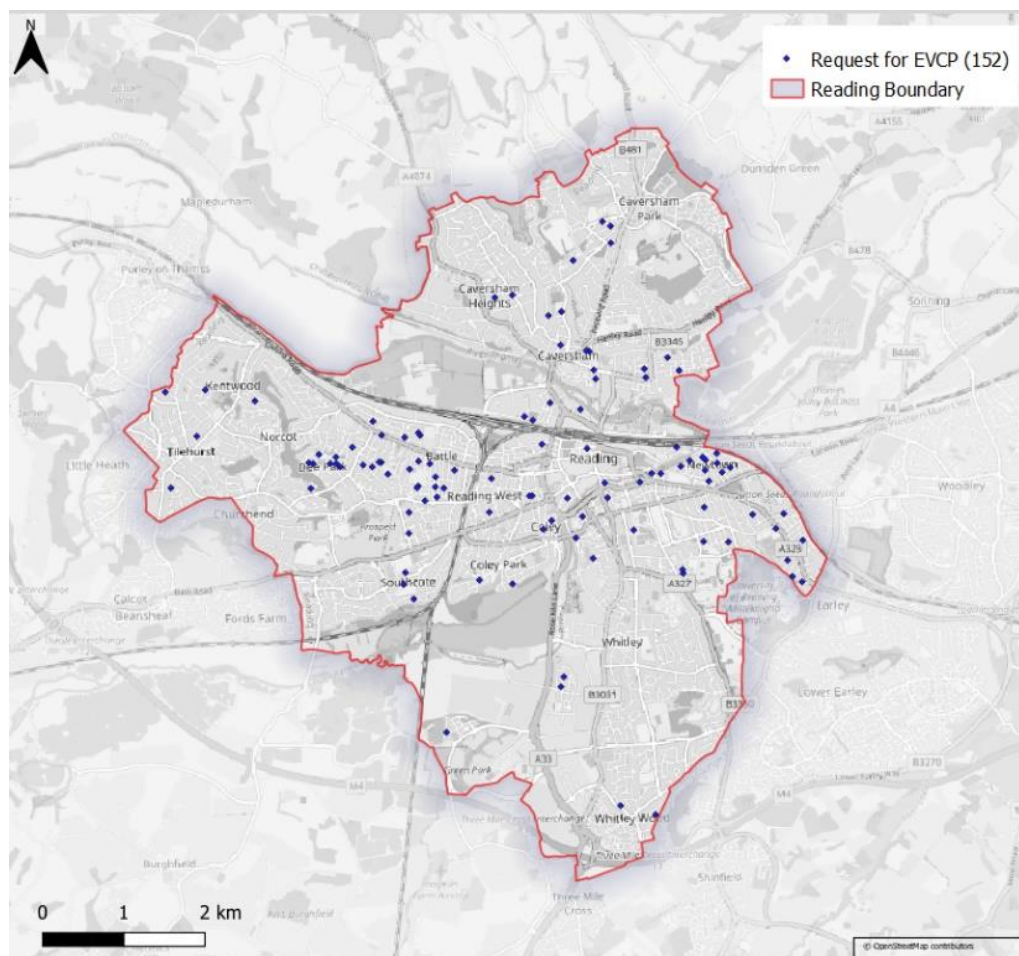
Infrastructure Requirements

3.20 EV charging Infrastructure will need to be implemented to address the following growth in EV demand:

- Residents of Reading – Slow to Fast charging on-street for those who cannot install home chargers.

- Commuters and Visitors to Reading – Rapid and ultra rapid charging at charging stations and slow to rapid charging at public and private car parks, workplaces, retail, entertainment venues etc reflecting typical duration of stay.
- Businesses providing local services, e.g. taxi services and delivery services

3.21 Section 4 sets out the infrastructure options appraisal including future technologies that may affect how we charge EVs. This infrastructure forecast reflects the expansion of current EV charging infrastructure, and the aim of the strategy is to continue monitoring EV growth, technologies, and use of charge points to be adaptable to future uncertainty.

Local Residents

3.22 Figure 3.8 below shows an estimated forecast number of on-street chargers (and / or ducting provision in kerbs for home charging) required to meet the growth in demand for EVs. It assumed that these will be slow / fast lamp column chargers or similar on-street chargers and there will need to be one charger per 3 vehicles. It is not proposed to provide dedicated parking bays, but instead, by providing a large number of chargers there is much greater flexibility to park near one on the street. The requirement for one charger per 3 vehicles is based on an average annual vehicle milage of 7,500 miles[11] and the average daily milage that will need to be topped up (about 20 miles). This indicates that Reading should be providing around 3,000 on street chargers by around 2030 to enable EV growth. As set out above, the growth in EVs may be lower on-street in the early years with a higher proportion purchased by households with off-street parking and monitoring of demand to balance the supply of chargers will be a key element of the strategy delivery.

A particular challenge is large parts of Reading being a Victorian town with lots of terraced homes with on street parking only. Where charging infrastructure is provided on the street, the highest priority location for the infrastructure will be within the road where this is feasible (such as the example shown in the photo). This will ensure that obstructions are not created for pedestrians on footways which can often be narrow.

[11] NTS0901: Annual mileage of cars by ownership, fuel type and trip purpose: England, 2002 onwards

Figure 3.8 - Predicted Requirement of On-street EV Chargers

Required On-street Home Chargers (Using charger ratio - 3:1)
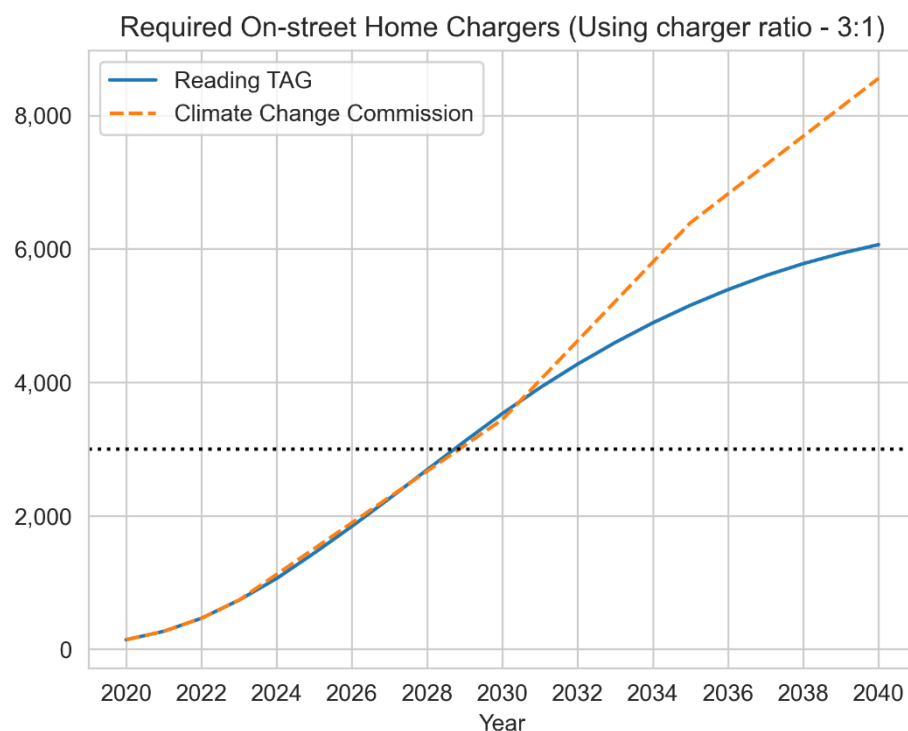
3.23 Council owned car parks also provide an option for EV charging. Parking is free overnight, and this provides the opportunity for residents to use the car park to charge rather than use an on-street charger and car parks are covered below. Figure 3.9 shows the car park EV usage within Reading by the estimated use type, where overnight charging is assumed to be usage by residents. This would indicate that the car parks are used as charging hub for residents when parking is free overnight, and this usage is similar to visitor usage during the day. At present, there is not an on-street charging alternative for people living locally to the car parks and it may be that when this is introduced that car park usage will fall. However, it also indicates that people will use a local hub for charging and that this could be an option where it is difficult to provide on-street parking.

Figure 3.9 - EV Charge Point Usage by Day/Overnight charging – Reading Car Parks
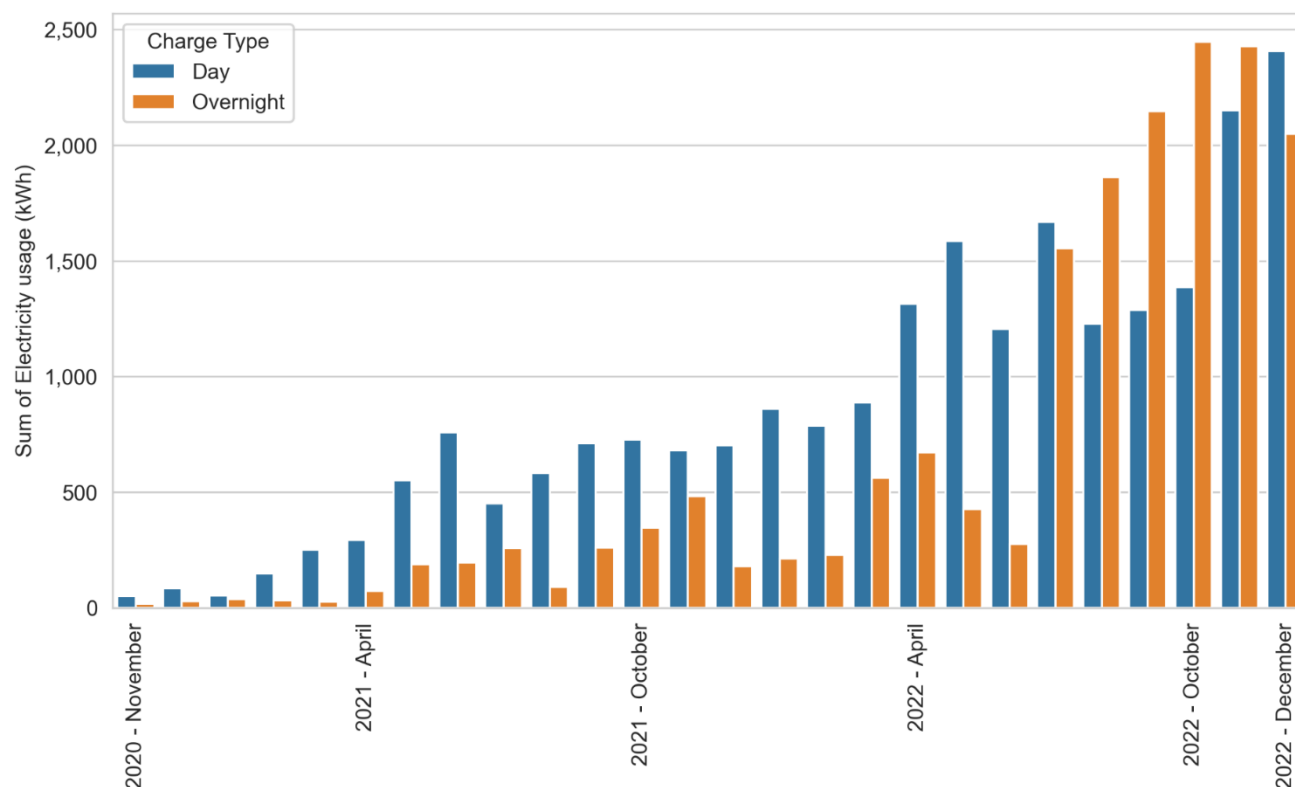
Commuters and Visitors to Reading and commercial users

We consider that there are two types of infrastructure requirements:

- Rapid and Ultra-rapid EV chargers which will be required to provide a full charge to a vehicle which is in-transit on a longer journey or has visited Reading from some distance and requires a full charge in a reasonable time. Also, taxi's and delivery vehicles may benefit from this type of charger if they need a top up during the day with minimum delay to their business. There is an expectation that existing fuel suppliers such as BP and Shell will install rapid and ultra-rapid chargers at charge hubs in Reading. The role of the council may be to install some rapid / ultra-rapid charge hubs where the market is not going to provide them, such as providing for the electrification of taxis.

• Charging for local visitors such as 7KW chargers in car parks where vehicles may need an additional top up for the journey to the car park. Reading Borough Council (RBC)'s primary focus to meet this demand will be in the provision of EV charging infrastructure in the council owed car parks. Analysis has been undertaken of the current car park use where 7KW EV charging has been installed and Figure 3.10 shows the projected requirement for charge points in the car parks. This figure reflects that it is likely that most cars visiting the car parks will have charged at home and the journey to and from the car park will be well within the capacity of the battery. As with on-street charging, keeping supply and demand under review will be key to delivery of the strategy. Also, greater investment will be required for car parks that act as overnight on-street charging for residents and where increased investment in on-street charging still leads to their use.

Figure 3.10: Projected number of Car Park Charge Points (RBC Operated Car Parks)
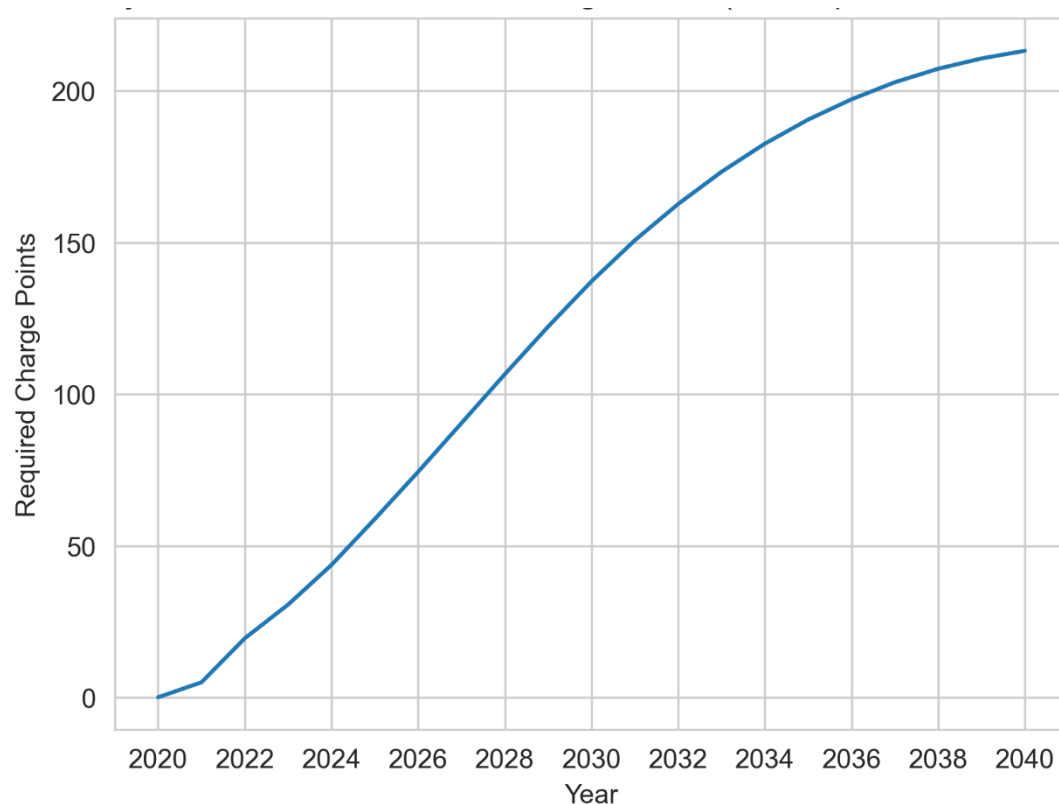
It is expected that workplaces will also continue to provide charging for their employees and visitors.

Regional Context

Geographical and Population Context

3.24 As shown in the map (Figure 3.11), Reading neighbours with Wokingham, South Oxfordshire and West Berkshire local authorities. Despite the geographical size difference between the boroughs, figures from the ONS Mid-Year Estimates for 2019[12] in Table 3.5 show that they have similar population sizes.
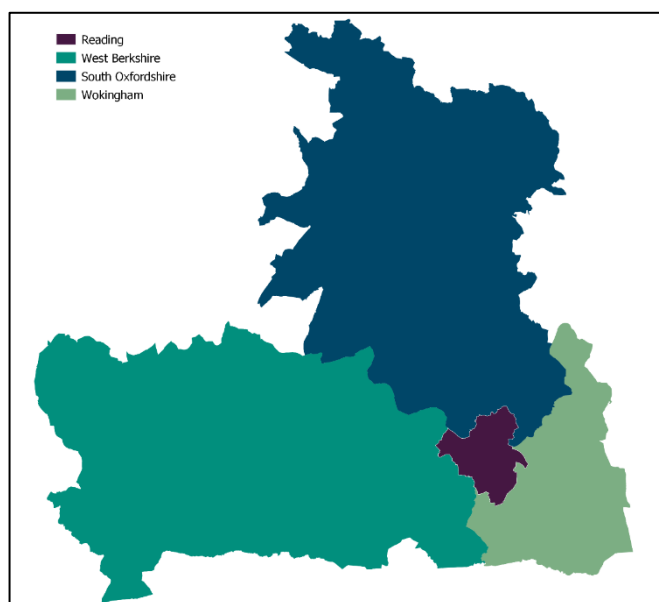
Figure 3.11: Local Authority Map

Table 3.5: Population estimates (2021)

Local Authority	Population Estimate (2021)
Reading	174,200
Wokingham	177,500
South Oxfordshire	149,100
West Berkshire	161,400

Ownership and Access to Private Vehicles

3.25 Car ownership ratios differ across local authority areas dependent on a number of factors some of those include:

- socio-economic status;

- access to quality and frequent public transport systems;

[12] ONS Mid-Year Estimates for 2019 -
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland

- cycle and walking infrastructure; and

- on and off-street parking availability, as well as parking constraints or fiscal measures to limit parking.

3.26 Differences in car usage are evolving with more urbanised populations favouring private car ownership less, with leasing or car-club options being a more economic option to owning, taxing, parking and running a vehicle.

3.27 Data from the (pre-Covid) 2019 National Travel Survey (NTS)[13] showed trip rates for urban (conurbations) and rural towns for car/van drivers during 2018/19 were at 296 and 460 trips respectively. The data show that cars/vans are used over 55% more in rural areas than in urban conurbations such as Reading.

3.28 Reading is a more urbanised authority than the other neighbouring authorities, hence private vehicle ownership and usage is lower, due to some of the aforementioned factors.

Numbers of EVs

3.29 Table 3.6 and Figure 3.12 below show the number of plug-in vehicles licensed at the end of quarter 3, from 2012 to 2020, in Reading, Wokingham, South Oxfordshire and West Berkshire[14]. The data shows that Reading currently has fewer EV registrations than its neighbouring boroughs.
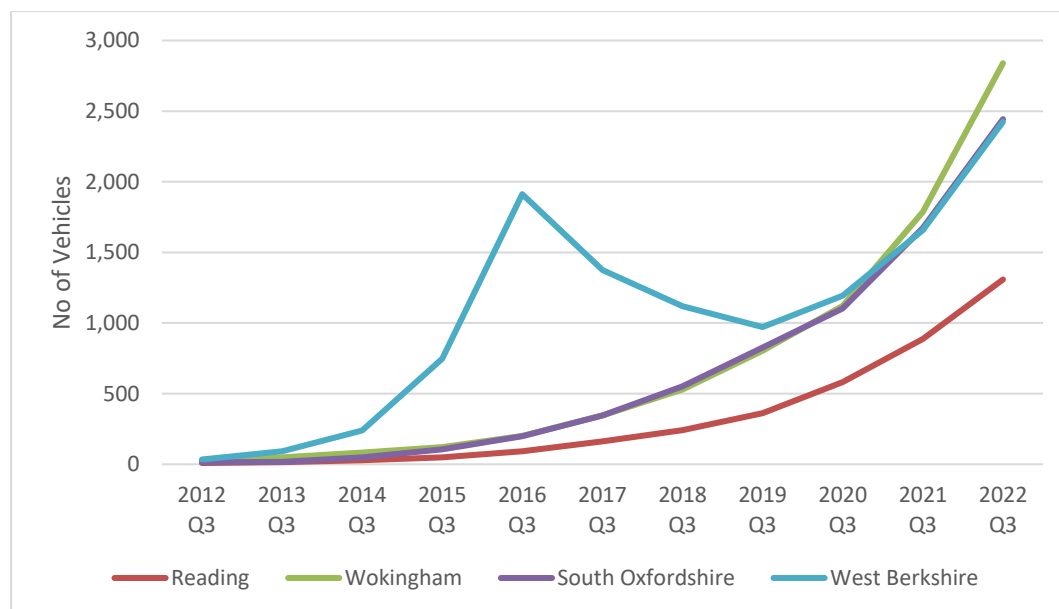
Table 3.6: Registered EVs across Reading, Wokingham, South Oxfordshire and West Berkshire (2012 – 2022)

Local Authority	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	9	16	29	50	92	162	242	361	581	888	1,308
Wokingham	22	49	83	122	201	346	529	803	1,122	1,788	2,839
South Oxfordshire	14	17	50	105	199	346	553	827	1,102	1,673	2,443
West Berkshire	34	93	239	748	1,913	1,375	1,118	971	1,194	1,659	2,424

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[13] DfT (2020) https://www.gov.uk/government/collections/national-travel-survey-statistics and https://www.gov.uk/government/statistics/national-travel-survey-2019
[14] DfT and DVLA (Table 0132) https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#ultra-low-emission-vehicles

Figure 3.12: Registered EVs across Reading, Wokingham, South Oxfordshire and West Berkshire (2012 – 2022)

3.30 When comparing the ratio of EVs versus all vehicles registered in these authorities, to date Reading is slightly behind the other authorities. There is an apparent anomaly in the West Berkshire graph, but the numbers are correct as per the DfT/DVLA statistics and the reason for the high uptake peaking in 2016 is not known but could, for example, be a vehicle leasing company registering all its EVs in a West Berks location for a period of time.

3.31 Table 3.7 presents the percentage of total vehicles that are plug in (EV) since 2012, included in this table are data from a similar sized urban local authority (Brighton and Hove) for comparison.

Table 3.7: Percentage EVs across Reading, Wokingham, South Oxfordshire, West Berkshire and Brighton* (2012 – 2022)

LA	2012 Q3	2013 Q3	2014 Q3	2015 Q3	2016 Q3	2017 Q3	2018 Q3	2019 Q3	2020 Q3	2021 Q3	2022 Q3
Reading	0.01%	0.02%	0.04%	0.07%	0.12%	0.21%	0.32%	0.47%	0.76%	1.16%	1.69%
Wokingham	0.02%	0.03%	0.06%	0.08%	0.13%	0.25%	0.42%	0.66%	0.95%	1.55%	2.45%
South Oxfordshire	0.01%	0.02%	0.04%	0.10%	0.18%	0.31%	0.49%	0.72%	0.96%	1.45%	2.09%
West Berkshire	0.04%	0.10%	0.25%	0.76%	1.92%	1.36%	1.10%	0.93%	1.15%	1.57%	2.27%
Brighton and Hove	0.02%	0.03%	0.05%	0.09%	0.16%	0.24%	0.40%	0.50%	0.76%	1.18%	1.86%

*Note: *Brighton and Hove data has been included to demonstrate ratios of EVs in a similar urban authority.*

3.32 The current (2022 Q3) percentage of EVs in Reading is comparable to other urbanised authorities such as Brighton and Hove, indicating that private vehicle ownership is lower due to aforementioned urbanisation factors (see para. 3.25).

Numbers of Charge Points

3.33 Table 3.8 below shows the number of charging devices (EVCPs) within Reading and its neighbouring boroughs. West Berkshire has the highest total devices per 100,000 population, with almost double the numbers of Reading, Wokingham and South Oxfordshire.

Table 3.8: EVCPs per 100,000 population

Local Authority	Total devices (January 2023)	Per 100,000 Population
Reading	116	64.1
Wokingham	112	62.9
South Oxfordshire	74	49.3
West Berkshire	143	88.3

Reading's Own Fleet and Infrastructure Plans

3.34 Reading Borough Council currently operate two electric cars and seven electric vans, with the remainder of the fleet currently petrol/diesel powered. It is, however, a very modern fleet with high emission standards and as part of the Council's fleet replacement programme over time the majority of the fleet could be switched to electric.

3.35 In addition, the Council now has six electric Refuse Collection Vehicle (eRCV) with the required charging infrastructure. The eRCVs are being evaluated on an on-going basis and plans are being prepared to fully transfer the fleet of refuse collection vehicles to electric operation. The Council is also testing other vehicle types as they come on to the market and has one electric compact sweeper vehicle, with additional vehicles to be integrated into the Council's fleet as existing models approach the end of their lifetime and replacement from 2024 onwards.

3.36 There are 5 charging points for council fleet vehicles to charge at Reading Borough Council offices at Bridge Street and a further 6 load balancing units at Bennett Road. These units are for council fleet vehicle use only, as set-out in Table 3.9.

Table 3.9: Reading Council EVCPs

Street Location	EV Charge Connector	Charge Power Rating	Type	Provider
LG Car Park Civic Offices 1and 2	Type 2	7kW	Fast	Swarco
LG Car Park Civic Offices 3 and 4	Type 2	7kW	Fast	Swarco
Bennett Road Depot 1 and 2	Type 2	7kW	Fast	Mer
Bennett Road Depot 3 and 4	Type 2	3.7-22kW	Slow- Fast	Mer
Bennett Road Depot 5 and 6	Type 2	3.7-22kW	Slow- Fast	Mer

Sustainable Transport Options

Buses

3.37 Electric buses are operating across the UK and Reading Buses is looking to introduce electric buses as part of their fleet replacement programme. Currently Reading buses are improving the fleet emissions through the provision of funding to upgrade their older bus fleet in conjunction with funding sourced through the AQAP.

Micro Mobility (e-Bikes and e-Scooters)

3.38 E-bikes are seeing a significant growth in popularity and hence Reading needs to consider provision of charging infrastructure. Electric ranges on e-bikes are generally good and hence most charging is expected to be at home or potentially at an office with little need for on-street parking. Provision would be required for occasional charging in the town centre for cyclists who have forgotten to charge, and for cyclists undertaking longer distance journeys. How charging infrastructure relates to the Sustrans strategic cycle network will be a key consideration.

3.39 The provision of charging infrastructure for e-bikes will also be important for delivery and cargo bikes for current and future logistics.

3.40 E-scooters are currently illegal on the public highway unless they are part of an official hire scheme. However, it is expected that the government will legalise e-scooters and hence consideration of public charging provision will be considered. As with e-bikes, it is expected that most charging will be at home or in the workplace with limited demand for public charging.

Taxis

3.41 There are currently 13 zero emission/EV Taxis (Hackney Carriage) and no zero emission/EV registered Private Hire Vehicles (PHVs) operating in Reading out of a fleet of 568 (Taxis and PHVs). The 2021 Energy Saving Trust (EST) research[15] showed that 95% of Taxi drivers would switch to EV with two in five planning to switch within the next 5 years, however many consider cost of electric vehicles as a major barrier to purchase or lease.

3.42 The EST research also identified that average taxi mileages reported were low: 81% stated their typical daily mileage was 100 miles or less. Usage patterns of both forms of taxi mean that access to Rapid and Ultra-Rapid charging would be important in the transition to EV Taxis. This will be important in allowing drivers to maximise their productive work time, and that charging infrastructure at company premises, and close to popular routes or ranks are beneficial to supporting the EV taxi business case.

Car Clubs

3.43 Reading currently have no operating electric vehicle car club cars. Co-wheels operates in Reading and is a car-club which uses both new and existing vehicles as part of its fleet. Co-wheels is also one of the first UK car clubs to introduce electric cars.

3.44 Co-wheels currently host 7 locations in Reading including:

- Cemetery Junction, Oxford Road, Rectory Road, Sherfield Hall Reception, UoR Whiteknights campus, Cardiff Road and Filbert Street (Huntley Wharf).

3.45 The introduction of an EV car club scheme at key locations across Reading would increase access to zero emission vehicles for a variety of residents, students, business operators and visitors to Reading.

Infrastructure
Options
Appraisal

4. CHARGING INFRASTRUCTURE OPTIONS APPRAISAL

Charge Point Infrastructure Overview

4.1   There are a variety of EVCP's with different power outputs and physical design. It is beneficial to make up the charging network of different types of charge points, to ensure the needs of all users are best met. This includes charging infrastructure operating at different speeds (residential 5.5kW, trip-destination 7-22kW, and rapid charging >50kW) to provide for a range of needs.

4.2   This section provides information on charging solutions for both on and off-street, exploring the different types of charging infrastructure and their associated design considerations.

4.3   Table 4.1 sets-out the EVCP information with regard to power rating, supply (AC or DC), connectors, usage and EV compatibility.

Table 4.1: EVCP Information

Charger	Slow	Fast	Rapid	Ultra-Rapid
Power Rating	3 – 5 kW	7 – 22kW	Up to 50kW	50-350kW
Electrical Supply Type	AC	Usually AC, DC available at higher rates	Usually DC. AC also available	DC
Charging time	6 to 8 hours	4 to 6 hours	25 to 40 minutes (80%)	10 to 15 mins
Connector	Type 1 or Type 2 Mode 2 or Mode 3	Type 1 or Type 2 Mode 3	CHAdeMO / CCS Type 2 (AC)	CHAdeMO CCS
Best Use	Residential or overnight charging	Home / workplace / destinations	Destinations / long distance trips	Long distance trips
EV Compatibility	All	All	Not all BEVs and very few PHEVs	Very few vehicles currently on the market
Typical cost of public charger	Approx 5-7k (lamp column charger)	Approx £7-10k	Approx £20-25k plus power upgrade costs	Approx £25-60k plus power upgrade costs

4.4   Table 4.2 sets-out the types of chargers and provides further detail on their application and best use.

Table 4.2: Types of Charge Points

	About	How do they work	Design Considerations
Residential Lamp Column Slow/Trickle Charging (5.5kW)	Most charging occurs at home, in residential areas. Lamp post chargers are a different approach to the majority of the existing electric vehicle chargers. Primarily, they are intended to address the challenge of charging electric vehicles when owners do not have access to off-street parking.	Lamp post chargers tap into the existing power network created for street lighting and are either integrated into the lamp column or are attached to it; making them a less expensive alternative to floor-mounted units. As they piggyback on an existing power grid, they are limited in the power they can supply but are sufficient for overnight charging. Integrating these charging units into existing street furniture means that there is no additional street clutter. These units can be accessed using a standard Type 2 charging cable and are typically Pay-As-You-Go.	Consider whether lamp column infrastructure is appropriate for the chosen location. Ensure lamp columns are positioned adjacent to the carriageway or ideally on carriageway build outs, to avoid trailing cables and ensuring the footway is kept clear and footway space is maximised for pedestrians. If a lamp column is back of footway, allow adequate footway widths for bollard at front of footway. To optimise use, two or three lamp column chargers may be installed at each location to ensure residents are always able to access a charging point. Locations for consideration should be resident led, in areas of existing demand and where there is likely to be future demand. Ensure columns are practical for the installation of the infrastructure – columns must adhere to a prescribed standard of earthing, increasing the fuse size to cope with the extra energy usage, and metering an otherwise unmetered energy supply. Steel lamp columns are required; concrete or heritage columns are often unsuitable. Adequate space is necessary, and no existing electrical infrastructure or utility covers within 2.5m of the kerb. Does not require a marked/dedicated EV bay - if the lamp column charge point is located within a CPZ, the local parking controls will apply and anyone can use the parking space. The Council may need to introduce EV charging bays with Traffic Regulation Order's (TROs) to control access to these charge points.

	About	How do they work	Design Considerations
Popup chargers (3-7kW) 8 hours +	Popup chargers are generally used for residential charging. By being fully retractable, their design is pedestrian-friendly. They have characteristics of both lamp column and fast chargers and are deployed as hubs.	Popup chargers are designed to sit flush to the pavement when not in use, minimising the impact of street clutter on the landscape. These units can be accessed using a standard Type 2 charging cable and are app operated. They are typically Pay-As-You-Go.	Hidden when not in use, reducing the risk of vandalism and street clutter. Ensure hubs are positioned at the front of the pavement, to avoid trailing cables and ensuring the footway is kept clear for pedestrians. Each on-street charging hub typically comprises 6 charging bays/sockets for dependability (minimum 4). Require a marked/dedicated EV bay. In terms of installation, they have the same criteria as fast chargers with the added complication of needing to be placed underground.
Standard/Fast (7-22kW) 6-8 hours	Fast 7kW-22kW chargers are suitable for the vast majority of electric vehicle users. Standard chargers are usually installed in public on-street locations, with high visibility and high footfall, or in off-street locations, such as car parks, where users can leave their vehicle for three to four hours.	Floor-mounted charging points require dedicated EV parking bays, with signing indicating length of stay restrictions. Having marked bays ensures electric vehicle owners can access charging points and emphasise that bays are dedicated. EVs must be plugged in and actively charging to use the parking bays. Some networks prefer drivers to use an RFID card and others a smart phone app, while some allow access using either. Charge points have set charges which tend to be a connection fee, price per time, price per energy consumed, or a combination of the above; most charging points offer Pay As You Go.	Install on carriageway build outs to avoid impinging on pedestrian footway space Ensure sufficient pavement space and distance from trees and existing electrical street furniture Consider which charge point networks to introduce. Consider the impact that the charging point will have on the street scene. Consider the spread of charge points across the borough The visibility of charging points is key to increasing public awareness. Consider the balance of on-street and off-street charging points Minimise impact on parking bays – consider flank walls and areas without significant parking stress. Consider sites that are not expected to change in the next 5-8 years. Install infrastructure on public highway to ensure footways are kept clear. Ensure adequate power supply Ensure viable access for the installation team

	About	How do they work	Design Considerations
Rapid/ Ultra Chargers (AC, 43kW; DC, 50-350kW; Tesla Supercharger V3, 250kW) 80% in 30 -45 mins	Rapid chargers can recharge a vehicle in minutes rather than hours. They are vital to long distance travel and for commercial vehicles such as taxis, which will need to top-up during the day. Rapids are ideal for off-street locations near arterial roads, service stations and car parks, due to their size.	Rapid chargers work in the same way as a standard floor mounted charger but charge at a more accelerated rate. The standard rapid charging speed is currently 50kW, which can charge a vehicle to 80% full in 30-45 minutes, although some companies offer Ultra-Fast charging speeds of up to 150kW. They usually use a tethered cable equipped with a non-removable connector.	Consider the impact that the charging point will have on the street scene, especially due to the size of rapid charging points Consider locations based on whether they are in an appropriate position to service fleets and commercial delivery vehicles, for example, close to major road networks bringing traffic in and out of the borough. Consider whether a rapid charging hub, normally consisting of 5 or more charging points, can be implemented. Consider whether there is sufficient space for a feeder pillar or substation, if required Consider the available power capacity from the local grid and whether it can support a rapid charging point
		Other types of chargers	
Trailing cables	It is generally considered that councils cannot condone the trailing of cables from private properties, across the footway to vehicles. The reason being is the trip hazard and the liability that the council may be responsible for in case of an accident. Cable protecting mats and gullies have been proposed to mitigate the risks but the liability remains		

Key Developments and Emerging Technologies

4.5   Delivering an electric vehicle charging network that meets the needs of residents, businesses, and visitors will require incorporating emerging technologies and charging options as they develop, to ensure the infrastructure continues to be fit for purpose and meets the needs and demands of users.

4.6   With advances in technology, some of which we are already witnessing, the charging needs and demands of those within Reading may change. For example, we are already seeing emerging on-street charging technologies such as retractable charging units and smaller units attached onto existing street furniture.

Hydrogen

4.7   Hydrogen fuel cell electric vehicles (FCEV) convert hydrogen gas to electricity and can have a significant range of up to 400 miles between charging and only emit water at the tail pipe. However currently FCEVs are approximately twice the price of a similarly sized BEV, with operational costs also greater. Typical hydrogen consumption is approximately 1 kg per 100 km, with each kilo of hydrogen currently £10-15. Conversely, a BEV would typically require approximately £3 of charge to cover the same distance.

4.8   Hydrogen is currently being trialled for buses and HGVs. Buses in London and Aberdeen have started using hydrogen buses on routes within their cities, as these buses are capable of ranges up to 250 miles between recharges.

Standards and Regulations

Following the Minimum Standards

4.9   As a minimum, parties should pay particular attention to:
- BS 1899
- BS 7671,7 especially s722
- Electrical Safety Regulations
- Electricity Safety, Quality and Continuity
- Regulations 2002
- BS EN 61851 on the EV conductive charging system

- EMC Regulations11

4.10 Plugs, socket types and wall boxes are covered in the standards. Parties should ensure compliance where appropriate with:

- BS EN 60309-2

- BS EN 60309-4

- BS EN 62196-2

Grid Demand and Preparing for the Future

Energy demand

4.11 Following the Government's initial announcement in July 2017 of plans to ban sales of "all new conventional petrol and diesel cars and vans" from 2040 (since brought forward to 2030), concerns were raised by the energy industry that this policy would require significantly more capacity in the power sector and present challenges for balancing the electricity grid.

4.12 National Grids (NG's) analysis estimated that by 2046 peak demand as a result of EVs charging would be 30 GW. By contrast, the most likely scenario in NG's analysis saw peak demand from electric vehicles alone being around 5 GW, about an 8% increase on today's peak demand value. This is because NG believe the switch to EVs will not be as extreme, and consumer behaviour will change to avoid charging at peak times, therefore resulting in a less significant increase to peak demand[16].

Smart Charging and Vehicle to Grid

4.13 With the wider proliferation of electric vehicles adding demand to the grid, smart charging can reduce charging at peak times, and the batteries in the vehicles could become an asset to National Grid, as they have the potential to be used for grid balancing.

4.14 'Smart' use of the electricity system involves using power at times when demand (and therefore prices) is low. Consumers can benefit from cheaper power, and operators benefit from an easier to balance system and avoiding all cars being charged simultaneously, such as at the end of rush hour.

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[16] National Grid, Our Energy Insights, Electric vehicle announcement and what the papers say, August 2017.

4.15 The concept of 'Vehicle to Grid' (V2G), is that when supply is low and demand high, EVs connected to the grid to charge can instead release power back into the grid. Owners of the vehicles can then be paid for this balancing service in a similar way to electricity storage unit operators. In theory, if a vehicle is needed to be charged for a certain time the owner could register that time and this would override the use of the car as a power source. Some suppliers have been developing V2G offers for their customers, though availability is currently limited.

Future EV Market

4.16 The number of electric vehicles across the UK is expected to quickly increase over the next decade, especially due to the ban of new internal combustion engine (ICE) cars and vans in 2030. It is then expected, by 2050, for almost all vehicles to be electric.

Cars and vans

4.17 The current market projections show at least 200,000 new electric vehicles (BEVs) were registered in the UK in 2021. The increase in recent years has also been influenced by the 1% Benefit in Kind (BIK) company car tax in 2021/22, which increased to 2% in April 2022 and will remain at 2% until 2025. At the end of Q2 2020 plug-in-hybrid, battery electric, range-extended electric or fuel cell electric cars accounted for 10.9% of all newly registered cars. A year earlier this was just 2.2%.[17]

4.18 The EV car market has now more models available to consumers with all major manufacturers joining the EV market with BEV and PHEV ranges, these include: Tesla, Nissan, VW, Mercedes, Jaguar, Peugeot, Kia, Mazda, Ford, Honda, Vauxhall, Hyundai, MG, Renault, Polestar and Volvo. In addition, we are seeing new manufacturers to the UK, such as BYD, the second largest EV manufacturer globally, joining the UK market which will further increase competition and drive down prices.

4.19 Although EV prices at the lower end of the market range between £20k to £30k, the costs are expected to reduce further with mass market production of vehicles and falling battery prices, and new models now starting to appear in the market between £15k to £20k.

Buses

4.20 The decarbonisation of buses is a key ambition of both UK Government and bus operators alike. The Confederation of Passenger Transport (CPT) aims for all buses to be ultra-low or zero emission by 2025. However, they also note that the range of EVs is not suitable for longer or more rural applications and that other options, such as hydrogen Fuel Cell EVs (FCEVs), may offer potential.

4.21 Electric buses are operating across the UK and Reading Buses is looking to introduce electric buses as part of their fleet replacement programme.

[17] House of Commons (June 2021), Research briefings - Electric vehicles and infrastructure.

Micro Mobility (E-Bikes and E-Scooters)

4.22 It is anticipated that demand for e-scooters and e-bikes will significantly increase in the future, particularly if the use of e-scooters is legalised, therefore sufficient charging infrastructure will need to be provided to facilitate and encourage usage of these sustainable modes.

Heavy Goods Vehicles

4.23 Zero-emissions technologies exist across the freight / heavy goods vehicle (HGV) sector. Whilst the technologies are more advanced for smaller vehicles, electrification has also been proven for larger HGVs, with hydrogen also seen as a viable alternative. Further development has been supported by funding the Low Emissions Freight and Logistics Trial (£20 million)[18] and Integrated Delivery Programme (IDP) 14 (£18.1 million specifically for HGVs)[19].

4.24 Low emission trucks are also eligible for the low-emission vehicle plug-in grant, with the current grant covering 20% of the purchase price, up to a maximum of £16,000.

Rail Freight

4.25 Network Rail set forward their Traction Decarbonisation Network Strategy (TDNS) within the Environmental Sustainability Strategy (2020 – 2050)[20]. The TDNS will set-out the investment for electrification of the rail network, and opportunities for further decarbonising rail freight. A further shift in moving freight onto rail and commuter services will assist in driving down local carbon emissions.

Taxis

4.26 There were 4,202 electric taxis registered at Q4 2020. Most electric taxis (4,047) within the UK had been registered in England. London represents the region with the greatest number of electric taxi registrations, at 2,715. A significant number have also been registered in the East (647) and the South East (442).

4.27 The low-emission vehicle plug-in grant applies to taxis. There are two models included, the LEVC TX and the Dynamo Taxi, both of which are produced in Coventry. The grant will pay for 20% of the purchase price for these vehicles, up to a maximum of £7,500. Meanwhile, private hire vehicles can be

[18] Department for Transport, Decarbonising Transport: Setting the Challenge, March 2020
[19] Department for Transport, Road to Zero, July 2018
[20] Network Rail (2020) https://www.networkrail.co.uk/wp-content/uploads/2020/09/NR-Environmental-Strategy-FINAL-web.pdf

eligible for a plug-in grant provided they meet the scheme requirements which include being wheelchair accessible.

Electric Motorcycles

4.28 Electric motorcycles will be capable of using EVCP infrastructure, however it is likely this market will remain small until the phasing out of internal combustion engine (ICE) motorbikes is bought forward by Government. Electric mopeds are likely to become popular in the near-term, however these are only to be chargeable on Home/ Slow/Trickle Charging (5.5kW) EVCPs.

Future Proofing

4.29 Future proofing the EV charging network is essential for the following reasons:

- Less expenditure needed in the future to replace obsolete or unused EV infrastructure

- Public confidence in EV infrastructure decreases if it is not being replaced regularly.

- Having a practical and robust network will be important if emergency and essential services become dependent on charging infrastructure.

- Prevents issues of waste management when infrastructure 'false starts' and lead to working assets being removed and scrapped.

4.30 Charge points can be procured, installed, maintained, and operated in the knowledge that they are resilient to unforeseen technical, market, behaviour, and regulatory changes. Technical and physical interoperability, interchangeability and adaptability supports the purchase and rollout of infrastructure in a way that allows providers or investors to gradually build their provisions without unreasonable risk of costly false starts or of needing to replace equipment before the end of its life.

4.31 Outlined below are ways in which Reading can make sure the charging network and associated infrastructure are implemented and designed for long-term use:

Smart Charging

4.32 Smart EV charging refers to a system where an electric vehicle and a charging device share a data connection, and the charging device shares a data connection with a charging operator. As opposed to traditional charging devices that are not connected to the cloud, smart charging allows the charging station owner to monitor, manage, and restrict the use of their devices remotely to optimize energy consumption.

4.33 A key feature of a smarter energy system is the ability to minimise peak demand and network congestion, allowing the use of cheaper, low carbon generation to be maximised. The current electricity system has been designed to meet a peak in demand between 17:00 and 20:30. For the rest of the day there can be large amounts of underused generation and network capacity. Generation during these off-peak periods is usually cleaner and

cheaper. EVs can support the transition to a smarter energy system by, for example, charging overnight (during the off-peak) reducing the need for investment in infrastructure, but also providing power back to the grid via 'Vehicle2Grid' technology. This makes it cheaper for people to charge and integrates EVs into the electricity system in an affordable way.

Charge Point Design and Placement

4.34 When designing charge point locations and identifying potential sites on and off-street, consideration will be given to the following:

- Driver and pedestrian safety
    - Adequate lighting where necessary.
    - Placing charge points on the carriageway where appropriate to keep the footway clear for pedestrians (whilst taking account of e.g. cycle lanes).
    - Avoiding trip hazards from trailing cables.
    - Not positioning charge points too close to busy junctions or crossings.
- Inclusivity
    - Interoperability - Ensuring charge points can be used by all vehicle makes and models.
    - Ensuring drivers do not need to sign up to a specific network for membership in order to charge.
    - Design in accordance with BSI PAS 1899, Electric Vehicles - Accessible charging - Specification
- Coherence
    - Easy to use interfaces and payment methods.
    - Clear signing directing drivers to charge points.
    - Clear signing for length of stay/marked parking bays.
- Attractiveness
    - Charge point may need to blend into existing surroundings e.g. heritage sites/conservation areas.
    - Infrastructure should not clutter the streetscape.
- Reliability
    - 24-hour access to charge points.

- - Efficient maintenance and repair of the infrastructure to reduce downtime.

  - Grid Capacity

    - Adequate electricity network capacity.

    - Collaboration with SSE over grid strengthening to facilitate EV charging growth and optimise charging locations.

4.35 Both technology and behaviour change will result in changing infrastructure needs; therefore, all parties should plan for the future projected demand instead of for the present situation only. This would mean finding a suitable balance between providing enough infrastructure to service the current and expected demand and shielding against over-procuring. When installing public charge points, laying passive cabling at the same of the time will enable the installation of additional charge points at the same location in the future, as and when demand increases. Having said that, installing modular infrastructure, which can easily be updated without having to replace the entire unit is vital. EV range will increase and charging times will fall as vehicle, charge point, and battery technology all improve. Consumer charging behaviour may also change, emphasising the importance of futureproofing.

Coordination and Involvement of Different Organisations

4.36 In order to future proof the EVCP network, Reading must have a clear understanding of the challenges and constraints faced by the different actors involved with the existing and future infrastructure. Installing a considerable number of charging stations to achieve a significant uptake of EVs will demand a mid/long-term planning strategy as well as the coordination and involvement of various entities working together to make Reading's network a success story.

- As private developers bear the cost of installing charging infrastructure on-site, they perceive EVCPs as an amenity rather than a direct source of revenue. Therefore, building owners may try to meet their customers' demands at the lowest price point possible. In the long run, developers are at risk of having to incur even greater expenses to retrofit the units or, worst of all, not being able to afford the cost of those at all. Many building owners do not plan for EV-charging needs in the mid/long term future, increasing the risks of not having an adequate electrical grid able to support the energy requirements to install EVCPs.

- Reading's planning department can limit costly retrofits by setting standards for charging-infrastructure build-out that drive the deployment of cost-efficient power capacity in new development construction. Reading will enforce the new building regulations (part S) adopted in 2022 requiring all new dwellings to have EV charging provision.

- Charge-point operators are likely to play a key role in managing EVCPs and in offering a wide range of charging options best suited for public buildings' needs. Open-charging protocols, standards and charger interoperability will be key to unlocking a healthy range of operators, EVCPs network and energy providers as well as energy-management providers.

- Distribution operators and utility companies should be consulted on nearly all projects that exceed approximately 10 kW to study the implications for power-distribution equipment. Early planning and adoption of charge-management and building-energy-management solutions are likely to save important sums of money in feeder upgrades and demand charges to fleet and commercial customers.

4.37 Short-sighted decisions made today over electrical and civil infrastructure and the capacity and technology of charging solutions could cause EV-infrastructure costs to increase to hundreds of billions of pounds in the future. Added to the costs of electricity peak demand charges and grid upgrades, the impact of this additional investment could stall the progress of fleet electrification as well as affordable, unhindered access to EV charging.

Planning Support

4.38 Infrastructure providers also need support to get installations in the ground, with some EVCPs taking 2 years to get through the planning and installation system. Planning policy at local level maybe beneficial and assist in fast tracking installations. New residential developments are required to provide access to an electric vehicle charge point for each associated parking space [21].

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[21] Approved Document S: Infrastructure for the charging of electric vehicles (publishing.service.gov.uk)

5. FUNDING OPTIONS AND OPPORTUNITIES

Infrastructure Funding Business Models

5.1 This section provides a summary of the different approaches that are available for the delivery of public EV charging infrastructure. There are a variety of infrastructure funding business models available, each with its own costs, revenue projections and associated risks and uncertainties. These will be investigated further to develop each option as part of the delivery of this strategy, including working with Southern Electric Power Distribution to understand the power upgrade requirements and associated costs to enable the delivery of this charging infrastructure.

Ownership and Lease Options

Own and Operate

5.2 Own and Operate is becoming a commonly used approach where a contracting local authority or other public body publishes a tender, inviting suppliers to submit a competitive offer to provide and install the charge point equipment, and manage the network for a set period of time. The capital costs are funded by the local authority, potentially with a capital contribution from a central or devolved government grant. Following procurement, the charging infrastructure is owned by the authority, which receives all revenue and typically pays a monthly fee to a supplier for operation and maintenance.

5.3   Table 5.1 sets-out the Own and Operate option advantages and disadvantages.

Table 5.1: Own and Operate option

Advantages	Disadvantages
• Local authority retains full ownership of the charging network and collects revenues • Local authority can determine locations, irrespective of commercial viability, ensuring equity of access for residents and businesses. • Easier procurement route as more familiar and requires less involvement from legal, procurement and property teams. • Likely to be a quicker process, leading to faster network growth. • National procurement frameworks available to streamline process and ensure confidence in suppliers.	• Limited central government and local authority funds available • Use of public funds comes with accountability to taxpayer and therefore political risk • Requirement for local authority to cover costs for ongoing operation, maintenance and upgrade • Local authority may become the owners of low value or redundant equipment as charging infrastructure market and technology is developing rapidly • Local authority carries the risks of unexpected costs and the reputational risk if the network is unreliable • Charge point operator less incentivised to repair faults, although a service level agreement (CSLA) should be in place • Missed KPIs/SLAs may be more difficult to enforce.

 Leasing

5.4   A leasing model is similar to an own and operate model, however some risks can be transferred as the council leases the charger equipment and back-office software for an ongoing hire fee from a charge point operator, typically for a minimum period of 5 years.

5.5   This period of lease removes or significantly lowers the upfront capital costs required and, in most cases, reduces the maintenance liabilities of the chargers. However, non-warranty repairs following accidental damage and vandalism are often chargeable to the authority and all equipment must be returned at the end of lease in a reasonable condition.

5.6 The ongoing costs are higher, but they are fixed (excluding damage repairs) which provides budget certainty; however, these costs are applicable regardless of network usage and if charge points aren't utilised this can become a heavily subsidised provision.

5.7 Table 5.2 sets-out the Lease option advantages and disadvantages.

Table 5.2: Lease option

Advantages	Disadvantages
• The council retains all revenues • The council has the option to choose locations, regardless of commercial viability, to ensure equity of access for residents • Lower or zero capital costs, dependant on initial hire fees being applicable • Equipment is removed and returned if it becomes redundant • Hardware and software fault repairs included	• The council carries the risk of lower revenue generation than anticipated • The whole life cost of the chargers is much higher due to ongoing leasing costs • The council will never own the charging equipment • Equipment must be removed and returned at the end of the lease period • The council will still be required to meet the cost of accidental damage and vandalism • Significant revenue costs for Council

Private Public Partnerships

Private Sector Match-Funding Partnership

5.8 To date, most central government grant schemes for charging infrastructure cover 75% of the eligible capital costs. The remaining 25% can be covered by the local authority but in some cases, EV charge point operators have provided this match-funding. Where central government funding is not available, private sector funding could be matched directly against local authority capital.

5.9 Table 5.3 sets-out the Private Sector Match-Funding Partnership option advantages and disadvantages.

Table 5.3: Private Sector Match-Funding Partnership option

Advantages	Disadvantages
• Reduces the up-front financial burden that local authorities face when installing charging infrastructure.	• Reduced income from the charge points for authorities • Reduced control over where charge points are located for authorities • There will also need to be agreement on equipment ownership and/or upgrades throughout and at the end of the contract

Concession Framework

5.10 A concession model is an agreement where a charge-point operator will offer to install charging equipment on council owned land or the public highway, free of charge. This model is low risk, but low reward, often these agreements provide a small, guaranteed income or 'rent' to the council in return for allowing the equipment to be installed which is paid regardless of how high or low the usage of the chargers is, however the council is never liable for any costs associated with the chargers.

5.11 Under a concession model, the operator will only offer to install chargers in high demand locations where they are confident that the chargers will return their initial investment costs quickly and provide them with an ongoing profit.

5.12 Concession model agreements are typically long term, requiring a 10-30 year contract which enables the supplier a better chance of recouping their costs and maximising profitability over the duration of the term. Under this type of agreement, the council would act as a facilitator/landlord rather than having an active involvement in the operation and delivery of the charger network. The cost to the end user is often set at the sole discretion of the supplier and expansion of the network or addition of new chargers is also at the supplier's sole discretion. The council are limited in their ability to expand the provision as the supplier will usually only consider this where usage is extremely high and the opportunity is commercially attractive, although the council may be able to pay both the capital and ongoing costs to provide a charger in a specific location. These agreements typically include exclusivity clauses, so the council is unable to add additional chargers from another supplier.

5.13 Table 5.4 sets-out the Concession Framework option advantages and disadvantages.

Table 5.4: Concession Framework option

Advantages	Disadvantages
• Some income shared/rent paid by concessionaire to the council • Charge point operator is responsible for maintenance • Reduced risk to the council in terms of income not meeting ongoing maintenance and operation costs • Some contract renewal terms require the concessionaire to update and refresh equipment and software • No capital costs	• Lower income potential compared to other models • Low usage on some or all chargers may make the operator reluctant to spend money on repairs and maintenance • Concessionaire likely to only be interested in profitable sites or where cross-subsidisation can occur resulting in reduced LA control over locations • The market is limited with only a few suppliers offering concession model agreements • Long contract terms tie the council in beyond the foreseeable future and restrict the council's ability to react to demand or capitalise on increased usage

National Funding Options

Office for Zero Emission Vehicles

5.14 Currently OZEV funding, administered via the Energy Saving Trust, is the key source of government funding available for the installation of EVCPs.

5.15 OZEV is a team working across government to support the early market for ULEV (ultra-low emission vehicle). The OZEV funding is available for eligible projects and Councils must secure a minimum of 25% of capital funds via sources other than OZEV funding, which makes available 75% of the capital costs.

Department for Environment, Food & Rural Affairs (Defra)

5.16 Defra operates an Air Quality Grant Programme which provides funding to eligible local authorities to help improve air quality. The scheme helps local authorities to make air quality improvements and to meet their statutory duties under the Environment Act 1995. Although the grant can no longer be used specifically for charging infrastructure, it has awarded over £70 million in funding to a variety of projects since it started in 1997.

Local Electric Vehicle Infrastructure (LEVI) Fund

5.17 The Local Electric Vehicle Infrastructure (LEVI) Fund is a new government funding stream for local authorities which aims to deliver a step change in the deployment of local EV charging infrastructure across England. It is comprised of capital funding to support investment in charging infrastructure, and capability funding to ensure local authorities have the resource to plan for and deliver charge points. The Fund's two main objectives are to deliver a

step-change in the deployment of local, primarily low power, on-street charging infrastructure across England and accelerate the commercialisation of, and investment in, the local charging infrastructure sector. Reading Borough Council will use its LEVI Fund to deliver the objectives as set out in our EV Charging Infrastructure Strategy. In addition, the On-street Residential Charging Scheme (ORCS) fund is available for projects up to £200k.

Influencing and Encouraging Infrastructure

Reading Borough Leading by Example

5.18 Potential EV owners are often reluctant to purchase an electric vehicle without the confidence that there is sufficient charging infrastructure in place locally. Similarly, electric vehicle infrastructure operators can be reluctant to install new charge points without confidence that they will have adequate usage. Subsequently, it is often questioned whether demand for charge points should come before the supply, or whether supply should lead demand. In order to influence and encourage infrastructure, the Council proposes to take the lead and use a 'supply leading demand' approach to the public charging network working with EV infrastructure suppliers. However, it should be noted that the Council is heavily reliant on Government policy and funding for the implementation of charging infrastructure.

Trials

5.19 Local authorities can undergo electric vehicle trials to help influence and encourage infrastructure. Reading Borough Council are undertaking a trial to allow residents to enter into a licence agreement with the Council to privately charge their EVs parked on the public highway.

5.20 The EV Charging Licence includes a range of criteria and conditions to reduce the risk to the public and the applicant. The licence will allow alternate solutions to trial. The includes free installation of slot drain and cable cover options for getting the cable safely from the property boundary to a vehicle parked on street. Reading had 68 initial requests, however only 4 have gone forward to date for the slot drain type and there is now a request for cable cover. The low take up could be due to homeowners not having a dedicated parking space immediately outside their homes and this will be explored further in the trial. Home owners will be able to still have the opportunity for slot drain and cable covers to be installed after the trial, but these will be at cost to the homeowner.

Policy - Residential Developments

5.21 Following its Road to Zero strategy commitment and consultation during summer 2019 on changing building regulations (Part S), the new building regulations came into force in England as of June 2022.

- Every new residential building with an associated car parking space must have a charge point. This also applies to buildings undergoing a material change of use to create a dwelling

- Every residential building undergoing major renovation with more than 10 car parking spaces to have one EV charge point per dwelling along with a cable route for electric vehicle charge points in every car parking space.

Reallocating Parking

5.22 As the number of on-street electric vehicle charge points increases over time, a number of existing parking bays will need to be converted to electric vehicle charging bays. Currently, people are often not able to use the existing lamp column charge points due to non-electric vehicles blocking the available parking. In the future, RBC will consider introducing bays with traffic regulation orders for existing and future lamp column charge points. Subsequently, when new electric vehicle charging bays are created, it is important to ensure that they do not reduce the provision of essential parking spaces such as disabled bays, loading bays, doctors' bays and ambulance bays.

Partnership with Key Stakeholders

5.23   Key stakeholders need to be engaged and involved in delivering Reading's EV Charging Infrastructure Strategy to support and work in partnership with RBC. Key stakeholders can contribute to and benefit from infrastructure being available for their businesses, customers, staff and local residents.

5.24   Stakeholders can contribute to the provision of or sharing of EV infrastructure or EV services, such as:

- Shared business EVCPs for evening residential charging;
- Hub-sharing: Taxi rank by day/residential EVCP by night;
- Shared spaces for EV car clubs; and/or
- Provision of private sector land for EVCP infrastructure.

Major Employers and Local Businesses

5.25   RBC will work with stakeholder businesses to identify locations where infrastructure can benefit business users and residents.

NHS Trust

5.26   The NHS Carbon Footprint programme, which relates to carbon emissions under NHS direct control, are targeting net zero by 2040 and have the ambition for an interim 80% reduction by 2028-2032[22]. NHS Trusts operate significant fleets of vehicles in the UK internally and in wider supply chain and in partnership with the NHS's national carbon commitments, there are opportunities to support the NHS in greening their fleet locally.

University of Reading

5.27   The University of Reading (UoR) currently have four EVCP locations on campus and operate only a small fleet of vehicles of which two are BEV.

5.28   UoR sustainability policies cover:

- Ban on student vehicles as part of Student contracts; and
- Support for Co-wheels car club.

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[22] NHS, 2020 https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/ (October 2020)

5.29 UoR are supportive of installing further EVCPs and increasing on-campus car club access for students and staff. UoR are involved in developing the Innovation Valley Science Park and are to investigate the opportunity that this site can become an EV charging destination for Reading buses to encourage sustainable travel between campuses and Reading.

Operators of Sustainable Transport Options

5.30 RBC will work with operators of sustainable transport options including buses, car clubs, e-scooter and e-bike hire schemes to ensure sufficient provision of electric charging infrastructure is in place for these modes of travel.

Scottish & Southern Energy (SSE)

5.31 RBC will work with SSE to ensure there is sufficient capacity in the electricity grid to enable the provision of the required amount of electric vehicle charging infrastructure within the borough.

Neighbouring Local Authorities and Highways England

5.32 RBC will work with neighbouring local authorities and Highways England to ensure the provision of strategic electric vehicle charging infrastructure is co-ordinated across the wider region.

Owners and Operators of Existing Combustion Engine Infrastructure

5.33 RBC will work with owners/ operators of existing combustion engine infrastructure, such as petrol stations and car parks, regarding the potential to convert this existing usage into charging for electric vehicles.

Future Partnerships

5.34 RBC will continue to develop future partnerships as joint working will be key to implementing the Strategy. Stakeholder engagement is a key component in the Action Plan presented in Section 7 of this strategy.

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6. CONCLUSION

Current Status of EV Charging in Reading

6.1   Reading currently has a comparable number of EV charging infrastructure to other similar urban authorities in the UK. However, as demand for EVCPs will inevitably increase as we approach key dates in the future, there is a need to consider a pathway to support the uptake of EVs through the wider provision of charging infrastructure.

6.2   Reading has policies that target carbon reductions and has an integrated transport infrastructure which supports modal shift toward public and low carbon active transport modes. This EV Charging Infrastructure Strategy supports these policy areas and provides appropriate provision that enables equitable access to EV infrastructure and support bids and schemes such as bus fleet improvements, EV car clubs, EV taxis, micro-mobility options (e-bikes and e-scooters) and on-street charging.

Projected Requirements for EV Charging

6.3   Reading has a higher-than-average number of properties with no off-street provision for EV home charging, particularly Victorian terraced housing. To help address this the Council has already successfully installed an initial set of lamp column chargers, and is trialling slot drain and cable cover options to allow for on-street parking from home wall boxes. The strategy supports a significant investment in charging for residents to provide equity in charging for residents across the borough and enable rapid take up of EVs with around 3,000 on-street chargers proposed to take Reading to around 2030.

6.4   The Council has developed a strategy that shows its commitment to working with transport operators, businesses, energy suppliers and EV charging suppliers to support the delivery of EV charging infrastructure for operators and visitors to Reading. It is estimated that around 200 chargers will be required in the Council's car parks and other infrastructure will need to be defined for taxis, buses and to meet rapid charging requirements of through traffic and visitors and delivery vehicles.

Future Developments

6.5   The Reading Transport Strategy 2040 aims to deliver equitable access to zero-carbon transport options and this EV infrastructure forms a key part of that wider strategy.

6.6   The Council will lead, support and enable access to EV infrastructure. However, as the EV market evolves and more commercial companies enter the market, the Council does not necessarily need to provide all of these assets. The Council is therefore seeking to deliver a 'concession framework' entering into agreements with operators to provide charging facilities at key locations throughout the borough as the main mechanism for EV infrastructure provision.

6.7   The Council will also look to develop the best fit business model and policies which enable EVCPs to be installed and used for domestic charging (on and off-street), destination charging and en-route charging. Supporting policy to fast-track EVCP installations would benefit and encourage operators to deliver infrastructure to match demand of EV take up in the future.

6.8   The provision of charging infrastructure for electric buses, car clubs, taxis, e-bikes and e-scooters also forms a core element of this strategy and will help to promote these sustainable forms of travel. For instance the provision of rapid chargers for car club and taxi use at strategic locations.

6.9   Reading will seek to form partnerships in both the public and private sectors to develop and install infrastructure where needed. It should also work with large public bodies (i.e. NHS), Universities and other local authorities to identify demand and joint opportunities. Commercial operators are installing infrastructure in and around Reading and as the EV market increases and competition grows, these operators will be supportive of policy and engagement with the Council to assist in installing more EVCPs.

6.10   The Electric Vehicle Charging Infrastructure Delivery Plan, as included at section 7 of this strategy, sets out the strategy objectives and actions to be taken forward to enable the core aims and objectives of this strategy to be achieved. An important element of the delivery of this plan will be to ensure, as far as is possible, that charging infrastructure does not become outdated and therefore creates legacy issues where it has been installed.

6.11   This strategy is a live document and will be updated regularly to reflect the latest and newest developments in the uptake of electric vehicles and changing charging and vehicle technologies. Progress will be monitored alongside delivery of the wider Reading Transport Strategy 2040 and the Reading Climate Emergency Strategy, including the objective to achieve net-zero carbon by 2030.

Infrastructure Delivery Plan

7. CHARGING INFRASTRUCTURE DELIVERY PLAN

7.1 This section details the objectives that Reading Borough Council have set and provides guidance on how these objectives are to be achieved.

7.2 Five key objections that Reading are setting out to achieve through the Infrastructure Delivery Plan are provided the following Tables 7.1 and 7.2.

Table 7.1: Five Key Objectives

Objectives	Details
Objective 1	Develop a Reading-wide approach to facilitate and encourage the growth in use of electric and zero emission vehicles by Reading's residents, businesses, and visitors.
Objective 2	Increase public EV charging point and improve charging infrastructure in line with TAG projections, and as amended through monitoring, by developing and implementing a policy for appropriate, equitable and disability aware accessible provision across the borough.
Objective 3	Seek to provide a renewable energy source for charging points on Council land or highway by 2030.
Objective 4	Respond flexibly to fast-paced and changing technologies within the EV sector.
Objective 5	The Council will lead by example by using EV technology as much as possible to further reduce the environmental impact of our day-to-day operations.

Delivery Plan

7.3   Table 7.2 sets out the Infrastructure Delivery Plan linking the five "Objectives" to "Actions", with "Time scales" for delivery (Short term: <2 years, Medium: 2-5 years, Long term: 5+ years) and provides "Immediate Recommended Actions" to kick start the process.

7.4   The Delivery Plan sets out a pathway to developing policies and further actions to be taken forward. These policy areas will be developed following public engagement and consultation.

Table 7.2: Infrastructure Delivery Plan

Objective	Actions	Timescale	Immediate Recommended Actions
1. Develop a Reading-wide approach to facilitate and encourage the growth in use of electric and zero emission vehicles by Reading's residents, businesses, and visitors.	**1.1 Residential** ■ Install charge points in areas without off street parking to facilitate uptake of EVs for residents living in these areas. ■ Provide a balance of commercially viable and more community centred options to deliver equality in charging provision ■ Provide a balance of residential and fast charging strategy. ■ Install charging points in clusters of 2 or 3 to ensure points are accessible for residents. ■ Consult with residents and respond to local demand by considering these locations for charging points if suitable, especially if residents do not have access to off-street parking. ■ Explore potential for local amenities such as community halls, parks and business parks within proximity to residential areas in which charge points could be installed to enable overnight charging where on-street charge points are not suitable ■ Understand demand on housing estates and consider the provision of charging infrastructure where appropriate	Short-term	■ Undertake a review of potential charge point locations taking account of on and off street parking, socio-economics, power constraints and charge point design and placement considerations. ■ Explore options for suitable charge point suppliers and understand the different charging/delivery models that are available. ■ Tender for a suitable supplier to install appropriate infrastructure in residential areas. Target of 2,500 – 3,000 on-street chargers to be delivered by 2026. ■ Install infrastructure at suitable identified residential locations. ■ Engage with eligible residents (tenants and owners of rented flats) about The Electric Vehicle Homecharge Scheme (EVHS) that provides grant funding of up to 75% towards the cost of installing electric vehicle charge points at domestic properties across the UK. ■ Create a timescale to review on-street parking as this will be necessary alongside EVCP delivery.

	▪ Ensure that charging units are included for consideration at the planning stage as part of all new housing developments and all housing re-developments		▪ Seek to secure Govt EV infrastructure funding (EG LEVI – Local Electric Vehicle Infrastructure Fund)
		Med-term	▪ Investigate planning restrictions due to high number of conservation areas and listed buildings limiting on-street parking solutions. ▪ Engage with planning to improve the installation of charging points in new developments. ▪ Identify priority locations to target
	1.2 Businesses ▪ Provide public charge points for drivers who need to recharge during the day without returning to a depot or home (e.g. businesses or taxi/private hire drivers) ▪ Explore the potential for private car parks to install rapid charge points for workers or customers ▪ Promote business fleet decarbonisation - Educate and inform businesses about the long-term benefits of decarbonisation. ▪ Consider incentives such as introducing tax breaks (business rates) for businesses fulfilling decarbonisation targets	Short-term	▪ Carry out a survey of business to identify where they have charging points and their policies for installing them. ▪ Carry out a mapping exercise to identify parking sites and business park opportunities. ▪ Develop a strategy that engages specifically with business owners / charge point operators (CPOs) ▪ Investigate grid implications and charging strategy for potential locations for rapid charge points and whether they would be adequate for an EV taxi scheme.
		Med-term	▪ Engage with key stakeholders including Reading Chamber of Commerce, UoR, NHS, Reading Buses, Taxi Association. ▪ Promote vehicle schemes and tax incentives with businesses. ▪ Identify priority locations to target
	1.3 Visitors/Destination Charging ▪ Install charge points in council car parks ▪ Ensure charge points are installed in high visibility, high footfall areas without compromising road or footway space	Short-term	▪ Carry out a mapping exercise that builds on current RBC owned car park provision and usage, include separating EV charging during the day and locations where local residents use free parking overnight to charge. Initial evaluation shows a target of 150 -200 fast car park chargers being required by 2040.

	- Identify opportunities for charge points near leisure centres, near Park and Rides, supermarkets and places of work - Develop sites with a minimum capacity of two vehicles per site - Review opportunities to power charge points in car parks through solar powered canopies		- Engage with operators of private car parks to understand their EV charging usage (where provided) and their strategies for expansion. - Engage with commercial EV rapid charge hub operators (EG Shell, BP at traditional garage forecourts) to understand what is likely to be delivered commercially in the town. - Develop a strategy and seek to secure Govt EV infrastructure funding (EG LEVI – Local Electric Vehicle Infrastructure Fund)
		Med-term	- Explore options for suitable CPOs and understand the different charging/delivery models that are available - Identify priority locations to target
	1.4 En-route/Strategic Route Charging - Partner or support the opportunities to install en-route charging hubs on corridors into Reading - Partner or support the opportunities to install en-route charging hubs with neighbouring authorities such as on motorway services, new employment and education destination sites or other authority Park and Ride locations.	Short-term	Develop a Berkshire-wide strategy that engages specifically with business/ charge point operators
		Med-term	- Work with owners/ operators of existing combustion engine infrastructure, such as petrol stations and car parks, regarding the potential to convert this existing usage into charging for electric vehicles. - Engage with neighbour authorities and Highways England, motorway service station operators/CPOs on strategic network locations to be developed
	1.5 Charging Infrastructure for Other Sustainable Modes - Explore and develop opportunities for electric charging infrastructure for sustainable modes of travel. - Deliver electric charging infrastructure for sustainable modes of travel.	Short-term	- Engage with bus operators to review business case to install EVCPS for buses in Reading. - Engage with car club operators to prepare business case to install EVCPS for car clubs. - Engage with taxi drivers to prepare business case to install EVCPS for taxis. - Review opportunities to install EVCPs the use of e-scooters and e-bikes. - Review opportunities to install EVCPs the use of electric motorbikes.

| | | Med-term | Secure funding for and deliver infrastructure requirements to encourage the use of buses. Secure funding for and deliver infrastructure requirements to encourage the use of car clubs. Secure funding for and deliver infrastructure requirements to encourage the use of taxis. Secure funding for and deliver infrastructure requirements to encourage the use of e-scooters and e-bikes. Secure funding for and deliver infrastructure requirements to encourage the use of electric motorbikes. |

Objective	Actions	Timescale	Immediate Recommended Actions
2. Increase public EV charging point and improve charging infrastructure by developing and implementing a policy for appropriate, equitable and disability aware provision across the borough.	• Prioritise residents without access to off-street parking, those in high density dwelling areas, and those that already own an electric vehicle. • Review on-street charging partnership and funding options • Require charging infrastructure for new housing developments, through planning policies. • Install an even spread of fast and residential charging points throughout the borough where footway space is sufficient. • Support EV car-club opportunities across Reading esp. in low-income areas. • Design in accordance with BSI PAS 1899 for accessible EV charging.	Short-term	• Build on initial forecasting work undertaken for this strategy to develop a town wide delivery plan. • Map out opportunity areas where EV charging can be provided. • Engage with car club operators to review business case to install EVCPS for car clubs (see objective 2).
		Med-term	• Review funding model options and EVCP market operators to determine potential delivery partners for on-street charging options.

Objective	Actions	Timescale	Immediate Recommended Actions
3. Seek to provide a renewable energy source for charging points on Council land or highway by 2030.	• Explore solar charging hubs as a resolution to grid capacity implications. • Consider energy storage and charging hubs for EVs and hydrogen refueling.	Long-term	• Review options and opportunities for solar charging hubs. • Review options and opportunities for refuelling hubs.

Objective	Actions	Timescale	Immediate Recommended Actions
4. Respond flexibly to fast-paced and changing technologies within the EV sector.	▪ Ensure charge point infrastructure and designs are futureproofed. ▪ Once charge points are installed, monitor usage data to ensure locations are suitable and charge points are being used. ▪ Install active and passive charging points in new developments to account for future growth and up-take. ▪ Embed capacity for EV infrastructure into other Highways and Transport projects and programmes and ensure these are aligned with the EV objectives as far as possible, to encourage and support further expansion. ▪ Ensure partnership infrastructure agreements include flexibility to be upgraded and not left redundant.	Short-term	▪ Analyse usage data from charge points in designated monitoring sites to gain an understanding of charging patterns - Create a projection of how many EV charge points will need to be installed each year based on this data. ▪ Understand electricity and gas grid constraints for future development.
		Med- term	▪ Work with DNO and electricity suppliers to target grid reinforcement areas for future (equitable) access to EVCPs.
Objective	**Actions**	**Timescale**	**Immediate Recommended Actions**
5. The Council will lead by example by using EV technology as much as possible to further reduce the environmental impact of our day-to-day operations.	**5.1 Council Actions** ▪ Install additional charge points in car parks and on all Council owned sites for use by council staff and visitors ▪ Understand the challenges faced by Reading Borough Council employees in the purchase of EVs ▪ Identify further locations to install EV charge points to benefit Reading Borough Council workers ▪ Explore grid implications of providing charge points for both council fleet and workers private vehicles ▪ Undertake analysis into travel patterns for fleet vehicles to understand which vehicles should be prioritized for electrification	Med-term	▪ Support EV upgrades across Council vehicle fleet ▪ Provide information on EVs and EVCP availability for staff ▪ Engage with and encourage feedback from Reading Borough Council staff/workforce ▪ Discuss barriers to EV purchase with Council staff ▪ Review options to provide a salary sacrifice scheme for staff to purchase an electric vehicle
		Long-term	▪ Develop policy to ensure no new ICE vehicles are purchased as part of the fleet
	5.2 Engagement and Promotion ▪ Engage and promote the benefits of low and zero emission travel options with the public	Med-term	▪ Provide information on benefits of EVs and funding available for vehicles and charge points

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Strategic Environment, Planning and Transport Committee

Reading Borough Council
Working better with you

29 June 2023

Title	Strategic Transport Schemes Update
Purpose of the report	To make a decision
Report status	Public report
Report author	Chris Maddocks
Lead councillor	Cllr John Ennis
Corporate priority	Healthy Environment
Recommendations	The Committee is asked to: 1. Note the progress made on delivery of the current programme of strategic transport schemes as summarised in this report. 2. Note the decision of the Assistant Director for Planning, Transport and Public Protection to extend the BUZZ 42 bus service contract, which runs between Kenavon Drive and Richfield Avenue, until November 2025. 3. Note the decision of the Assistant Director for Planning, Transport and Public Protection to agree spend approval for the additional £1m capital grant funding which has been secured from the Department for Transport for the Bath Road active travel scheme. 4. To approve the progression of a procurement to establish a framework agreement for the provision of transport consultancy services, and the provision of delegated authority to the Assistant Director for Planning, Transport and Public Protection, in consultation with the Lead Member for Climate Strategy & Transport, and Assistant Directors of Legal & Democratic Services and Procurement, to approve the award of the resulting contracts.

1. Executive summary

1.1. The purpose of this report is to provide an update on progress with the delivery of the current programme of strategic transport schemes in Reading. This includes major public transport enhancements for both bus and rail services, active travel improvements to enable more walking and cycling, and associated incentivisation and communications initiatives to encourage more healthy lifestyles.

1.2. Key milestones set out in this report include the launch of the Reading All-Bus ticket scheme which sets a daily cap for bus travel in Reading; securing an additional £1m funding from the Department for Transport (DfT) for the Bath Road active travel scheme; and the significant milestone of the opening of Reading Green Park Railway Station to the public on Saturday 27th May.

2. Policy context

2.1. The Council's current Local Transport Plan (LTP) sets the transport strategy for Reading up to 2026. Development of a new LTP, the Reading Transport Strategy 2040, is being progressed with the core principles of the strategy linked to wider objectives

including the Reading 2050 Vision, the Climate Emergency, health and wellbeing, and improved air quality. The strategic transport schemes included within this report are fully aligned with both the existing and new LTPs, and delivery of each of these individual schemes is a vital part of achieving the overall vision and objectives of each strategy.

2.2.   Whilst the LTP sets the context and overarching vision for future transport provision in Reading, sub-strategies provide more detailed implementation plans for specific topics. These form the basis for preparing funding proposals to deliver key elements of each sub-strategy, including the Bus Service Improvement Plan, Local Cycling & Walking Infrastructure Plan and the Public Rights of Way Improvement Plan.

2.3.   The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:

- Healthy Environment
- Thriving Communities
- Inclusive Economy

2.4.   These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:

- People first
- Digital transformation
- Building self-reliance
- Getting the best value
- Collaborating with others

2.5.   Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the Council's website. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

3.   The proposal

Bus Service Improvement Plan Programme

3.1.   The Council published and adopted its Bus Service Improvement Plan (BSIP) in October 2021, setting out our plans to enhance services and encourage more people to travel by bus in Reading. The BSIP was aligned with the objectives of the National Bus Strategy 'Bus Back Better' and in April 2022 Government announced an indicative funding award of £26.263m for Reading following a review of all BSIPs submitted by local authorities. This was one of the highest funding awards (per head of population) in the country.

3.2.   Following the indicative funding award, discussions were undertaken with local bus operators to agree the key schemes and initiatives to be delivered through the BSIP programme. As required by Government, the Council has developed an Enhanced Partnership (EP) agreement with all local operators and convened an EP Board with the major operators to oversee the development and delivery of the BSIP programme.

3.3.   Detailed discussions were undertaken with DfT officials resulting in the EP Board agreeing an EP Variation in December 2022, which includes more detail on the various scheme and initiatives to be delivered with the initial phase of Government funding. Subsequently, the DfT confirmed the full funding allocation of £26.263m to Reading in January 2023, consisting of £15.939m capital and £10.324m revenue funding.

3.4.   The BSIP programme includes a range of capital and revenue measures to encourage greater passenger usage in Reading. The EP Scheme Variation sets out our commitment to deliver, in partnership with the operators, the schemes that the DfT have awarded grant funding for as set out below, although it should be noted that the package of capital schemes will be subject to public consultation:

Capital schemes:

- A package of six new bus lanes on key routes in the borough, including on Oxford Road (x2), Bath Road, Southampton Street and London Road (x2).

- Phases 5 of the South Reading BRT (Bus Rapid Transit) scheme.

- Improvements to passenger facilities at Mereoak Park & Ride site.

- Package of bus signal priority measures at key junctions to complement new bus priority lanes.

- Package of town centre public transport infrastructure enhancements.

Revenue initiatives:

- Introduction of a multi-operator fares reduction ticketing scheme.

- South Reading bus service enhancements, including the continuation of Route 9 services.

- Enhancements to the Buzz 42 bus service between Kenavon Drive and Richfield Avenue, and enhancements to park and ride services, particularly to serve the Royal Berkshire Hospital and University of Reading.

- Develop proposals for future bus priority measures in the borough.

- Comms programme to publicise the capital and revenue enhancements.

- Management of the EP arrangements and BSIP programme delivery support.

3.5.   Good progress has been made with delivery of this programme to date, including the Reading All-Bus ticket scheme which was launched on 13 March. This sets a daily cap for travel within Reading to ensure no one pays more than a set cap regardless of the amount of travel undertaken in a day, and includes travel on Reading Buses, Thames Travel, Arriva and Thames Valley buses. The scheme has proved popular to date, with over 65k tickets sold in the first 3 weeks of operation and it complements the £2 national single fare scheme.

3.6.   Development of plans to introduce enhanced services is being progressed, including for the BUZZ 42 service which operates between Kenavon Drive, the town centre and Richfield Avenue. The current contract for the operation of this service commenced in November 2020, following a competitive tender process and is operated by Reading Transport Limited. The initial period for the contract is due to expire on 3rd November 2023, however the contract includes the option to extend for a period of 24 months until 3rd November 2025. These bus services are proving popular to date with usage levels steadily increasing due to the significant residential developments at Kenavon Drive, and the facilities at Richfield Avenue including the new Rivermead leisure centre and the forthcoming secondary school. The services are fully funded by private sector section 106 contributions which have been secured through the planning process to provide the service until at least November 2025, with these contributions being specifically fettered for the provision of the bus service to give new residents a new sustainable travel choice. The Committee is therefore asked to note the decision of the Assistant Director for Planning, Transport and Public Protection to extend the BUZZ 42 bus service contract until November 2025.

3.7.   Progress has also been made on the capital schemes, with design work being developed for the next phase of works for the South Reading BRT scheme and passenger enhancements for Mereoak P&R site. In addition, an initial public consultation was launched on 19 May to seek feedback on the concept designs for the proposed bus lanes on Oxford Road (x2), Bath Road, Southampton Street and London Road (x2). The consultation closes on 16 June after which officers will review the results, both in respect of the levels of support and opposition for the proposals and the individual comments provided on each scheme concept.

3.8.   The Committee will be kept updated on the development and delivery of the individual schemes and initiatives which make up the overall BSIP programme through regular update reports.

South Reading Bus Rapid Transit

3.9.   The South Reading Bus Rapid Transit (BRT) scheme is a series of bus priority measures on the A33 growth corridor, with the overall vision of creating a dedicated fast-track public transport priority route between Mereoak Park & Ride and Reading town centre. The current scheme which is being delivered in phases as funding is secured, and in future has the potential to become a guided-bus, tram or autonomous shared vehicle system.

3.10.   Funding of over £15m has been secured for the scheme from the Local Growth Fund (LGF) and fettered S106 developer contributions, with phases 1-4 of the scheme successfully delivered. Phase 4 was constructed last year, which includes an outbound bus lane between Rose Kiln Lane and Lindisfarne Way (Kennet Island), and the upgrade of the traffic signals to an intelligent Microprocessor Optimised Vehicle Actuation (MOVA) method of control at the Bennet Road gyratory to improve traffic flows.

3.11.   Funding for phase 5 of the scheme has been secured as part of the overall BSIP grant funding award and design work is being progressed. This phase will link up existing outbound bus lanes delivered through previous phases through the construction of an additional lane over the River Kennet, between the junctions with Rose Kiln Lane (South) and Kennet Island. This work would complete the outbound section of the scheme in terms of the provision of bus lanes, which would enable future funding bids to focus on delivery of the remaining inbound sections which could logically be split into four distinct phases, depending on the level of funding available through individual funding opportunities. The future potential adaption of the scheme into a guided bus or tram system would require further investment in the necessary infrastructure and vehicles at that time.

Reading Green Park Station

3.12.   Reading Green Park Station is a new railway station on the Reading to Basingstoke line. The station and multi-modal interchange will significantly improve accessibility and connectivity to this area of south Reading which has large-scale development proposed including the expansion of Green Park business park, Green Park Village residential development and the Royal Elm Park mixed use development.

3.13.   Funding for the scheme was secured from the Local Growth Fund (LGF), fettered section 106 developer contributions, the DfT's New Stations Fund and directly from Great Western Railway and Network Rail. Construction of the station and multi-modal interchange was managed by the Council and was substantially complete in March, when the project entered a period of thorough testing and authorisation working with the Office of Rail and Road (ORR), DfT and Network Rail.

3.14.   The authorisation process was completed in May and the station was transferred to Network Rail and Great Western Railway (GWR), who own and operate the station respectively. An event was held to mark the formal opening of the station with all key partners and stakeholders on 25 May and the first public services calling at the station commenced on Saturday 27 May.

Reading West Station Upgrade

3.15.   A Masterplan setting out a vision for significant enhancements to the station and wider interchange was prepared by the Council, in partnership with GWR and Network Rail, which includes enhanced passenger facilities, security improvements and enhancements to both the Oxford Road and Tilehurst Road station entrances.

3.16.   Planning consent for the scheme was granted in January 2021 and the current phase of works includes a new station building on the Oxford Road with associated highway

alterations and interchange improvements, increased cycle parking and a new ticket gateline at the Tilehurst Road station entrance. The scheme will provide safety and security improvements at both entrances through enhanced CCTV coverage and lighting, which have been designed with input from the British Transport Police.

3.17.   Construction of the enhanced interchange and highway arrangements commenced on-site last year and are now substantially complete, with the remaining work to be undertaken following construction of the new station building. GWR have taken possession of the southern footway of the Oxford Road entrance and construction works for the new passenger building on the Oxford Road and works to deliver a new entrance and gateline at the Tilehurst Road entrance are progressing well. The overall project is currently projected to be completed in the summer.

3.18.   The current scheme being delivered by GWR will include passive provision for accessibility enhancements within the designs, however Network Rail's position is that a full platform rebuild would be required to deliver the necessary minimum platform widths to enable safe usage of the station for wheelchair users and passengers with buggies prior to lifts being installed. This is unaffordable within the current funding for the scheme. Therefore, the Council will continue to work with railway partners including Network Rail to seek opportunities to secure funding for these elements of the overall Masterplan vision for the station.

Tilehurst Station Upgrade

3.19.   The Council has been working with Network Rail and GWR to develop a series of improvements to upgrade passenger facilities at Tilehurst Station and funding is being sought to develop an agreed Masterplan of enhancements, both within the station and for the wider interchange and access arrangements to/from the station.

3.20.   Network Rail secured £4m funding from the DfT in March for the first phase of works to deliver accessibility improvements through the installation of lifts at the station. They will be added to the existing station footbridge which had been designed with passive provision for lifts, which when complete will provide step free access to all platforms at the station.

3.21.   A prior notification application was submitted to the Council by Network Rail on 17 May and subject to securing the necessary consents, it is anticipated that construction works will commence on-site in the summer.

Shinfield Road Active Travel Scheme

3.22.   The active travel scheme on Shinfield Road will provide a segregated cycle route and pedestrian improvements on a key route between South Reading and Royal Berkshire Hospital, the University of Reading, local centres and Reading town centre. External funding of £1.2m has been secured from Active Travel England (ATE) to deliver the scheme.

3.23.   An initial consultation on a range of active travel proposals was undertaken in spring 2021, resulting in the scheme at Shinfield Road being selected as the initial scheme to take forward. A further consultation on the proposed scheme designs was undertaken between in autumn 2021, which included information, maps and a survey on the Council's website, a public drop-in event at the University of Reading and presentations and workshop sessions with local user groups. Feedback from this consultation was incorporated into the final detailed designs for the scheme and the statutory consultation on Traffic Regulation Orders (TROs) to implement double yellow line parking restrictions along the route was undertaken and proposals subsequently approved in spring 2022.

3.24.   Construction of the scheme is being undertaken by the Council's in-house Highways delivery team, with a degree of sub-contracting being managed by the Highways team. The initial construction works commenced at the University / Christchurch Green end of the route and construction of the full scheme is due to be complete in the summer.

Bath Road Active Travel Scheme

3.25. The active travel scheme on Bath Road will provide a segregated cycle route and pedestrian improvements on this key route between the town centre and the junction with Berkeley Avenue. External funding of £1.3m has been secured from Active Travel England (ATE) to deliver the scheme, alongside £200k from the Integrated Transport Block (ITB) grant from the DfT. An additional £1m grant funding has recently been secured from the DfT for the scheme and this Committee is asked to note the decision of the Assistant Director for Planning, Transport and Public Protection to agree spend approval for this additional funding to be allocated to the scheme.

3.26. The initial consultation on the concept designs for the Bath Road scheme was undertaken alongside the other active travel schemes in spring 2021. This consultation resulted in strong support for the scheme, with 60% of respondents saying they supported or strongly supported the proposed segregated cycle lanes. A further consultation on the updated designs was undertaken in summer 2022, including a public drop-in event at Reading Association for the Blind, Walford Hall, Carey Street. Feedback received through these consultations has been used to prepare the detailed designs for the scheme, including elements of the scheme that require a TRO statutory consultation which was approved from the Council's Traffic Management Sub-Committee in March 2023.

3.27. Detailed design of the scheme is currently being finalised with procurement of a contractor to deliver the scheme to follow on completion of the design work. Delivery of the scheme on-site is currently due to commence in the autumn.

Active Travel Capability Fund

3.28. The Council has secured over £370k revenue grant funding from the DfT to provide a programme of schemes and initiatives to be delivered aimed at supporting a shift in travel behaviour to active travel. This will complement the segregated route facilities being delivered through the Active Travel Fund capital grant funding.

3.29. Delivery of the programme of initiatives is well underway, including the provision of adult cycle training and cycle maintenance training courses to complement the training being provided to children in schools through Bikeability cycle training. The Council is working in partnership with Sustrans to deliver a behavioural change programme through a dedicated officer as a joint Sustrans resource in partnership with Bracknell Forest Council. Activities undertaken to date include engagement through led rides and walks, supporting schools with the delivery of Modeshift STARS travel planning activities, developing a series of active travel communications and working with partners to support events including Reading Cycle Festival and the Sustrans Big Walk and Wheel. A research programme will also be undertaken to identify the key barriers to encouraging walking and cycling in Reading.

3.30. This programme of works includes the delivery of a 'pop-up' secure cycle parking hub in the town centre, following representations to the Council from local groups with a strong desire to be involved in the delivery and on-going management of such a facility. Following the award of funding from the DfT, the Council has worked to secure a prominent town centre location for this facility, secure planning permission which was approved in November 2022, and progress the legal process to finalise a lease agreement which is currently being undertaken. The Council has also sourced proposals for the fit-out of the facility and discussions are on-going with local groups regarding the on-going day to day management and operation of the facility.

School Streets Programme

3.31. The Council launched a School Street application process and guidance in spring 2020, after securing £175k from the DfT's Travel Demand Management Fund. To date, School Street schemes have been implemented at Park Lane Primary Junior School (Downing Road and Lambourne Close), Wilson Primary School (Wilson Road), Thameside Primary School (Harley Road) and most recently on Crescent Road in East Reading. The scheme on Crescent Road is a joint scheme for Maiden Erleigh School in Reading, UTC Reading and Alfred Sutton Primary School.

3.32.	All School Street schemes were initially established as trials under an Experimental Traffic Regulation Order (ETRO). The ETRO includes a 6-month statutory consultation period to provide the opportunity for comments and objections to the scheme to be submitted to the Council. The Council's Traffic Management Sub-Committee approved for the schemes at Park Lane Junior, Wilson and Thameside Primary schools to be made permanent in June 2022 and the Crescent Road scheme in June 2023.

3.33.	Applications to establish new School Street schemes are being encouraged, alongside monitoring of the existing scheme to identify any improvements which can be made to help enable an increase in levels of walking and cycling for children, parents and carers.

Transport Consultancy Services Contract

3.34.	The development and delivery of this programme of strategic transport schemes is lead and managed by Council officers, with external support from specialist transport planning and engineering consultants. This support is vital to supplement limited internal resources and to provide specialist knowledge and expertise in respect of transport and highways professional services.

3.35.	Until August 2019, RBC had a term contract with a single supplier for the provision of these transport consultancy services, however since this time a number of different external procurement routes have been used to engage these services, such as frameworks established by the 100% public sector owned East Shires Purchasing Organisation (ESPO), Crown Commercial Services (CCS) and other frameworks established by local authorities.

3.36.	Recent soft-market testing with a number of multi-disciplinary transport consultants has revealed interest in the establishment of a Reading focused transport consultancy framework, which would enable a more consistent approach to the delivery and development of transport schemes and associated funding proposals. The soft-market testing has provided feedback on a number of different approaches which officers are now reviewing to leverage best value from the market. It is likely that this would involve establishing a framework with two, high quality, multi-disciplinary suppliers with the ability to deliver a wide range of services, as required by the Council's Transport and Highways teams. The scope could also be tailored to ensure that the transport-related requirements of other areas of the Council, such as Planning and Parking, could also be met.

3.37.	Approval is therefore sought from the Committee for the progression of a procurement to establish a framework agreement for the provision of transport consultancy services, and the provision of delegated authority to the Assistant Director for Planning, Transport and Public Protection, in consultation with the Assistant Directors of Legal & Democratic Services and Procurement, to approve the award of the resulting contracts.

## 4.	Contribution to strategic aims

4.1.	The delivery of the programme of strategic transport schemes will help to deliver the three service priorities in the Council's Corporate Plan of Healthy Environment, Thriving Communities and Inclusive Economy as set out within this report.

## 5.	Environmental and climate implications

5.1.	The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers). Transport is the biggest greenhouse gas emitting sector in the UK accounting for around 27% of total carbon emissions. As set out in our Climate Emergency Strategy this figure is lower in Reading with transport accounting for around 20% of carbon emissions, however significant investment in sustainable transport solutions is vital in order to respond to the Climate Emergency declared by the Council in February 2019 and to help achieve our target of a carbon neutral Reading by 2030.

5.2.	The Climate Impact Assessment tool has been used to assess the proposal as set out within this report, resulting in an overall Net Medium Positive impact. This is due to the programme being focused on encouraging the use of sustainable transport, walking and

cycling as attractive alternatives to the private car. The programme will enhance facilities to encourage more use of sustainable transport and active travel options, and therefore reduce the use of the private car and resulting congestion, carbon emissions and other air quality issues. There are inevitably emissions associated with the construction of these major schemes, however we are working to reduce these short-term impacts in order to achieve the longer-term modal switch benefits.

5.3. In addition, the delivery of the major transport schemes as set out within this report form a vital part of our overall transport and climate emergency strategies, which has achieved considerable success in recent years including bus usage in Reading being the second highest in the country outside of London, having increased by 23% since 2010, and around 35% of trips into Reading town centre being made by pedestrians and cyclists.

6. Community engagement

6.1. The schemes included within the current major transport scheme programme have and will be communicated to the local community through public exhibitions, consultations and Council meetings.

6.2. Statutory consultation will be conducted in accordance with appropriate legislation, including Traffic Regulation Orders as appropriate. Notices will be advertised in the local printed newspaper and will be erected on lamp columns within the affected area.

7. Equality impact assessment

7.1. Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act.
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

7.2. The Council, and where appropriate partner delivery organisations, have carried out an equality impact assessment scoping exercise on all of the projects included within the current major transport scheme programme.

8. Other relevant considerations

8.1. There are none.

9. Legal implications

9.1. The creation of and changes to existing Traffic Regulation Orders will require advertisement and consultation, under the Road Traffic Regulation Act 1984 and in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996. These procedures have been and will continue to be completed at the relevant time.

9.2. The procurement of a new Transport Consultancy Services Framework Contract will be undertaken in accordance with all relevant legislation at that time, noting it is anticipated that new procurement legislation is likely to be brought forward by the Government in due course. It is envisaged that the procurement will be undertaken through a two-stage process, with an initial Pre-Qualification Questionnaire (PQQ) stage followed by the main Invitation to Tender (ITT) stage. All documentation will be prepared in collaboration with and agreed by the Council's Procurement and Legal Services departments prior to the procurement being undertaken.

10. Financial implications

10.1. The vast majority of the Council's current programme of strategic transport schemes is funded by external grants which have been secured from various sources, including the LEP and the DfT. All of the capital schemes as set out within the report are included within the Council's Capital Programme which includes the funding profile for each scheme. Both the capital and revenue schemes are monitored regularly as part of the internal budget monitoring processes.

10.2. The Council has secured private sector Section 106 funding contributions specifically fettered for the provision of the Buzz 42 bus service through the planning process, These contributions include £300k from the development at 42 Kenavon Drive, £188k from the Huntley Wharf site and £200k from the Gasholder site on Kenavon Drive.

10.3. In March 2023, the DfT confirmed to the Council that the bid for an additional £1m of capital grant funding for the Bath Road active travel scheme had been approved. This is in addition to the £1.3m grant funding which was secured from the DfT in March 2022 for the scheme.

11. Timetable for implementation

11.1. The latest timetable for implementation of individual schemes is set out within this report.

12. Background papers

12.1. There are none.

Appendices

1. None

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| **Strategic Environment, Planning and Transport Committee**

29 June 2023 | Reading Borough Council
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Title	Borough Wide Smoke Control Area Declaration
Purpose of the report	To make a decision
Report status	Public report
Report author	Ross Jarvis
Lead councillor	Councillor Ennis
Corporate priority	Healthy Environment
Recommendations	The Committee is asked to: 1. Revoke the existing Smoke Control Orders and that they be replaced with a single Smoke Control Order across the whole Borough, subject to the outcome of consultations and confirmation by the Secretary of State. 2. Subject to the outcome of the public consultation, authorise the Assistant Director, Planning, Transport & Public Protection, in consultation with the Lead Councillor and the Assistant Director for Legal and Democratic Services to exercise the delegation confirming the order.

1. Executive summary

1.1 The purpose of this report is to bring forward a proposal to revoke all the existing Smoke Control Areas (SCA) currently covering a large part of the Borough, and to replace them with a new single Order declaring the whole of the Borough a smoke control area.

1.2 SCA's were first introduced under the Clean Air Act 1956 to restrict coal burning following bad smog events. SCA's are still relevant today due to the rise in popularity of wood burning stoves.

1.3 The current Clean Air Act 1993 was recently updated by the Environment Act 2021 to provide a simpler regime for smoke control enforcement, allowing a possible decriminalised regime with a simplified structure for issuing penalty notices.

1.4 There are currently 21 SCAs within the Borough that have been declared since 1959. However, these only cover around 62% of the borough. See Appendix 1 for map of existing areas.

1.5 The benefit of this proposal is to reduce the risk of harmful emissions of uncontrolled burning of solid fuels in open fireplaces in the 38% of Reading currently not covered by SCAs.

1.7 The proposal will also ensure consistency and minimise confusion in relation to the controls in place for the burning of solid fuels across the Borough and to raise awareness of the health impacts of burning solid fuel on air pollution.

1.8 Before the new SCA can be declared a statutory consultation process would be completed (see section 6 below). A public awareness campaign would also be carried

out alongside this process to ensure that residents are aware of any implications there might be on them.

2.   Policy context

2.1.   The Council's new Corporate Plan has established three themes for the years 2022/25. These themes are:

- Healthy Environment
- Thriving Communities
- Inclusive Economy

2.2.   These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:

- People first
- Digital transformation
- Building self-reliance
- Getting the best value
- Collaborating with others

2.3.   Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the Council's website. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

2.4.   The Environment Act 2021 established a legally binding duty on government to bring forward at least two new air quality targets in secondary legislation. The air quality targets set under the Act are:

- Annual Mean Concentration Target ('concentration target') - a maximum concentration of 10µg/m3 to be met across England by 2040

- Population Exposure Reduction Target ('exposure target') - a 35% reduction in population exposure by 2040 (compared to a base year of 2018).

2.5.   Although the above targets are not currently the direct responsibility of local authorities, the decision is being driven by the Council's commitment to improve local air quality.

2.6.   PM2.5 is considered a particularly harmful pollutant with regard to human health. These tiny particles are able to travel deep into the respiratory tract leading to numerous health conditions including asthma, lung cancer, cardiovascular disease, dementia and pregnancy loss.

2.7.   The 2016 Air Quality Action Plan contains an action to raise awareness of the existence of smoke control areas to reduce the emission of pollutants from open fires and wood burners.

3.   The proposal

3.1.   Current position:

3.2.   There are currently 21 SCA in Reading that have been declared since 1959, but these only cover around 62% of the borough.

3.3.   Smoke Control Areas (SCAs) make it an offence to emit smoke from a chimney within the area unless using an appliance on the Department Environment Food and Rural Affairs (DEFRA) exempt list or using an authorised fuel.

3.4.   Households using an exempt appliance or authorised 'smokeless' fuel should not produce a 'substantial' amount of smoke, so would not be subject to enforcement action.

3.5.   Until recently unauthorised fuels could be bought and sold within a smoke control area because the seller or buyer could reason that it would be used outside the smoke control area or will be burnt in an exempt appliance.

3.6.   From 1 May 2021 it became an offence to sell an unauthorised fuel for domestic use under the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020 2020 (2020/1095)). For example, it is now an offence for any person to supply a solid fuel including wood (unless it has a moisture content of less than 20%). It is also now an offence for any person to supply any manufactured solid fuel (MSF) that has not been authorised and classified as an exempt fuel.

3.7.   MSF for use in SCAs is available at any reputable supplier and easy to identify via the 'Ready to Burn' logo.

3.8.   Wood must also be certified under the 'Ready to Burn' scheme (as having under 20% moisture content), although there is an exemption for quantities in excess of 2m3 sold outside SCAs. Quantities sold over this amount must be sold accompanied by guidance on how to store to ensure proper seasoning of the wood. The sale of traditional house coal was made illegal on 1st May 2023.

3.9.   The enforcement of SCAs is currently carried out by officers on an intelligence led basis in accordance with guidance and it is not proposed to change this.

3.10. Records show we have only received an average of 4 complaints per year about smoke from chimneys over the past 10 years. None of these complaints has led to formal enforcement action being taken (prosecutions or fixed penalty fines). Although the legislation was only changed in 2021 to allow fixed penalty fines to be issued, which may make formal action easier, and therefore more likely in the future.

3.11. When a substantial amount of smoke is detected from a chimney the guidance recommends a written warning (also known as an 'improvement notice') is sent to the person responsible, although this is not a legal requirement.

3.12. If they continue to emit a substantial amount of smoke from their chimney, the Council must then:

- Issue a notice of intent.
- If no valid objection received within 28 days - issue a final notice with a financial penalty.

3.13. Households using an exempt appliance or authorised 'smokeless' fuel should not produce a 'substantial' amount of smoke, so would not be subject to enforcement action.

3.14. There is a right to appeal the final notice within the 28-day period to the first-tier tribunal.

3.15. The financial penalty can be appealed on the following grounds:

- Based on a factual error
- Based on a legal error
- Unreasonable

3.16. The final notice is suspended until the result of the appeal or the appeal is withdrawn.

3.17. The first-tier tribunal may:

- Cancel the final notice
- Confirm the final notice
- Change the final notice by reducing the amount of the financial penalty
- Ask the local authority to decide whether to withdraw or confirm the final notice or reduce the amount of the financial penalty

3.18. Options proposed

3.19. It is proposed to declare the whole Borough a Smoke Control Area by issuing a single Smoke Control Order using the process contained in Clean Air Act 1993 Schedule 1. This Order will revoke and replace the original 21 Orders issued previously.

3.20. This will ensure consistency in relation to the legal restrictions of burning solid fuel and the type of equipment that can be used.

3.21. The proposed revocation of the existing orders and the making of a borough-wide smoke control order will help support the enforcement of the new domestic fuel regulations providing an effective and holistic approach to tackling smoke pollution.

3.22. To coincide with the declaration of the new SCA officers will work to ensure residents are informed of the changes and what this means for them. This will be done through the formal consultation process (see section 6) with additional publicity through the Council's communications channels to ensure that people are aware of the changes and the implications of this.

3.23. Long term benefits from agreeing to the recommendations will be a reduction in the quantity of PM2.5 produced in the Borough, resulting in cleaner air and health benefits for those who live and work in the Borough.

3.24. Other options considered

3.25. To revoke all Smoke Control Orders and not replace and therefore have no restrictions. This option would go against the Council's objectives in relation to climate change and air quality.

3.26. To leave the 21 Smoke Control Areas in place covering 62% of the borough. However, this creates inconsistencies across the borough and can be confusing for residents. This approach would also not be progressive in improving Air Quality within the borough.

3.27. It is recommended that the best course of action to enable the health benefits from cleaner air to be realised is to declare a borough wide Smoke Control Area.

4.   Contribution to strategic aims

4.1.   The actions contained in this report contribute to:

Healthy Environment - The proposal would help to improve air quality which would directly contributing to the service priority from the Council's Corporate Plan. Reference

Inclusive Economy – UK wood suppliers (New Scientist 2 September 2022) have reported an unprecedented surge in demand for logs, briquettes and other biomass products as households try to minimise the impact of rising energy bills. This resurgence in burning wood can exacerbate air pollution and damage people's health. It is therefore important that we have better control of our area by having a single Smoke Control Area and inform residents of the correct appliances and fuels to be used.

5.   Environmental and climate implications

5.1.   The proposal aims to improve local air quality by introducing better control of solid fuel burning that contributes to 22-38% of local particulate pollution.

5.2.   Solid fuel can be burned sustainably if it is replaced like for like, although there are greener forms of heating with should be encouraged over solid fuel. The proposal will encourage people not to burn solid fuel from unsustainable sources, helping to contribute to a net zero carbon Reading by 2030.

5.3.   The Climate Impact Assessment toll shows an overall rating of low positive due to the reduction of burning of unsustainable sources of solid fuel that this policy is expected to have. Any other climate related impacts are considered negligible.

5.4.   With a revival in the popularity of 'real fires' there are a number of solid fuel burning stoves in the market that comply with the legislation, and many already in use across

Reading are likely to be compliant. There is a growing public awareness surrounding the impact and harm caused by burning solid fuels and a desire to improve local air quality. This report, and the need to modernise the smoke control orders, reflects this and provides the council with an opportunity to encourage responsible use of solid fuel burning appliances in domestic properties throughout the borough.

6. Community engagement

6.1. There is a statutory consultation process for the declaration of new SCAs.

6.2. A notice must be published in the London Gazette and in a local newspaper for two consecutive weeks. In addition, the Council must post, and keep posted, for 6 weeks notices at conspicuous places so as to give publicity to the order or intention to make it.

6.3. It is intended to use social and local media to further publicise the declaration and provide clarity on the rules of SCA. If more grant funding becomes available to do further publicity, targeted enforcement we will seek to apply.

6.4. Any objections received must be considered during the consultation process. If any objections are received and not withdrawn, the Council cannot make the order without first considering the objection. At the end of the consultation period the Secretary of State is empowered to confirm the order with or without any modifications. It is proposed that the Assistant Director for Planning, Transport & Public Protection will deal with these objections under the auspices of the proposed delegation in this report. If the responses to the consultation reveal issues which are substantial in their implications for the objectives outlined in this report, or significant unforeseen impacts for residents, then the Assistant Director will refer the matter back to Committee for further determination.

6.5. In the event that the Council resolves to make the new smoke control order it cannot come into effect earlier than 6 months from the date of making. This date may be postponed, subject to a resolution to that effect being passed and suitable publicity in line with that set out in the legislation (Schedule 1, Clean Air Act 1993).

6.6. The changes proposed do not impact on people who wish to have bonfires as this is covered by different legislation. However, the proposed publicity campaign would look to discourage bonfires by including messaging about the impact that bonfires can have on air quality and health.

7. Equality impact assessment

7.1. An Equality Impact Assessment has been carried out. People with certain protected characteristics (the old, young and those with certain disabilities) are more vulnerable to air pollution. People in vulnerable groups are also known to live in areas with more air pollution, so the proposal may have a differentially positive impact on these groups.

7.2. Due to the cost-of-living crisis more people are believed to have turned to burning solid fuel for heating. The introduction of a borough wide SCA would therefore affect more people than it would otherwise, potentially requiring them to pay more for fuel to keep warm.

7.3. The proposal would mean that people could only burn clean seasoned wood with the 'ready to burn' logo in exempt appliances, or authorised fuel. This would be more expensive for people who were reliant on foraging for wood as their main source of fuel.

7.4. The proposal would not have any implications on the two thirds of the borough already covered by SCAs as they are already subject to the rules, the proposal just brings the rest of the borough in line with this. Most modern, recently installed appliances would also already be compliant.

8. Other relevant considerations

8.1. Public health

8.2. PM2.5 emissions from solid fuel burning make up between 22-38% of total PM2.5 emissions. It is a particularly harmful pollutant with regard to human health, able to travel deep into the respiratory tract leading to numerous health conditions including asthma, lung cancer, cardiovascular disease, dementia and pregnancy loss.

8.3. All solid fuel burning releases harmful particulates, but this the proposal provides a mechanism to control the burning of the dirtiest forms of solid fuel and the appliances that they are burned in. Therefore, the proposal is likely to result in positive public health impact.

9. Legal implications

9.1. The Council has a discretion under Section 18(2A) of the Clean Air Act 1993 (the Act) whether to declare the whole, or any part of its area to be a smoke control area; by a smoke control order.

9.2. A smoke control order -

(a) may make different provision for different parts of the smoke control area;

(b) may limit the operation of section 20 (prohibition of emissions of smoke) to specified classes of building in the area; and

(c) may exempt specified buildings or classes of building or specified fireplaces or classes of fireplace in the area from the operation of that section, upon such conditions as may be specified in the order;

and the reference in paragraph (c) to specified buildings or classes of building include a reference to any specified, or to any specified classes of, fixed boiler or industrial plant.

9.3. A smoke control order may be revoked or varied by a subsequent order.

9.4. Schedule 1 to the Act sets out the procedure which the Council must follow to make an Order, including publicising its intention to make an order and how objections may be made. If any objections are received and not withdrawn, the Council cannot make the order without first considering the objection.

9.5. If the Council resolves to make the new smoke control order it cannot come into effect earlier than 6 months from the date of making. This date may be postponed, subject to a resolution to that effect being passed and suitable publicity in line with that set out in the legislation (Schedule 1, Clean Air Act 1993).

9.6. Once any objections have been considered, if delegation is approved, the Assistant Director, Planning, Transport and Public Protection will authorise confirmation of the order. New orders must then be considered by and confirmed by the Secretary of State with or without modification.

10. Financial implications

10.1. There are not considered to be any significant budget implications besides officer time in setting up the new order, advertising the new order and providing publicity around it. The publicity will predominantly be online using social media and the website. Operationally any enforcement will be managed within the existing team budget. If further grant funding becomes available additional publicity and targeted enforcement would be carried out.

11. Timetable for implementation

11.1. There is a statutory consultation process (see section 6) which can commence once approval is given. The statutory consultation period is a minimum of 8 weeks (2 weeks of notices published in the London Gazette followed by 6 weeks of the plan being available for public inspection.)
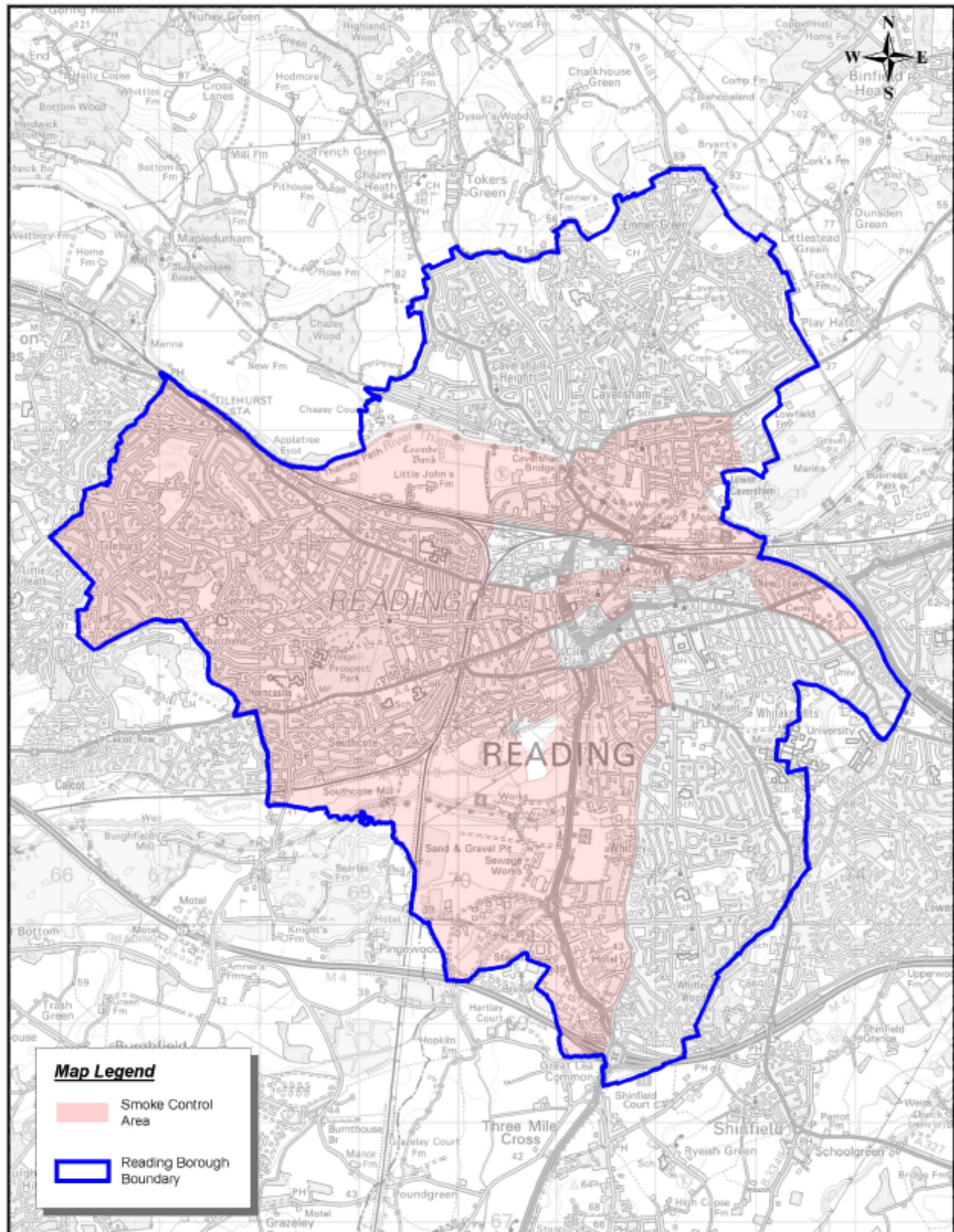
11.2.   If any objections are received within that period must also be considered, which is likely to add time to making the order.

11.3.   After the Council resolves to make the new smoke control order it cannot come into effect earlier than 6 months from the date of making. This date may be postponed, subject to a resolution to that effect being passed and suitable publicity in line with that set out in the legislation (Schedule 1, Clean Air Act 1993).

11.4.   This means that it would take a minimum of 8 months for an order to come into effect, but realistically would take longer due to the administration involved in the process.

12.   Background papers

12.1.   There are none.

Appendices

1.   Smoke Control Areas in Reading

Map Legend

Smoke Control Area

Reading Borough Boundary

| Strategic Environment, Planning and Transport Committee 29 June 2023 | Reading Borough Council Working better with you |

Title	Update on the Council's Low Carbon Capital Investment Programme
Purpose of the report	To note the report for information
Report status	Public report
Report author (name & job title)	Peter Moore (Head of Climate Strategy)
Lead Councillor (name & title)	Councillor Ennis, Lead Councillor for Climate Strategy and Transport
Corporate priority	Healthy Environment
Recommendations	That the Committee notes progress with the development and delivery of the Council's low carbon investment programme as summarised, pursuant to the recommendations agreed at SEPT Committee in June 2021 and the delegations therein.

1. Executive Summary

1.1. The 2022/23 Budget, approved by Council in in February 2022, confirmed the Council's commitment to a c£7.1m programme of low carbon investment (energy efficiency and renewable energy installations) over the 3 years to 2024/25 to help achieve the corporate Carbon Plan target of an 85% reduction in the Council's carbon emissions by 2025. The 2023/24 budget, approved by the Council in February 2023, included an additional £2.2 million for a new corporate solar energy programme, underlining the Council's commitment to meeting Climate Strategy and Carbon Plan commitments. This report updates the Committee on progress with implementation of the programme.

1.2. It is important to note that there are a number of projects within the Capital Programme which contribute to the Council's climate goals (e.g. in transport, fleet, waste, housing and schools) - the programme which is the subject of this report is just one part of this, relating specifically to decarbonisation of key corporate assets.

1.3. Approval to spend against the programme was sought and secured at SEPT Committee in June 2021 based on the programme summarised at Appendix 1 of that report, along with delegations to the Executive Director to agree significant variations to the programme and commit sums from the programme as match funding for external funding bids, in consultation with Director of Finance and Lead Member for Climate Strategy and Transport. This report provides an update on the programme, reflecting changes and significant variances agreed in the interim. A similar update on the programme is provided annually to SEPT to ensure that the Committee has regular sight of the status of the programme covered by the recommendations in the June 2021 report.

2. Policy Context

2.1 The Reading Climate Emergency Strategy 2020-25, which was endorsed by the Policy Committee in November 2020, reaffirmed the goal of achieving a net zero carbon Reading by 2030 as set out in the Council's climate emergency declaration of February 2019. At the same time as endorsing the Climate Emergency Strategy for the Borough, the Policy Committee also adopted a new corporate Carbon Plan for the organisation covering the period 2020-25. This set an ambitious target of an 85% reduction in the Council's CO_2 emissions by 2025, compared to the 2008/09 baseline, on the way to becoming a net zero organisation by 2030.

2.2 Key to achievement of these targets is additional investment in the Council's assets to reduce energy use, improve energy efficiency and increase renewable energy generation. While there are a large number of projects within the Capital Programme which contribute to this aim, the 2022/23 Budget and MTFS confirmed specific provision for c£7.1m investment in low carbon investment up to 2024/25. This investment is reflected in three budget lines in the approved Capital Programme as follows: the Salix Re-circulation fund, the Decarbonisation fund and the Renewable Energy fund. Since the budget was set, there have been significant movements of funds in and out of the programme as projects have been taken forward and/or integrated into other programmes. The main changes are as follows:

- £852,000 was added to the programme for High Voltage EV charging infrastructure at Bennet Road (see Policy Committee Quarter 4 Performance Report July 2022)
- £976,000 was transferred to Leisure programme budgets to enable installation of heat pumps and additional solar panels to Palmer Park and Rivermead Leisure Centres (see Decision Book report 654 March 2022) of which £866,000 was spent to complete the works
- £1,136,000 was transferred to the Levelling Up Fund programme budget to enable heat pump and other measures at the Hexagon theatre (February 2023)
- £204,000 was transferred to Levelling Up Fund programme budget towards the cost of heat pump installation at the Civic Offices (February 2023)
- £825,000 was secured in grant from TVB LEP towards the cost of Civic Offices decarbonisation (March 2023), exceeding the target of £450,000 for grant income set for the low carbon budget lines in the Capital Programme.

2.3 In addition to these changes, £2,171,000 was added to the Capital Programme in the 2023/24 budget for a new corporate solar programme (see Budget Book 2023/24) enabling solar PV on corporate buildings and solar canopies in Council car parks.

3.4 Of the original c£7.1m programme, approx. £2.44m has now been spent on low carbon leisure centre investments and EV charging infrastructure at Bennet Road; approx. £2.49m is committed to decarbonisation projects for delivery by March 2025 within the LUF programme (heat pump and energy efficiency projects at the Hexagon and Civic Offices) and the remainder is earmarked for projects in development (Smallmead solar farm, LED lighting and other energy efficiency projects), subject to business case approval. The new £2.17m corporate solar programme has yet to be mobilised as there are dependencies with asset strategy and car parking reviews which will influence the potential locations for deployment of additional solar capacity.

3. The Proposal

3.1 Current Position: the substantive decisions in relation to the programme were taken by SEPT Committee in June 2021 and associated budget decisions. This report updates the June 2021 report to give an update on the status of the programme. A status update on key projects within the programme is as follows:

Table 1: status update on key projects

Project	Budget (£000)	Estimated annual CO_2 saving (t)	Status
Low carbon leisure centres (heat pumps and solar PV)	976	246	Palmer Park – complete; Rivermead – near complete, heat pumps and solar panels reducing emissions by 57% and 80% respectively.
Bennet Road 'zero carbon depot (EV charging infrastructure)	1,660	396	Building fabric improvements and heat pumps to replace gas complete. Upgrading of electrical network and installation of EV charging infrastructure complete/ underway. CO_2 figure cited is for savings from eRCVs only but further carbon savings will be enabled by the investment made as more of the fleet is electrified.
Bennet Road 'zero carbon depot' (solar pv)	385	59	Installation of solar canopies over parking areas in contract but on hold pending review of depot layout options.
Hexagon Theatre/Hexbox decarbonisation	1,136	124	Heat pump installation and other energy efficiency measures now an integral part of LUF project for completion by March 2025. Potential for ground source heating to become part of wider Minster Quarter district heating scheme.
Civic Offices	1,342	195	Heat pump installation now an integral part of LUF project for completion by March 2024, supported by £825,000 TVB LEP grant.
Smallmead solar farm	1,145	190	Solar farm planned to provide 900kWp to the RE3 facility at Island Road on Council land. Pre-application work underway but delayed due to staff shortages/other priorities driven by grant deadlines.
SALIX Recirculation fund	618	64	Ring-fenced energy efficiency fund operated since 2008 - programme is coming to an end with planned spend of £618,000 over the remaining 3 years. Mainly used for

			LED lighting projects for schools and other buildings in the 2022/23 year. Further spend planned in 2023/24.
Reading Bus Depot	130	15	Working with RTL and Reading Community Energy Society (RCES) to put solar array on bus depot - planning secured, scheduled to complete in 2023/24. Pioneering battery storage solution may enable night-time power consumption to compress gas and/or charge EV buses. Budget allocation is a share of final project costs to be shared with RCES.
Crematorium	55	6	Solar panels and energy efficiency measures programmed for 2023/24.

4.   Contribution to Strategic Aims

The recommendations in this report align with Corporate Plan priorities as follows:

4.1.   Healthy Environment: the programme will help deliver the Council's ambitions to become a 'net zero carbon' organisation by 2030, as part of the wider ambition set out in the Corporate Plan of a carbon neutral Reading by 2030.

4.2.   Thriving Communities: the programme will help deliver the Council's ambitions for Reading's communities to be protected from the worst impacts of a changing climate.

4.3.   Inclusive Economy: the programme will help deliver the Council's ambitions for development of Reading's 'low carbon economy' by stimulating demand for low carbon goods and services.

4.4.   These themes are underpinned by "Our Foundations" explaining the ways we work at the Council:

- People first
- Digital transformation
- Building self-reliance
- Getting the best value
- Collaborating with others

4.5.   Full details of the Council's Corporate Plan and the projects which will deliver these priorities are published on the Council's website. These priorities and the Corporate Plan demonstrate how the Council meets its legal obligation to be efficient, effective and economical.

5.   Environmental and Climate Implications

5.1   The Council declared a Climate Emergency at its meeting on 26 February 2019 (Minute 48 refers), endorsed the Reading Climate Emergency Strategy 2020-25 in November 2020 and adopted a new corporate Carbon Plan 2020-25 also in November 2020. The programme is designed to deliver the key aims of the

Carbon Plan and will contribute directly towards the Carbon Plan target of an 85% reduction in RBC emissions by 2025, *en route* to becoming a net zero organisation by 2030.

5.2   The Council's low carbon investment programme is designed to reduce the Council's energy use and ensure that the energy we do use is from lower carbon sources. As such the climate impact assessment conducted on this report suggests that the programme will have a 'net high positive' impact on the Council's carbon emissions. The contribution of individual projects within the programme is summarised in table 1 above and collectively will reduce emissions by over 1,200 tonnes per annum, which is over 20% of the Council's current annual emissions. Any environmental impacts arising from individual projects within the programme are being addressed via the appropriate mechanisms (e.g. via the development control process where planning permission is required).

6.   Community Engagement

6.1   Section 138 of the Local Government and Public Involvement in Health Act 2007 places a duty on local authorities to involve local representatives when carrying out "any of its functions" by providing information, consulting or "involving in another way". The programme was the subject of public consultation as part of the budget setting process.

7.   Equality Implications

7.1.   An Equality Impact Assessment is not considered necessary for the recommendations in this report as they do not have implications for groups with protected characteristics.

8.   Other Relevant Considerations

- Risk management implications will be integrated into project management processes.
- Health and Safety risk assessments will be carried out as part of project delivery and operational protocols thereafter.
- Transparency of information and freedom of information implications through record keeping and public reporting.

9.   Legal Implications

9.1.   There are no legal implications arising from the recommendations in this report.

10.   Financial Implications

10.1.   There are no additional financial implications arising from the recommendations in this report. The capital funds referred to in this report are part of the approved budget and MTFS. Table 2 summarises actual and planned spend against the original programme, noting that these amounts are no longer readily visible in the budget due to the movement of funds in and out of the low carbon capital budget lines as summarised in 2.2 above.

Table 2: summary of spend/commitments against original low carbon capital programme budget

Status	Budget position	Projects
Spent	£2.44m	• Leisure centre heat pumps and solar • Bennet Rd EV charging infrastructure
Committed	£2.49m	• Hexagon decarbonisation • Civic Offices heat pumps
Allocated subject to business case approval	£2.18m	• Smallmead solar farm • SALIX recirculation projects (LED lighting) • Misc smaller projects
TOTAL	**£7.11m**	

11.   Timetable for Implementation

11.1. Table 1 above summarises the timetable for implementation of the key projects within the programme and will be refined through the regular capital monitoring process.

12.   Background Papers

12.1. There are none.