Bicester and Mid-Cherwell

Movement and Place Plan

Local Transport and

Connectivity Plan –

Supporting strategy

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Vision for Bicester and Mid-Cherwell

We envisage Bicester and Mid-Cherwell as a sustainable and healthy place where communities thrive.

A people-first approach will be utilised, focusing on sustainable connectivity and ensuring new developments are located where opportunities for sustainable development and transport can be maximised. This will prioritise walking, wheeling, cycling, and public transport, providing choice in how residents travel to schools, leisure facilities and local employment.

We will deliver streets that support sustainable growth, enhance biodiversity and connect people to nature, showcasing Bicester's Garden Town status. We will improve the public realm, creating places for people to meet, places to stop and rest, while ensuring this is sensitive to the character and needs of residential areas and the historic core, making Bicester and Mid-Cherwell a more desirable place to live, work, and visit.

Area context

Bicester is an historic market town in north Oxfordshire with a rich history. It lies approximately 18km northeast of Oxford with a population of 56,200 residents[1] and has seen significant growth over the last few decades. The overall population including Mid-Cherwell according to 2021 census data is 58,570. In 2014, Bicester was designated a Garden Town and located in the Cherwell district of Oxfordshire. It has a range of amenities and services including restaurants, library, supermarkets, pharmacies, thriving weekly market and other shops centred mostly around Market Square, at the heart of the town. There has been a significant investment in Bicester town centre with the opening of Pioneer Square in 2013 and associated retail units and amenities. The Bicester and Mid-Cherwell Movement and Place Plan (MAP Plan) will consider the interactions between Bicester and the surrounding villages within Mid-Cherwell which rely on Bicester for essential services, employment, education and leisure.

It will also consider how movement will develop between Bicester and Heyford Park which has been identified as one of the proposed 12 new towns in the government's New Town Taskforce published in September 2025[2]. This Plan will need to take account of decisions that will be made by the new task force. At the time of writing this Plan, Heyford Park is part of potential shortlist of new towns. Should Heyford Park be put forward as a deliverable New Town, this Plan will be updated, and further work will be identified to provide the best outcomes for communities from a movement and place perspective.

Bicester supports a wide variety of employment opportunities. Due to its proximity to the city of Oxford, and its location within the Oxfordshire Knowledge Spine and the Oxford-Cambridge Arc, Bicester benefits from a diverse set of industries including distribution, retail, motorsports, offices, and defence due to its status as a garrison town. The Oxfordshire Industrial Strategy[3] also identifies Bicester as an Eco Zone and Corporate HQ Hub providing an opportunity for 'living labs'. In 2024, planning was approved for Bicester Motion to be a 'living lab' for the UK's first vertiport[4].

One of the major employers in the area is Bicester Village, a world-renowned outlet shopping centre attracting many local and international visitors. The shopping outlet attracts nearly 6 million visitors per year and ranks as one of the top tourist destinations for the UK. Bicester Village is a key economic driver in the area, employing around 3,500 people directly and many others indirectly. Another significant employment site is Bicester Motion, the UK's only business park dedicated to the promotion and preservation of historic motor cars. Alongside this, it is a centre for future mobility technology such as drones and being a 'vertiport' for flying electric taxis. [5]

The town is well-connected by various transport links, typically attracting people who need to commute for work (i.e. to Oxford, London, Birmingham or further afield). In terms of the strategic highway network, it is connected to the A41, which links to the nearby M40 motorway and the A34. Bicester has the advantage of having two railway stations, Bicester North, and Bicester Village. These strategic transport connections link Bicester to key destinations such as Oxford, London, Birmingham, and Milton Keynes.

Bicester's topography is well-suited to walking and cycling as the town is compact and flat. Route 51 of the National Cycle Network from Oxford to Felixstowe passes through the centre of Bicester. With the town centre right in the middle, most residents can access it within a 30-minute walk or a 10-minute cycle. To improve cross town connectivity an 18-month trial began in February 2025 removing the prohibition of cycling on Sheep Street. However, as detailed in the Bicester Local

Cycling and Walking Infrastructure Plan (LCWIP), residential streets lack permeability and the main corridors which run through the town are highly trafficked and frequently congested by vehicles, and do not provide an appropriate, safe or easy to navigate space for people who walk, wheel and cycle.

Over the coming years, the town is projected to grow significantly, up to 18% by 2031[6]. New residential and employment sites are planned to be developed. The proposed North-West Bicester development will deliver thousands of new homes, and the hectares of allocated land for employment along the A41 corridor plus other sites identified in Cherwell District Council Local Plan 2042 will deliver new opportunities in the area.

Key facts and figures

66,100 residents in 2030

58,570 residents in 2021

First documented in **Domesday Book (1086)**

Historic town centre

150 hectares of land for new employment

7,977 new homes from 2020 to 2042 and further 4,075 beyond 2042 at NW Bicester, further 100 in Mid-Cherwell

Designated as a **Garden Town** in 2014

Also as a **Healthy Town** and **Eco-town**

A **garrison town,** hosting the Ministry of Defence

Bicester Village attracted over **7 million visitors in 2019**

Transport links include:

Bus services to **Oxford, Aylesbury, Milton Keynes,** and **London**

Town centre is accessible within **30 minutes by walking,** or **10 minutes by cycling**

2 railway stations

with regular services to **Birmingham, Oxford** and **London**

and in the future, direct connections to **Milton Keynes** and **Cambridge** thanks to East West Rail

Bicester Park & Ride

Direct access to **A41** linking to **M40**

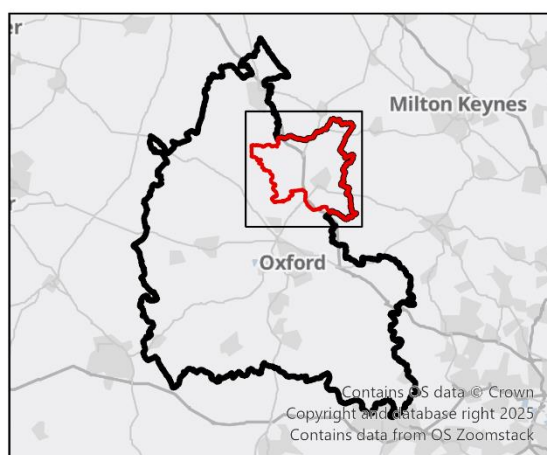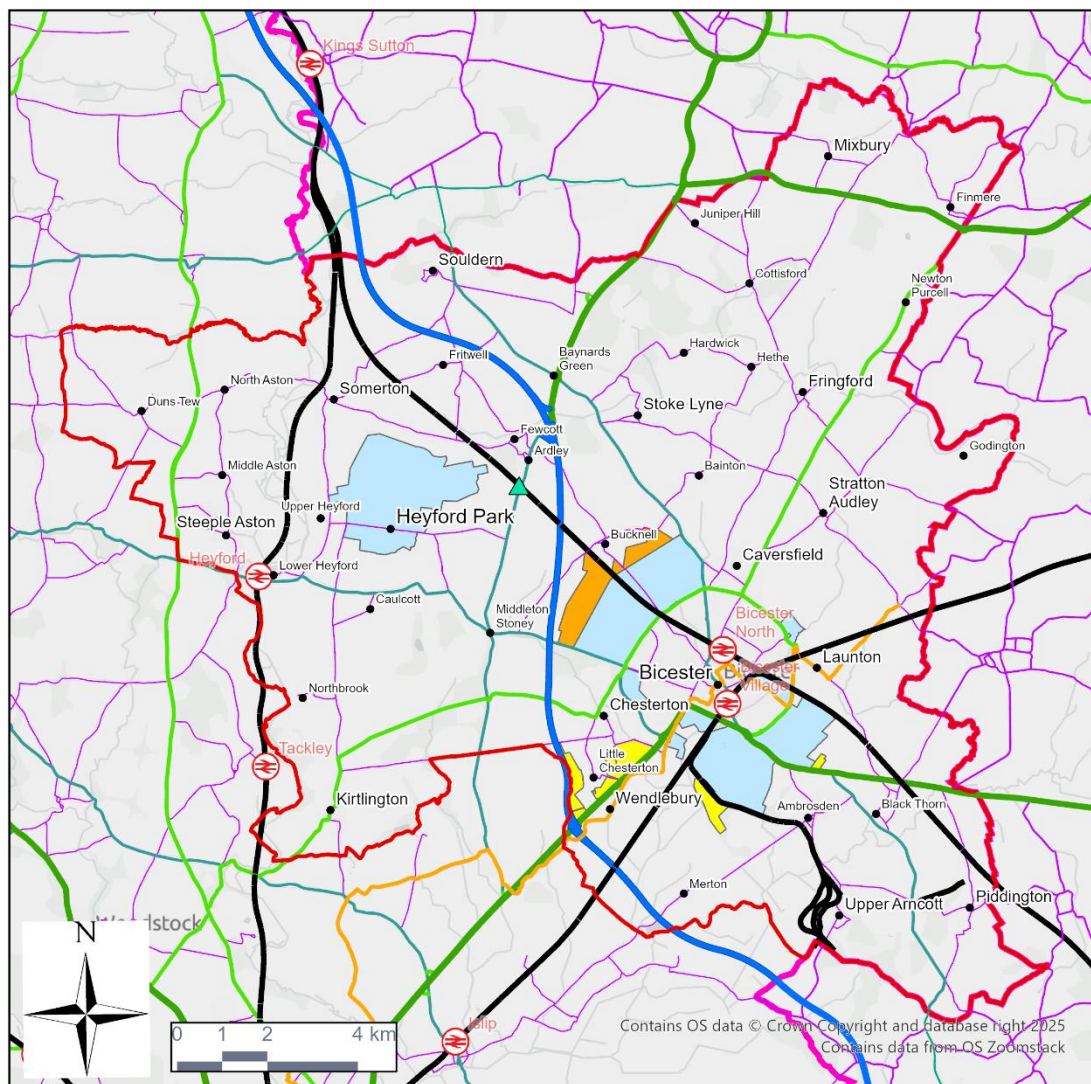**35%** of commuting trips start and end in Bicester

65% of residents travel to work by driving

88% of households own at least one car
(vs 77% of national average)

49% of households own multiple vehicles
(vs 35% of national average)

MAP of Bicester and Mid-Cherwell

Legend

- Settlements
- Railway Station
- Proposed Strategic Rail Freight Interchange
- Railway Line
- Motorway
- A Road Primary
- A Road
- B Road
- Minor Road
- National Cycle Network Route 51
- Saved Allocations

Regulation 19 sites

- Allocated Employment
- Allocated Housing
- Built-up areas
- Bicester and Mid Cherwell Boundary
- Oxfordshire boundary

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Challenges and opportunities

Bicester and Mid-Cherwell is undergoing significant changes that will affect movement and connectivity across the area. These changes will provide challenges and opportunities that we can take advantage of to make Bicester and Mid-Cherwell a healthy, sustainable and connected place.

Future growth

The strategy in Cherwell's Local Plan identifies Bicester as an area to focus further development. 7,977 new homes are planned to be delivered in Bicester from 2020 to 2042 with a further 2,342 planned at Heyford Park. There are a further 100 homes allocated across Mid Cherwell as set out in Policy RUR 1[7] of the proposed Local Plan 2042. This is around a third of the growth for Cherwell district. Additionally, 4,075 homes will be delivered at North-West Bicester beyond 2042. Aside from the increased housing supply in Bicester, 150 hectares of land are planned to be developed for new employment. These figures are subject to the Government's New Town Taskforce. This MAP Plan will be updated to reflect the outcome of the governments proposed New Towns.

The new developments will provide opportunities to enhance existing and provide new transport infrastructure and public realm to support population and employment growth; this will support Bicester and Mid Cherwell to grow sustainably and provide opportunities for residents to thrive. Moving home or starting a new job is regarded as a key life moment when individuals are most likely to switch to a different transport mode[8], the growth in Bicester and Mid-Cherwell will help create the conditions to enable and promote modal shift toward walking, wheeling, cycling and public transport.

To provide the environment for Bicester and Mid-Cherwell to grow sustainably, future residential and employment developments will need to be in locations which are accessible or can be accessible to provide the greatest opportunity to increase walking, wheeling, cycling and public transport. Working with partners, we will transform how people move around Bicester, improving the outcomes of communities as they will have choice in how they travel. Equally, people living in villages within Mid-Cherwell will have choice in how they choose to travel. It will support Local Transport and Connectivity Plan (LTCP) transport targets as well as benefit the climate and public health. Creating equitable transport system will remove barriers to the labour market and education, evidence shows that transport problems are a known barrier to accepting job offers[9]. Analysis of the National Travel Survey showed 19% of unemployed people in England turned down a job or did not apply due to transport problems.

To reduce the potential impact growth may have on A41, central and peripheral corridors, we will need to work with partners and the community to address congestion, safety and invest in walking, wheeling, cycling and public transport to enable modal shift. The delivery of South East Peripheral Road will be required to support growth and limit the impact of through traffic: enabling Bicester to become a town where walking, wheeling, cycling and public transport are the first choice for local journeys. We will need to invest in public realm to create places which enhance community cohesion: creating wider health and wellbeing benefits.

Future growth will create opportunities for Bicester and Mid-Cherwell communities to exploit its position in the Oxford-Cambridge corridor and deliver transport and healthy place shaping schemes which meet the needs of a healthy and sustainable town. Through forward planning, we can

integrate new and existing housing and employment developments with Bicester town centre by prioritising sustainable modes of travel from the start, reducing reliance on private motor vehicles. Providing a high-quality walking, cycling, and public transport network along with enhancing biodiversity in Bicester and Mid-Cherwell, will support growth, improve public health, and make it a more attractive place for residents, workers, visitors, wider community, and investment.

Improving connectivity

The planned growth in Bicester and Mid-Cherwell will provide opportunities to enhance the existing walking, wheeling, cycling and public transport connectivity and complete gaps in the transport network where severance or barriers to access currently exist, this will provide opportunities to maximise Bicester's compact nature and enhance the connections with surrounding villages. We will seek to make walking, wheeling, cycling and public transport the first choice for journeys within Bicester and become a viable option for travel beyond Bicester. New developments will have the services and amenities, creating liveable neighbourhoods where residents will be able to walk, wheel and cycle to local shops, schools and other key amenities. New developments will provide connections to existing routes, enabling residents to access Bicester town centre, rail stations and leisure facilities by sustainable means.

To maintain and improve connectivity for existing and new residents and those living in the surrounding villages, enhancements will be required for walking, wheeling, cycling and public transport. The future planning period will support the delivery of infrastructure which provides a variety of transport options including quality pedestrian corridors, electric bikes, segregated cycling infrastructure, conveniently located cycle parking and electric bike charging facilities. It will provide opportunities to deliver micromobility hubs supporting shared bike/scooter network and allowing for seamless transition between different modes of transport. To provide transport choice public transport will be enhanced and integrated with other modes of transport with frequent services to support a changing economy. Other transport alternatives may include a comprehensive car club offering, reducing the need for car ownership or removing the need for a second car. The provision of transport choice will mean residents will not need to rely on their car, this will improve air quality, health outcomes[10], reduce congestion and enable public transport to run efficiently, and those who need to travel by car will be able to do so.

Transport choice will help Bicester and Mid-Cherwell thrive as it develops and support opportunity for people to live and work within Bicester and wider area. It will further Bicester and Mid-Cherwell's economic reach and increase communities' access to the labour market. Providing choice will reduce the need to travel by car for short journeys and remove the reliance on vehicle ownership. 2021 census data shows 85% of households in Bicester own at least one car or van, including the wider Mid-Cherwell area this rises to 88%. In Bicester, 43% of households owning at least two cars and this rises to 49% including Mid-Cherwell. This is higher than the national average, where 77% of households own at least one vehicle, and 35% own multiple vehicles. This shows the greater reliance on car ownership in rural areas and the opportunity to enable a greater number of people to walk, wheel, cycle and use public transport through improved infrastructure and services.

Health, wellbeing and inequalities

Increasing walking, wheeling and cycling has various positive impacts on health and wellbeing. From an increase in physical activity levels, which are linked to lower levels of cardiovascular disease (CVD), such as diabetes, hypertension and stroke to reduced levels of overweight and obesity.

The design of cities, villages and towns with better active travel and public transport options can contribute to better mental wellbeing and community connection[11]. High speed roads cutting communities in half or creating residential areas where it is not safe for children to play increase the likelihood of loneliness, isolation and anxiety.

Oxfordshire's Health and Wellbeing Strategy[12] identifies Thriving Communities and Climate Change and Health as enablers to good health. Walking, wheeling and cycling supports these priorities by supporting connection in communities and reducing carbon emissions, and air pollution associated with private car use for local trips.

Since December 1997, all local authorities in the UK have been carrying out a review and assessment of air quality in their areas through monitoring air pollution levels[13]. During this process, if an area has air pollution levels above or close to the limit values set out in the Air Quality Standards Regulations (2010) legislation, they must declare an Air Quality Management Area (AQMA)[14].

There is currently one AQMA in Bicester which incorporates sections of Kings End, Queens Avenue, Field Street and St Johns Street.[15] Poor air quality is associated with poor health outcomes. Some health indicators for Bicester are significantly worse than the national average such as deaths from respiratory diseases in Bicester North and Caversfield, and the incidence of lung cancer in Bicester East.[16] Improving air quality is necessary to reduce the risk to public health. Recent monitoring data shown in Cherwell's annual status report[17] shows that air quality in Bicester is improving since 2015 when the AQMA was declared however, more work is required to further lower air pollution levels to enable health benefits.

Road transport is responsible for significant contributions to air pollution.[18] The greenhouse gas emissions from road traffic also contributes to climate change, which exacerbates threats to human health. In addition to poor air quality, car dominance creates a more sedentary lifestyle, increasing other health risks such as obesity and type 2 diabetes[19]. In Bicester, around 1 in 3 children in Year 6 are overweight.[20] Studies suggest that children who regularly walk or cycle to school are less likely to be overweight or obese than those who travel by car[21][22]. Health conditions such as obesity, diabetes and heart disease are linked to physical inactivity. Transport interventions to support walking, wheeling and cycling have the potential to mitigate health problems which are borne out of inactivity[23]. Bicester and Mid-Cherwell's MAP Plan will seek to provide policy to create transport infrastructure which gives residents and visitors the choice to travel actively and enjoy the associated health and wellbeing benefits this provides.

No_2 and $PM_{2.5}$ are the key pollutants considered in terms of local air quality management. The annual mean modelled concentrations in 2023 for Bicester were 14.27 µg/m^3 for NO_2 and 9.51 µg/m^3 for $PM_{2.5}$. The maximum annual concentrations within the Bicester were 15.88 µg/m^3 for NO_2 and 12.45 µg/m^3 for $PM_{2.5}$. All concentrations exceed the annual mean 2021 air quality guidelines recommended by the World Health Organisation of 10 µg/m^3 for NO_2 and 5 µg/m^3 for $PM_{2.5}$[1].

The Air Quality Lifecourse Assessment Tool (AQLAT) is currently being developed by the University of Birmingham for Oxfordshire County Council. The tool looks at health savings when air pollutant concentrations are reduced. Data is currently available for Bicester. The AQLAT was used to calculate

the health savings that would be seen if pollution levels reached those set out in the World Health Organisation 2021 air quality guidelines for NO_2 and $PM_{2.5}$. The following savings could be seen in 10 years: £758 k NHS cost savings, £361 k social care cost savings, 61 early deaths prevented, 49 asthma cases prevented, 33 coronary heart disease cases prevented, 7 lung cancer cases prevented, and 18 stroke cases prevented. This shows the importance of lowering air pollution levels in Bicester.

To obtain better health outcomes we must reduce air pollution, and in doing so, we will simultaneously reduce greenhouse gas emissions that will affect our local climate. One way to do this is to tackle the use of the most polluting forms of transport by delivering transport interventions that will support the decarbonisation of the transport network, creating choice which enables travel behaviours that are more sustainable and active.

The burden of poor health is not equally experienced across the population, with some groups having poorer health than others. Those on lower incomes are one group which is more likely to have poor health. Financial hardship can cause transport poverty, which in turn impacts access to the labour market, education, services and leisure. Although Bicester and Mid-Cherwell does not have high levels of deprivation, there are wards which are in the top 20% most deprived areas of Cherwell[24], Bicester West and Bicester South and Ambrosden. There are areas in Bicester deprived in aspects of education, skills and training. Bicester has small areas within the top 10% and 20% most deprived in England[25].

Research published by Active Lives Survey[26] shows the widening gap between those living in the most deprived areas compared to those living in the least and mid deprived areas. If we are to reduce this gap, we need to ensure equitable opportunities to walking, wheeling, cycling and public transport. It is known that the negative impacts of transport affect poorer, more vulnerable groups more[27]. Consequently, vulnerable groups are most in need of public transport and quality walking and cycle routes to access healthcare, education, employment and social networks.

Understanding inequalities and the barriers to access public transport, walking, wheeling and cycling will be vital to transforming how residents of Bicester and Mid-Cherwell move around. The availability of transport options impacts the accessibility of health services especially for the more vulnerable and those who do not have access to a car. Providing transport options which support the needs of all communities can reduce missed appointments[28], creating positive health outcomes and savings for the health sector.

Place-shaping - Bicester as a Garden Town

In 2014, Bicester was designated as a Garden Town as it was identified as a key area for growth in the UK. As a Garden Town, government funding has aimed to create new homes with access to green spaces that will enable healthy living. There are also aims to enhance the town centre which, like many towns, has seen the closure of retail units resulting in empty units in the town centre. The Cherwell District Council 2022 Retail Study identified challenges and opportunities, recommending investment in public realm, to create a more attractive and distinctive place. Additionally, the North West Bicester development was named the UK's first eco-town, which aims to create truly sustainable communities embracing blue green infrastructure.

To fulfil these aims, movement and places in Bicester will need to be low carbon, be resilient to climate change, and provide transport choice for the residents of Bicester and visitors. This can be achieved by delivering healthy place shaping interventions that enable walking, wheeling and cycling and public transport whilst reducing reliance on private motor vehicles. One notable example of this is the Health Routes funded by NHS England as part of the Bicester Healthy New Town Programme[29]. Various routes around the town were marked with blue lines to create a 5km circular route, with the aim of encouraging daily exercise and increasing physical activity amongst residents.[30] The focus will be to deliver nature-based solutions to ensure greening of new and existing developments to make Bicester a healthier, environmentally friendly place and support the aims of the LTCP in creating a net-zero transport system.

Future place making schemes will build on Bicester's unique character and heritage, creating identity and a sense of place. For example, sheep bollards along Sheep Street help reinforce the area's unique character, history and identity of Bicester.

Developing healthy place-shaping across Mid-Cherwell will improve access to healthcare, community facilities, help support community cohesion, reduce rural inequalities and make it easier for people to live healthy lives. To develop this, we will work closely with communities using Marmot Principles[31] to create places where everyone has the same opportunities.

Walking, wheeling and cycling

Bicester and Mid-Cherwell can be more accessible for walking, wheeling and cycling through physical infrastructure improvements, demand management and behaviour change initiatives. Bicester is well-suited for walking, wheeling and cycling, as it is particularly flat and compact. There are no pronounced elevation changes except Graven Hill in the south, and the town centre is approximately 2km away from the ring road in all directions. As previously highlighted, future

growth will increase the need for high quality cycle connections for trip distances beyond 2km when walking becomes less viable.

A substantial proportion of Bicester residents travelling to work travel less than 5km - 47% in Census 2021, compared to 40% in Census 2011[32]. Many of these short distance trips are done by driving a car. More than half of the commuters in Bicester (67%) drive to work,[33] making it more popular than walking, cycling, and using public transport combined. 2011 census data show there are significant opportunities to increase levels of walking, cycling and public transport. Data shows 35%[34] of work trips start and end in Bicester, the localisation of these trips and compact nature are ideal for encouraging and enabling walking, cycling and wheeling within Bicester. By doing this, Bicester will gain public health and environmental benefits from the added physical exercise, noise reduction, reduced congestion, increased productivity[35], climate change mitigation, greater road safety, and improved community cohesion.[36]

In the rural areas and villages within Mid-Cherwell it is not realistic to undertake all journeys by walking, wheeling and cycling. This can be due to the distance, topography and infrastructure plus individual circumstances. However, rural areas offer a great opportunity to enhance access to walking, wheeling and cycling enhancing connectivity within and between villages. Research carried out by Cycling UK shows demand to improve connectivity in rural areas, providing communities choice in how they travel[37]. In 2021 the Government published a Call for Evidence whereby innovation could improve the range of transport options available in rural areas. The report states one of the strongest messages was the opportunity for e-bikes[38] to make cycling more accessible in rural areas. Improving infrastructure and enabling access to e-bikes would deliver health and well-being benefits to communities and reduce the reliance on private motor vehicle for trips. It would also improve access to employment and reduce social isolation for people without access to a motor vehicle.

Improving infrastructure in urban and rural areas can enable children to walk, wheel and cycle to school, providing transport independence, give choice in everyday journeys and deliver health and wellbeing benefits[39] and provide stronger and more connected communities.

Enhancing public transport

Bicester has a wide range of options for public transport services. This provides the town with various bus and rail links to several key destinations such as Oxford, London, Milton Keynes, Birmingham, and Bedford. Bus and rail connections provide a viable alternative to driving a car. For example, it will take around 35 minutes to drive from Bicester to Oxford. Getting on the bus will take a similar amount of time, and there is a service every 10-15 minutes at peak times. Getting on the train will take much less time, taking only 17 minutes, from station to station.

Currently less than 10% of residents in Bicester commute to work by public transport.[40] To maximise the services, further enhancements will be required particularly for the villages of Mid-Cherwell who do not have same level of service. We will need to deliver priority bus lanes and integrate public transport with other forms of transport to create seamless transition from one to the other. We will need to ensure that they are safe, accessible and comfortable for everyone. We also must improve reliability, frequency, and provide more economical services for passengers. Increased patronage on public transport will also make services more viable in the long run.

Some of these improvements are already being made in Bicester through various programmes such as the Bus Service Improvement Plan (BSIP), which has identified service and infrastructure

improvements. Rail links will be enhanced which will allow Bicester and Mid-Cherwell to maximise its location within the Oxford Knowledge Spine and the Oxford-Cambridge Arc with the planned opening of East-West Rail, providing connections all the way to Cambridge by mid-2030's. These interventions will bring changes to the town, and we will need to carefully consider these changes and ensure they are right for the people of Bicester, for example, working with partners to identify solutions for the London Road Level Crossing as part of East West Rail (EWR) improvements to maintain cross town connections.

Road safety

By improving and managing the road network we can ensure the residents can move around by any mode safely within an inclusive transport network.

The LTCP adopted a Vision Zero approach which aims to eliminate all Killed or Seriously Injured incidents (KSIs) on Oxfordshire's roads and streets, with the Council seeking to '*have zero, or as close as possible, road fatalities or life-changing injuries'* by 2050. Minimising road danger is fundamental in creating a safe environment for those walking, wheeling, riding a bike and using public transport.

From a KSIs in the Bicester MAP Plan area, equating to 1.13 KSIs per month. Of the KSIs recorded 4 were recorded as fatal. The KSIs were recorded throughout the MAP Plan Bicester area, although there were prominent cluster areas at:

- A4095 (between Bucknell Road and the B4100)
- Entrance to Bicester Park and Ride
- M40 (Junction 9, Wendlebury Interchange)
- Peregrine Way and the A4421 Roundabout
- A4241 Bicester Road Junction (Caversfield)

Vehicle trips

Bicester's proximity to the M40 means the A41 is a primary route linking J9 to Aylesbury, Watford and beyond. The A41 carries 36,000[41] vehicles each day, impacting how people move within and around Bicester. This creates significant travel demand on Bicester's central corridor, including traffic from A34 via M40 Junction 9 towards the A4421 and through the AQMA on King's End /Queens Avenue.

To deliver a transport system which supports the projected growth in Bicester and Mid-Cherwell we will need to work alongside various partners to create transport choice for the communities and for those visiting, which will support LTCP targets to remove 1 in 4 vehicle trips by 2030 and 1 in 3 by 2040. Measures to mitigate growth in vehicle trips will create opportunities, support growth and reduce the number of motorised vehicle trips passing through Bicester and support LTCP Vision Zero ambition.

Zero Emission Vehicle Infrastructure

The UK government has set out its plan to phase out new petrol and diesel cars from 2030 and new hybrids beyond 2035[42]. There are currently over 90[43] public charge points within Bicester, some of which are rapid and others with limited access. To support the government targets within Bicester

and surrounding villages there will need to be a scaled-up delivery of zero emission vehicle (ZEV) charging infrastructure to enable residents to make the transition to ZEV and providing required infrastructure for people visiting Bicester.

Planned infrastructure delivery

Work has already started to improve transport and movement in Bicester. There are a number of transport projects that have been delivered and are in progress. These are the following:

- Schemes delivered
  - **Ploughley Road/ A41 junction improvements** including signalisation and provision of active travel measures.
  - **A41 Oxford Road corridor:** Widening of A41 for right and left turn lanes and new signalised crossing.
  - **Highway capacity improvements to peripheral routes - western corridor:** Improvements to Howes Lane / Bucknell Road Junction: North West Bicester Ecotown Phase 1.
  - **Highway capacity improvements to peripheral routes - western corridor:** Provision of a new tunnel under the railway at Howes Lane / Bucknell Road
  - **Pioneer Roundabout improvements**
  - **Improvements to Middleton Stoney Road roundabout western end:** Shakespeare Drive and Howes Lane roundabouts
  - **Charbridge Lane crossing:** Conversion of current level crossing of A4144 Bicester eastern perimeter road with Oxford- Bletchley Railway line into grade separated overbridge.
  - **Park & Charge infrastructure at Cattle Market and Claremont Car Parks.**
  - **Electric vehicle initiatives:** Charging points at Bicester North and Bicester Village Stations, Bure Place, Elmsbrook, Sainsbury's at Pioneer Square, Bicester Little Chef and Grovesbury Cars
  - **Car Club at Elmsbrook (NW Bicester Phase 1)**
  - **Bus facilities at Bicester Village Station,** including a bus turning head and new bus stops on London Road.
  - **North West Bicester Ecotown railway crossings (underpass) 2 crossings:** One to support road realignment and another for pedestrians and cyclists
  - **Delivery of high-quality public transport from all Strategic Sites to Bicester Town Centre and Rail Stations:** South West Bicester Phase 1 and North West Bicester Ecotown Phase 1 (Exemplar site)
  - **Improvements to A41 corridor:** New bus stop on A41, adjacent to Bicester Business Park
  - **Central corridor:** Improve Queens Avenue/ Bicester School junction to provide a better pedestrian environment
  - **Bicester pedestrian and cycle links:**
    - Footpath and appropriate signage from Priory Lane to Bicester Village Rail Station.
    - Pedestrian crossing over South West Perimeter Road (Vendee Drive), Oxford Road and Middleton Stoney Roads.
    - Northwest Bicester (Phase 1 - Exemplar site) to town centre - implementation of new cycle route on the B4100 from site to Lord's Lane junction and across Lord's Lane.
  - **Bicester Wayfinding Project**
  - **Bicester Pedestrian and cycle bridge over railway:** Tubbs Crossing

- Schemes in progress
  - **Middleton Stoney Road Active Travel Scheme (an LCWIP route):** Extends from Kings End to Howes Lane. A draft concept design report has been completed with public consultation anticipated in Spring 2025.
  - **London Road Active Travel Scheme (an LCWIP route):** To provide a cycling/walking link between Gravel Hill and Talisman Roundabout with public consultation anticipated by late 2025
  - **A41 Active Travel Scheme:** Linking Siemens employment site near M40 Junction 9 to Vendee Drive roundabout. Options and feasibility work to be commissioned in early 2025
  - **'Cattle Creep' Scheme (an LCWIP route):** This scheme will safely connect developments in South East Bicester e.g. Graven Hill to the town centre and to development and facilities in South West Bicester. The connection will be via an off-carriageway pedestrian and cycle route under the A41, and via the 'Cattle Creep' railway underpass
  - **Banbury Road junction (B4100/A4095):** Highway capacity and active travel improvements including signalisation
  - **EV Charging Points** – The council has ambitious plans, as part of Oxfordshire's LEVI programme, to deliver at least 1,200 new public EV charging points across Oxfordshire by the end of 2027, with this including at least 230 low power EV charging points across Cherwell.

Summary

The challenges and opportunities section of the Bicester MAP Plan provides the context for the following objectives and actions which developers, councils, and stakeholders are expected to deliver as a supporting document to LTCP. What follows will outline how Bicester can grow sustainably over the following 25 years with a people first approach.

The objectives and actions will share how we and partners intend to improve the urban environment and deliver an inclusive transport system within Bicester, making streets safer and better for walking, cycling and public transport, enhancing access to schools, workplaces, Bicester town centre and district centres. There will also be a focus on improving connections with rural communities surrounding Bicester and providing choice with how people wish to travel.

Enhancing public spaces will be a key element of the MAP Plan, the objectives and actions will support the delivery of schemes which will enable people to be more active and enjoy social lifestyles.

Every objective and action will support the aim, vision and targets of the LTCP and create a greener, fairer and healthier county.
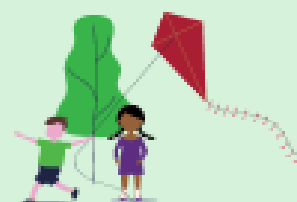
We envisage

Bicester as a sustainable and healthy town where communities thrive.

We will

Utilise a people-first approach

Support sustainable growth

Prioritise walking, wheeling, cycling, and public transport

Enhance biodiversity and connect people to nature

Improve public realm, creating opportunities for interaction

Objectives and actions

Oxfordshire's transport system affects the lives of all residents in Bicester and Mid-Cherwell by connecting communities, supporting businesses, and enabling journeys for education, leisure, and work. It is therefore vital that we improve the lives of those who live and work within Bicester and the surrounding villages, and support the council's nine priorities, its LTCP targets, the existing and emerging local plans and national planning requirements.

At the time of writing this MAP Plan, it is acknowledged the area is subject to proposed speculative growth and a potential New Town at Heyford Park. The objectives and actions reflect this, however, will need updating once the details of future developments are known.

This section defines how the Bicester and Mid-Cherwell Movement and Place Plan (MAP Plan) will help to achieve the targets of the Local Transport and Connectivity Plan (LTCP), whilst also helping to address challenges that are specific to Bicester. Each objective will be supported by a series of actions that set out how the objective will achieve the aims and targets of the LTCP. There is a clear shift from LTP4 to having a place-shaping focus as part of the MAP Plan.

In LTP4 Bicester Area Strategy, various schemes were proposed for the town, and a number of these schemes have either been completed, partially completed, or are currently being progressed. Schemes already delivered and in progress are listed in pages 13-14. Where schemes have not been completed or progressed, they have been assessed to determine whether they are still relevant. The relevant schemes have been carried forward and developed in MAP Plan to build upon the policies included within the LTCP and the local plans.

Place shaping

The first objective focuses on place shaping directly aligned to **Policies 8 to 14** of the LTCP and indirectly supports a number of other policies within the LTCP.

When considering places, it's important to recognise that streets are not just about movement, they are important public spaces which create social interactions and allow people to partake in various activities. Streets can play a vital role in delivering vibrant, healthy, liveable communities in urban and rural areas. Enhancing this place function will create streets which are attractive, safe and accessible for everyone.

Its important streets facilitate social engagement and are multi-functional, creating the spaces where local businesses can thrive, enhance the quality of the local environment, and can host cultural and recreational activities. This will improve the quality of life for residents and visitors.

This approach is vital to achieving LTCP outcomes such as improved public health, reduced inequalities, and stronger local economies.

Objective BIC1: Creating a sense of place through implementing a healthy place-shaping interventions

Objectives BIC1 to BIC2 focus on providing transport choice and healthy place shaping for trips to and from:

- School
- Local Shops
- Shopping
- Community Facilities
- Work
- Healthcare
- Local Bus Stops
- Leisure facilities
- Access to greenspace

Bicester's historic town centre and wider town is dominated by motor vehicles to the detriment of the movement of people. This perpetuates car use within the town centre where amenities for those who are able can be reached by walking, wheeling, cycling and public transport. There are many listed buildings in Bicester's historic core based around a narrow road layout which is not suitable for today's vehicles. The focal point of Bicester, Market Square, is a car park with multiple motor vehicle movements. Local centres and amenities provide excellent facilities for motor vehicles, however, spaces for pedestrians and cycles are limited and often an afterthought which limits how residents and visitors interact with the space.

We will re-examine Bicester's streets to create a town which is well connected and provides public spaces for residents and visitors to enjoy using the principles of the Transport User Hierarchy highlighted in **Policy 1** of the LTCP. Utilising the Healthy Streets Approach highlighted in **Policy 8** of the LTCP, we will create streets which are easy to cross for everyone, reduce street clutter, enhance biodiversity, reduce noise and create places where people wish to dwell, spend time and create a sense of belonging. Improvements to the walking environment which are well-planned can see an increase of up to 40% in shopping footfall[44]. We will focus on place shaping in rural villages, working with communities to understand what makes them unique to deliver positive health outcomes and strengthens communities.

The National Design Guide[45] states '*well designed places influence the quality of our experience as we spend more time in them and move around them*.' These principles underpin the following actions, which will deliver well designed interventions to create a vibrant, healthy, and successful town which supports Bicester's growth in a sustainable way. Through healthy place shaping interventions, this objective will enable and support **Policy 1 - 3, 7 – 11, 13 – 16, 18, 21, 22 and 30** of the LTCP.

We will deliver Objective BIC1 through the following actions:

1.1.   Prepare a strategy and action plan to develop place shaping solutions for improved public realm within the town centre, central corridor, local/district centres and surrounding villages. For example, Heyford Park and Ambrosden.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Culture & Assets` `Climate & Environment`

1.2.   Build upon and deliver a cohesive wayfinding scheme, to benefit all residents and visitors.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Culture & Assets` `Climate & Environment`

1.3.   Conduct an audit across Bicester and villages within Mid-Cherwell using Healthy Streets Toolkit, reviewing crossing points, side roads, barriers to support implementation of place-shaping schemes along with inclusive and accessible walking, wheeling and cycling routes.

`Travel & Connectivity` `Health & Wellbeing` `Social & Community` `Culture & Assets` `Climate & Environment`

1.4.   Collaborate with the community and partners to support the introduction of murals, artwork, rest places, greener spaces, pocket parks, play spaces and community parks.

`Social & Community` `Climate & Environment` `Culture & Assets`

1.5.   Collaborate with communities and partners to identify locations to deliver play streets.

`Health & Wellbeing` `Social & Community` `Culture & Assets`

1.6.   Working with partners to explore regeneration opportunities in and around Bicester town centre with a focus on place shaping.

`Economic Growth` `Health & Wellbeing` `Social & Community` `Culture & Assets`

Walking, wheeling, cycling

This objective focuses on walking, wheeling, cycling. Walking and cycling are at the heart of the LTCP, with both at the top of the transport user hierarchy. The LTCP also recognises the wider role of how we design our neighbourhoods, and how we need to make it easy and enjoyable for people to walk, wheel and cycle by considering the design and connectivity of our streets and places. There is an overarching ambition to create movement corridors and streets which enable extensive walking, wheeling and cycling routes and prioritise public transport in and around Bicester with peripheral routes for high volume traffic. If this ambition is achieved, it would deliver liveable neighbourhoods aligned with **Policy 13** of the LTCP enabling children to walk, wheel and cycle to school, support people to live healthy lives and provide choice in how everyone moves around Bicester. A similar approach has been taken in Ghent[46], Belgium delivering a positive impact by reducing collisions, improving air quality, decreasing noise levels, reducing congestion and increasing the number of people cycling. Such measures would need to be incorporated within a wider mobility strategy for Bicester which factors in public transport, motor vehicle movements and parking.

Alongside the LTCP, the council also adopted an [Active Travel Strategy](#), a supporting document which expands on the LTCP policies related to walking, wheeling and cycling. This plan set cycling targets at a local level, and for Bicester it aims to increase the number of cycle trips by 200%, or 60,000 cycle trips a week by 2031 from a baseline of 20,000. The objectives and actions set out in this MAP Plan will support the delivery of these targets and the LTCP vision of creating an inclusive and safe Oxfordshire net-zero transport system.

Objective BIC2: Deliver a comprehensive and inclusive walking, wheeling and cycling network

To improve walking, wheeling and cycling conditions in Bicester, the [LCWIP](#)[47] for the town was published in 2020. The LCWIP identified how the current cycle infrastructure is lacking, resulting in a disjointed network. The town has significant severance caused by the highway, historic planning with limited permeability, rail network, the high level of vehicle flows along key corridors, poor-quality footway network and a disconnected street network for pedestrians. The LCWIP proposed measures to enable more people to walk, wheel and cycle.

Bicester is well suited to becoming a town where walking, wheeling, and cycling is the natural choice for short journeys. As noted above, the topography of Bicester is relatively flat, and very compact (roughly 3.5 kilometres edge to edge). As the town expands over the next planning period up to 2042 a much higher commitment will be required to reach the government's targets and to avoid new developments becoming isolated and car dependant. The schemes should create cycle infrastructure which is accessible to everyone, adheres to Local Transport Note (LTN) 1/20[48] guidance, and is accessible for non-standard cycles[49] if Bicester is to meet government targets of 50% of trips in England towns to be walked, wheeled or cycled by 2030[50] and LTCP target to replace or remove 1 out of every 4 current car trips in Oxfordshire by 2030 and additional 1 in 3 by 2040. There is limited space on routes within Bicester to create the space where all modes of travel can co-exist without conflicts. We will need to look at innovative ways such as reprioritising road space to enable and increase in walking, wheeling and cycling.

Providing high-quality links to give residents of Bicester access to nature which reflects Bicester's Garden Town status will be at the forefront of the walking, wheeling and cycling network, this will include providing green corridors to new developments, villages, and places of interest. This will provide transport choice and enable residents of Bicester to live healthy lives. Green corridors will provide places for people to dwell, connect with nature and children to play which support Liveable Neighbourhoods.

Whilst sustainable modes of transport are promoted and encouraged for the benefit of all, not everyone has the same access to them. Cycling, for example, requires equipment that some may find difficult to access due to constraints related to finances or space. Shared micromobility (short term rental of zero emission vehicles capable of speeds up to 15mph such as e-bikes, e-cargo bikes and e-scooters) which can provide this access, enabling more people to participate in changing their behaviour towards travel. Steps to improve access have already been undertaken by Active Oxfordshire who launched a Bike Library at Bicester School with up to 45 young people regularly attending sessions to develop their bike skills[51].

A shared micromobility scheme in Bicester can complement other transport schemes introduced in the town, to support first and last mile trips. Although micromobility schemes typically operate in cities with bigger population sizes such as Oxford, some schemes in smaller cities have been operating successfully as demonstrated in Hereford (see case study). Bicester's compact size, flat topography, and its anticipated growth make the town an ideal location for shared micromobility.

Delivering a walking, wheeling and cycling network in Bicester and Mid-Cherwell will have numerous health and economic benefits[52]. Delivering a comprehensive inclusive walking, wheeling and cycling network will be achieved through delivering the following actions which support **Policies 1 - 8, 10, 11, 13 - 16, 18, 21 - 23, 38, 50 and 54** of the LTCP.

We will deliver Objective BIC1 through the following actions:

2.1.   Ensure the delivery of walking, wheeling and cycling schemes contained within adopted documents (such as LCWIPs and SATN) to create seamless links to existing and new developments and any subsequent update to them.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.2.   Create a strategy and action plan to deliver quality pedestrian corridors to integrate with other modes of transport.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.3.   Explore opportunities to work with partners and stakeholders to create movement corridors which enable and prioritise extensive walking, wheeling, cycling and public transport.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.4.   Work with the community and partners to deliver behaviour change programmes to support the delivery of walking, wheeling and cycling schemes and to influence modal patterns away from car usage.

`Travel & Connectivity` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.5.   To support the delivery of schemes in the capital programme:
   a.   Middleton Stoney Road Active Travel Scheme.
   b.   London Road Active Travel Scheme.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.6.   Progress schemes in the pipeline:
   a.   A41 (close to M40 Junction 9/Siemens access to Vendee Drive).
   b.   A41 (county boundary towards the A4421 Roundabout.
   c.   'Cattle Creep' scheme.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.7.   Develop blue and green infrastructure including investigate changes to the PRoW and Greenway network to enable use by a wider range of Non-Motorised Users for different journey purposes.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

2.8.　Work with partners to deliver a suite of behaviour change initiatives which will support the delivery of new infrastructure and provide the skills and confidence to walk, wheel and cycle, including but not limited to:

   a. Bikeability for schools, families and adults.
   b. Work with partners to explore a community bike loan scheme.
   c. Explore opportunities to work with local employers to deliver bike share schemes.
   d. Work with partners to develop Active Travel Hub / Bike Kitchen.

Travel & Connectivity **Economic Growth** **Health & Wellbeing** **Social & Community** **Climate & Environment**

2.9.　Ensure all developments provide direct links to wider walking, cycling and wheeling schemes such as LCWIP, SATN, PRoW and Greenway routes to align with Oxfordshire County Council's standards (e.g. cycling and walking).

Travel & Connectivity **Economic Growth** **Health & Wellbeing** **Social & Community** **Climate & Environment**

2.10.　Prepare a strategy and action plan to deliver with partners a network of inclusive cycle parking, hubs, hangars including provision for non-standard cycles within the town centre, along key bus routes and any residential street.

Travel & Connectivity **Economic Growth** **Health & Wellbeing** **Social & Community** **Climate & Environment**

2.11.　Remove or redesign Access Control Barriers to ensure walking, cycling and wheeling is accessible to everyone with no barriers in place for continuous movement.

Travel & Connectivity **Economic Growth** **Social & Community** **Climate & Environment**

2.12.　Work with partners and the community to assess the feasibility of an e-scooter and e-bike network.

Travel & Connectivity **Economic Growth** **Social & Community** **Climate & Environment**

Case study: Hereford shared bike scheme[53] add e-scooter trial in North Northamptonshire[54]

Shared micromobility schemes have been implemented successfully in some market towns in the UK. Hereford, a city in the West Midlands with a population of 60,000, has a shared bicycle scheme operating since 2019. The scheme, operated by Beryl, has since recorded 425,000 journeys covering more than one million kilometres. According to the local council, this helped reduce congestion and improve the health of its residents. Industry calculations showed nearly 40 tonnes of carbon emissions had been saved due to the scheme.

Another example of a successful scheme is the e-scooter trials in North Northamptonshire launched in 2020. The e-scooters are available in various towns in the district such as Corby with a population of 75 thousand, and in towns as small as Higham Ferrers with a population of only eight thousand. The council says that since launch, 1.9 million trips in total have been taken and 3.64 million kilometres have been travelled, saving 998,000 car journeys and 365 tonnes of carbon emissions.

[Beryl and Herefordshire Council celebrate the impact of e-bikes in first year | Beryl](#)

Public transport

Objectives BIC3 to BIC6 focus on public transport and build on the six policies set out in the LTCP. Increased public transport use will help to reduce the number of private motor-vehicle trips, improve connectivity, and deliver air quality improvements.

Based on census data, less than 10% of commuting trips are undertaken by public transport in Bicester.[55] Meanwhile, more than 60% are completed by driving a car.[56] Commuting data also shows that 35% of commuting trips start and end in Bicester, 17% end in Oxford, 3.5% end in Banbury, and 3% end in London[57]. These are locations where bus and train links are present, thus indicate excellent potential for encouraging more commuting trips by public transport.

From 2019 to 2023, overall satisfaction of bus passengers across Oxfordshire declined by 16 percentage points, the highest among the local authorities in the survey. This decline can discourage potential passengers from using the bus as their primary method of travel. Some key elements of a bus service that must be improved are cost, service frequency, travel time, waiting facilities and convenience.

Additionally, Bicester, a relatively medium sized town, benefits from two train stations (Bicester North and Bicester Village) with services linking the town to major cities such as London and Birmingham. The introduction of new East-West Rail services to Milton Keynes and Cambridge in the future will provide more opportunities for the town.

Public transport will be vital in ensuring multi-modal journeys. The integration of public transport with walking, wheeling, and cycling for first and last mile connectivity will deliver greater choice for communities and provide a more sustainable transport network.

Objective BIC3: Enhance bus infrastructure

Objective BIC3 and BIC4 centre on improving bus services and infrastructure to enable wider bus use for trips to and from:

- **Villages, Town and Cities**
- **Leisure Facilities**
- **School**
- **Work**
- **Healthcare**
- **Transport Hubs**
- **Holidays and Travel**

The infrastructure which supports bus services is a critical element in the smooth running of bus services. To maximise the bus network in Bicester, we will need to ensure roads are well maintained to ensure users experience a smooth journey. We will need to think about how we integrate walking and cycling with bus services to create a seamless transition between modes. Bus stops are the calling card for bus services and attention should be given to given to their visual presence. If the bus stops are poorly maintained, missing information or of inadequate quality, people will be more likely to use other modes of transport.

The quality of bus stops varies across Bicester, inconsistency and inferior quality will impact usage. Some bus stops have a flag and pole without information and safe crossing points. To create an inclusive network, bus stops in Bicester will need to be accessible for all users with crossings, dropped kerbs, tactile paving and footpaths. In addition, only 6.3% of bus stops within Bicester provide real time information (RTI) displays. Enhancing bus infrastructure will support LTCP **Policies 1-3, 7, 8, 10 - 15, 18- 23, 35 – 37 and 54.**

We will deliver Objective BIC3 through the following actions:

3.1. Working alongside public transport operators to develop a strategy and action plan for a bus route hierarchy and to implement bus prioritisation/SMART infrastructure along key movement corridors including as per Infrastructure Delivery Plan:
a. Bus priority on B4030 and Vendee Drive Roundabout improvements.
b. Improvements to A41 corridor; infrastructure improvements and bus priority to enable greater reliability on the A41 corridor to/from Junction 9 to Ploughley Lane.
c. B4100 between Baynard's Green roundabout and A4095 junction.
d. Bus only link, west of Howes Lane – link to the Howes Lane and Lords Lane realignment.
e. Through route for buses between the A4421 Charbridge Lane and A41 Aylesbury Road.

Travel & Connectivity   Economic Growth   Social & Communit
Climate & Environment

3.2.   Develop a strategy and action plan with local community and stakeholders to identify opportunities for the improvement of bus infrastructure/hubs (e.g. waiting facilities, location for new bus stops, Real Time Information, AI, raised kerbs, lighting, shelters, CCTV, onward travel maps and greening/solar.) including the following:
   a.   Town Centre interchange at Pioneer Square.
   b.   Bus routes into strategic employment and residential sites.
   c.   Bus routes through North West Bicester and Middleton Stoney Road.

`Travel & Connectivity` `Economic Growth` `Social & Community` `Culture & Assets` `Climate & Environment`

3.3.   Work with stakeholders to investigate the opportunities to enhance bus stops and public realm at Pioneer Square and assess future needs.

`Travel & Connectivity` `Social & Community` `Culture & Assets` `Climate & Environment`

3.4.   Explore solutions where there is conflict between public transport and other transport modes.

`Travel & Connectivity` `Social & Community`

3.5.   Work with public transport operators to deliver a zero-emission bus fleet within Bicester and Mid-Cherwell.

`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment`

Objective BIC4: Enhance bus services

According to the most recent census, only 2% of those travelling to work in Bicester travelled by bus.[58] Compared to Oxford, where 14% commute by bus[59], this is extremely low. Passenger satisfaction plays a big part in determining someone's preference for their main mode of travel. Therefore, it is important that we improve bus services to make sure people are satisfied.

Bicester is served by a variety of bus operators and not all of them accept the recently launched MyBus Oxfordshire ticket, meaning passengers requiring multiple tickets which limits integrations. Further to this, some operators provide multiple services, but they are not co-ordinated to deliver better convenience for the passenger.

Frequency and reliability are crucial[60] if we are to see an increase in patronage on services. We will collaborate with operators to ensure that services can be improved by making them more frequent and more reliable. We will also work with the operators and developers through S106 funding to ensure new developments in Bicester and Mid Cherwell will have access to buses through new services or improving existing routes. This objective supports **Policies 1, 2, 7, 11 - 14, 18, 21 – 23, 35, 37, 51 and 54** of the LTCP, the goals of BSIP, and the aims of the forthcoming countywide Bus Strategy.

We will deliver Objective BIC4 through the following actions:

4.1.   Develop a strategy and action plan with stakeholders and partners to identify opportunities to deliver and fund long distance coach services which link to regional and national locations.

Travel & Connectivity   Economic Growth

4.2.   Work with operators to provide new services to existing communities, new residential areas and existing/new employment, community and bus services linking to surrounding villages.
   a.   NW Bicester bus service connecting to the town centre.
   b.   Investigate the potential of providing a new bus service to strategic employment sites (developments to fund additional services).
   c.   Heyford Park.
   d.   Other areas across Mid-Cherwell.

Travel & Connectivity   Economic Growth   Social & Community
Climate & Environment

4.3.   Work with partners to enhance bus services to meet demands, with consideration given to increasing frequencies (including "turn up and go" services) and express, or limited stop services and the optimisation of existing services.

Travel & Connectivity   Economic Growth

4.4.   Work with bus operators and employers to ensure improved reliability, attractiveness and resilience of services.

Travel & Connectivity   Economic Growth   Culture & Assets

4.5.   Work with partners to develop a digital strategy to support the bus network within Bicester and surrounding areas.

Travel & Connectivity   Economic Growth

4.6.   Work with partners to develop a behavioural strategy to raise awareness about the existing bus network and enhancements.

Travel & Connectivity   Social & Community

Objective BIC5: Create a network of mobility hubs

Objective BIC5 focuses on the integration between different modes of transport to support trips of all lengths, for the following purposes:

- **Leisure**
- **Work**
- **Healthcare**
- **Shopping**
- **Holidays and Travel**

Levels of travel by sustainable modes are extremely low in Bicester. According to the latest census, only 5% of residents that travelled to work did so by public transport. 17% commuted on foot, and 5% by cycling. Most people in Bicester travel to work by driving a car. Many choose to drive as it is more convenient than other modes of transport.

The need to improve multi-modal travel and integrate different transport modes is key to addressing transport challenges faced in Bicester. As set out in Policies 22 and 23 of the LTCP, developing mobility hubs that integrate multiple modes seamlessly will help encourage people to walk, cycle, and use public and shared transport more.

The delivery of this objective is guided by the council's Mobility Hub Strategy which was adopted in 2023. Distinct types of mobility hubs will be developed based on their specific locations and contexts. This objective supports **LTCP Policies 1 - 4, 8, 11, 12, 13, 14, 18 – 23, 29, 38, 39, 50, 51 and 54.**

We will deliver Objective BIC5 through the following actions:

5.1.   Explore the feasibility and opportunities to provide a network of mobility hubs within Bicester including, including but not limited to:
  a.   Bicester North Railway Station.
  b.   Bicester Village Railway Station.
  c.   Bicester Park and Ride.
  d.   Pioneer Square.
  e.   Explore other strategic locations across Mid-Cherwell.
  `Travel & Connectivity` `Economic Growth`

5.2.   Explore opportunities to improve mobility hubs by:
  a.   Improving waiting facilities.
  b.   Providing digital connectivity.
  c.   Providing rest, and toilet facilities, etc.
  d.   Providing cycle parking (including e-bike charging facilities) and connections.
  e.   Providing EV charging facilities, helping to support parcel/taxi operators.
  f.   Linking to long distance coach services.
  g.   Co-locating with complimentary land uses and services.
  `Travel & Connectivity` `Culture & Assets`

Objective BIC6: Work alongside partners to improve rail services and infrastructure.

Objective BIC6 focus on rail connectivity and facilities to improve access for those travelling to and from:

- Holidays and Travel
- Villages, Town and Cities
- Work
- Transport Hubs
- Healthcare facilities
- Shopping

And to support

- Improved Air Quality
- More Rail Freight
- Decarbonisation

The rail network in Bicester provides residents fast and easy connections to key destinations such as Oxford and London. It also opens the doors for visitors from far and wide to access easily Bicester's attractions, such as Bicester Village. According to the latest figures from Office for Rail and Road (ORR), Bicester Village and Bicester North Stations are the fourth and fifth busiest stations in Oxfordshire, seeing 1.76 million and 758,000 entries and exits[61], respectively.

Train journeys are much more sustainable, emitting 10 times less carbon than cars[62]. To encourage people to use the train for longer distance journeys and to shift away from cars, we need to improve rail services infrastructure and explore opportunities for new stations in areas with high level growth to create an integrated transport network.

We will do this by making services more dependable and frequent, and infrastructure more comfortable and accessible. Some of the rail improvements in the Bicester area have already been delivered. This includes the first phase of the East West Rail project, improving connections between Bicester and Oxford. Further phases of this project will link Bicester to destinations such as Milton Keynes, Bedford and Cambridge.

By delivering this objective, we will enable better rail connectivity in Bicester and surrounding area which will provide better opportunities for the town and its residents. This objective supports **Policies 1 – 3, 9, 11 – 14, 15, 18 – 23, 29, 37, 38, 51 and 54** of the LTCP and will support the aspirations of the forthcoming Rail Strategy.

We will deliver Objective BIC6 through the following actions:

6.1. Support and promote additional services to improve the passenger experience at Bicester North and Bicester Village Rail Stations.
`Travel & Connectivity` `Economic Growth` `Climate & Environment`

6.2. **Bicester Village Railway Station**
   a. Support the upgrade of the station to accommodate an increase in patronage by enhancing the waiting facilities, interaction of bus and train services, alongside information and improve and enhance cycling and e-mobility.
   b. Support the delivery of East West Rail services unlocking the benefits of regional connectivity between Oxford and Cambridge.
   c. Work with partners to deliver 5G connectivity along the East West Rail route.
   d. Promote and support the delivery of the electrification of the East West Rail route.

Travel & Connectivity **Economic Growth** **Climate & Environment**

6.3. Work with EWR Company to ensure they deliver an alternative to the London Road Crossing making appropriate provision for walking, wheeling, cycling, public transport and motor vehicle solutions, and to consider appropriate opportunities to maximise sustainable and active door-to-door connectivity.
Travel & Connectivity **Economic Growth** **Health & Wellbeing**
Social & Community **Climate & Environment**

6.4. **Bicester North Railway Station**
a. Explore feasibility of additional pedestrian access.
b. Assess existing and future parking capacity.
c. Develop feasibility to enhance cycling access.
Travel & Connectivity **Economic Growth** **Health & Wellbeing**
Social & Community **Climate & Environment**

6.5. **Heyford Railway Station**
a. Work with stakeholders to explore better connectivity between Heyford Station and the residential areas. Subject to the New Towns Taskforce decision, further collaboration will be required to ensure seamless door to door connectivity between Heyford Station (other stations) and Heyford Park.
b. Work with partners to monitor the impact of future e-bike trials in Heyford Park.
c. Explore feasibility of enhanced rail connectivity to support employment, education and leisure.
Travel & Connectivity **Economic Growth** **Health & Wellbeing**
Social & Community **Climate & Environment**

6.6. Ensure delivery of high-quality public transport and walking, wheeling and cycling links with all rail stations in Bicester area.
Travel & Connectivity **Health & Wellbeing** **Climate & Environment**

6.7. Provide charging infrastructure for zero-emission battery trains.
Travel & Connectivity **Climate & Environment**

6.8. Enhance station facilities to meet future population growth, and to improve accessibility and consider opportunities for new stations.
Travel & Connectivity **Economic Growth** **Social & Community**
Climate & Environment

Car clubs and car sharing

Automobile-based modes of shared mobility such as car clubs and car sharing help to reduce car ownership and use, improve air quality, and encourage a shift towards the use of active travel or public transport. The LTCP supports the development of car club and sharing schemes as set out in **Policy 39.**

Objective BIC7: Support the development of a car club network and car share schemes.

Objective BIC7 focuses on providing an alternative to car ownership to support a variety of trips, including:

- **Holiday and Travel**
- **Villages, towns and cities**
- **Shopping**
- **Leisure facilities**
- **Daytrips**
- **Large purchases**

There are currently no car clubs operating in Bicester and surrounding MAP area. There is an opportunity to develop car clubs and establish a comprehensive network of zero-emission car club vehicles located at employment sites, transport interchanges, leisure facilities and within residential areas.

Car ownership in Bicester is extremely high, with 85% of households owning at least one car[63]. This is much higher than the national average of 77%. Car clubs can play a key role in driving this modal shift away from private cars. According to CoMoUK, each car club in the UK replaces between 14 and 32 private cars[64]. It also reduces the need for people to require two or more cars[65].

Car clubs also encourage a more thoughtful approach to mobility, as it is seen members of car clubs are likely to walk and cycle more than they did prior to obtaining membership. For example, 42% car club members travel by bicycle at least once a week compared to the average in England of 14%[66].

Moreover, one of the added benefits of car clubs is the ability to lead to considerable financial savings compared to traditional car ownership. On average, EV use through car clubs annually saves £5,573 compared to owning a new EV[67]. This objective will support **LTCP Policies 13, 14, 22, 23, 29, 38 and 39.**

We will deliver Objective BIC7 through the following actions:

7.1.   Identify with partners a comprehensive network of car clubs, including the prioritisation of parking for car clubs.
Travel & Connectivity   Climate & Environment

7.2.   Aim for car clubs to be zero emission only.
Travel & Connectivity   Climate & Environment

7.3.   Work with developers and business to provide EV charging and parking to support car clubs and car share.
Travel & Connectivity   Climate & Environment

7.4.   Collaborate with partners and businesses to develop a car share awareness/ expansion programme.

Travel & Connectivity **Social & Community** **Climate & Environment**

Demand management

As set out in LTCP **Policy 34**, there are situations where it will be necessary to discourage private car use through demand management measures to improve air quality, enable an increased use in sustainable transport and reduce congestion. Although it is important to set out that any proposals for demand management will only be proposed in locations with good levels of sustainable travel access.

Objective BIC8: Implement demand management measures in areas which are well served by sustainable transport.

The focus of Objective BIC8 is to enable our communities to have transport choice by improving safety, access and inclusivity for those:

- **Walking**
- **Wheeling**
- **Cycling**
- **Using Micro-mobility**
- **Buses**
- **Rail**

High car ownership and through traffic in Bicester are creating congestion which impacts air quality[68], public health, access to active travel and the reliability of public transport. The future housing and employment growth will put further pressure on the existing transport network and sustainable mitigations will be required.

To address the cumulative impacts, as set out in LTCP **Policy 34** it may be necessary to implement measures which discourage private car use. Such measures would only be implemented where attractive sustainable alternatives exist which provide choice for those who reside, work in and visit Bicester. This objective will support **LTCP Policies 1 - 3, 8, 10, 11, 13 - 16, 18, 19 - 23, 28, 34 and 35.**

Demand management, which includes reducing public and private car parking using Parking Standards for New Developments[69], Workplace Parking Levy[70] and on and off-street parking reductions. Implementing Controlled Parking Zones[71] (CPZs), other on-street parking or movement restrictions (double yellow lines, loading bans, clearways, banned turns, red routes), low emission zones, use of modal filters, or charging schemes will be considered to help mitigate or support the following issues:

- **Pollution/Air Quality** – Bicester contains an AQMA which has been in place since 2014[72]. High levels of NOx, CO2, and Particulate Matter (PM)$_{2.5}$ create significant health risks for the most vulnerable in society[73].
- **Vision Zero -** There have been 68 KSIs in the Bicester MAP Plan area over the last five years, equating to 1.13 KSIs per month. The LTCP aims to get the number of KSIs as close to zero as possible.

- **Active Travel** – Busy, congested roads are a barrier to active travel. Demand management schemes which create space for other transport modes and reduce congestion will increase uptake and deliver health benefits.
- **Travel distances** – Within the MAP Plan area 28% (33% in Bicester Town) of people commute distances less than 2km, with 44% commuting less than 5km and 56% commuting less than 10km. These trip lengths are suitable to be undertaken by either active travel or public transport.
- **Car dominance** – Bicester has high car ownership compared to national figures, and the central corridor is heavily trafficked which creates a barrier for active travel, creates severance and perpetuates car journeys due to poor alternatives.
- **Parking** – Bicester is well served by car parking including free parking within the town centre. This convenience compared to other modes makes car use extremely attractive within Bicester. The existing over supply of car parking was illustrated in Bicester Sustainable Transport Strategy[74] with car parks on average 50% full.
- **Capacity** – Future employment and housing growth will impact the capacity of the road network. Attractive alternatives which prioritise sustainable transport modes will be required.

We will deliver Objective BIC8 through the following actions:

8.1. Identify the demand management tools and appropriate locations where these may be required in short to medium term, agree further measures to compliment the delivery of Southeast Peripheral Road to enable an increase in walking, wheeling and cycling for local journeys within Bicester.
`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Climate & Environment`

8.2. Identify and deliver School Zones.
`Travel & Connectivity` `Health & Wellbeing` `Social & Community` `Climate & Environment`

8.3. Using a Safe System approach, we will reduce vehicle speeds inside Bicester's peripheral roads and throughout residential areas to prioritise the safe movement of people within Bicester.
`Travel & Connectivity` `Economic Growth` `Health & Wellbeing` `Social & Community` `Culture & Assets` `Climate & Environment`

8.4. Work with partners to investigate opportunities to consolidate public parking within the town centre, to reduce the need to travel by car as per the LTCP, to prioritise sustainable travel.
`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment`

8.5. Work with partners to limit the number of parking spaces at existing and future employment hubs, through the implementation of Travel Plans and sustainable travel measures.
`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment`

8.6. Explore the viability of a Clean Air Zone and Zero Emission Zone identified in the CDC Air Quality Action Plan 2024.

`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment`

8.7. Explore opportunities to deliver a Workplace Parking Levy and Control Parking Zones.

`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment`

Infrastructure development

As set out in **Policy 36** of the LTCP, there are situations when new or upgraded infrastructure is required to increase highway capacity for private vehicles, although it is understood that this is not a sustainable long-term solution. To ensure that any infrastructure schemes align with our transport vision, we take a 'decide and provide' approach rather than the traditional 'predict and provide' approach, when assessing impacts.

There are benefits to new or upgraded infrastructure, and these include tackling congestion and pollution which provide benefits to health, supporting the economy, and ensuring the county remains an attractive place to work and live. Furthermore, the delivery of new or upgraded infrastructure is key to the delivery of new walking, wheeling and cycling schemes, as the majority of our infrastructure schemes incorporate new walking, wheeling, cycling and public transport infrastructure, removing severance and physical barriers for all users. The following two objectives will support **Policies 1 – 4, 8, 9, 11, 14, 15, 18 – 23, 28, 31, 35, 36, 47 – 51 and 53** of the LTCP and the objectives of the [Air Quality Strategy](#).

Objective BIC9: Deliver movement infrastructure schemes

Objective BIC10: Deliver future movement infrastructure schemes

Objective BIC9 to BIC10 focus on providing transport choice for communities by improving journey time, experiencing and reducing congestion. This will benefit those making trips to and from:

- **School**
- **Shops**
- **Community Facilities**
- **Work**
- **Healthcare Facilities**
- **Villages, Towns and Cities**
- **Leisure Facilities**
- **Holidays and Travel**

Whilst our priority is on reducing car usage and enabling sustainable travel, we recognise that in some cases, new highway infrastructure and/or improvements may be necessary to ensure a reliable, efficient transport network and to deliver schemes which support walking, wheeling, cycling and public transport. To transform the central area, and make it a more attractive place for walking, wheeling and cycling, we intend to divert traffic to peripheral routes around Bicester through delivering South East Peripheral Road (SEPR) and enhancing Vendee Drive and A41 corridor.

By delivering these objectives, we will be able to improve road safety and air quality in the area. As in the LTCP, we will adopt a Vision Zero approach, making sure that any infrastructure development or improvements will incorporate design aiming for zero road fatalities and serious injuries. Redirecting vehicular traffic away from areas with high activity will also extend the distance from pollution sources, improving air quality for people to breathe safely.

We will deliver Objective BIC9 through the following actions:

9.1.   Support the delivery of:
   a.   A4095 realignment (NW Bicester).
   b.   Highways and environmental improvements to the central corridor: Kings End to Queen Ave.
   c.   Improvements to Middleton Stoney Road / Kings End / Oxford Road roundabout.
   d.   Caversfield junction improvements (Junction of Aunt Ems Lane and B4100).
   e.   Western corridor Changes and improvements to Howes Lane/Bucknell Road Junction: North West Bicester all other phases.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing`

We will deliver Objective BIC10 through the following actions:

10.1.   Progress the current ongoing schemes in the pipeline:
   a.   Eastern Peripheral Movement Corridor.

`Travel & Connectivity` `Economic Growth` `Health & Wellbeing`

10.2.   Work with partners to develop the following previously identified schemes:
   a.   A41 Corridor / South East Peripheral Road.

b.   Vendee Drive / A41 highway improvements.

Travel & Connectivity **Economic Growth** **Health & Wellbeing** **Social & Community**

Freight, deliveries, and servicing

Delivery of goods is important to support the residents and the wider community of Bicester. It is essential in supporting the town's economy by delivering supplies to industries, and more locally, bringing food and other products to shops and homes. The freight system is a complex process, and in Oxfordshire's Freight and Logistics Strategy, it recognises three distinct movements reflecting this complexity: long distance, local, and last-mile movements.[75]

Objective BIC11: Work with freight and delivery operators to improve movement efficiency and provide zero emission deliveries

Using a Healthy Streets approach, people will be at the heart of transport and place making schemes in Bicester. It is imperative that people within Bicester feel safe, a core component of Healthy Streets. The growth in online shopping means residential streets see a greater number in LGVs than ever before. The number of LGVs on UK roads increased by over a third in the past decade, with more than 1.1 million vans and trucks[76]. The movement of freight is a complex process and to support Vision Zero, innovative solutions will be required to remove conflicts between goods vehicles and people walking, cycling and riding motorcycles.

Objective BIC11 focuses on improving and reducing freight, deliveries, and servicing, the benefits of this are:

- Improved Air Quality
- Decarbonisation
- Reduced HGVs Use
- Improve Road Safety
- More Local Access

LGVs and HGVs vehicles contribute significantly to congestion, carbon and nitrogen oxide emissions. This can be prevented by looking at other types of vehicles that are zero-emission. We can look to reduce the number of LGV and HGV journeys by consolidating them and making fewer last-mile journeys and utilising the potential of collection hubs which can easily be reached on foot and save unnecessary vehicle delivery journeys through consolidation. E-cargo bikes are a great alternative for last-mile deliveries and will require the infrastructure to support their potential. This will remove carbon emissions associated with deliveries, and as reported from pilot schemes in other parts of the UK, can provide other benefits such as reduced journey times and improved health and wellbeing.[77]

This objective will support the county's Freight and Logistics Strategy for the local and last mile movements, specifically those occurring in Bicester. The delivery of this objective will ultimately support **Policies 1 – 3, 8, 10, 13, 15, 29, 47 - 50** of the LTCP.

We will deliver Objective BIC11 through the following actions:

11.1.   Explore opportunities to identify further HGV restrictions in areas with high walking, wheeling and cycling movements and consider enforcement.

Travel & Connectivity **Health & Wellbeing** **Climate & Environment**

11.2.   Collaborate with partners to develop feasibility of first and last mile delivery hubs using cargo bikes and e-cargo bikes at employment sites.
Travel & Connectivity **Economic Growth** **Health & Wellbeing** **Climate & Environment**

11.3.   Support the rollout of parcel / grocery lockers at key transport locations such as Bicester Village and Bicester North Rail Station's, Bicester Bus Interchange (Pioneer Square), Heyford Park, Bicester Park and Ride, Mobility Hubs, and local/ district centres to support integrated travel.
Travel & Connectivity **Social & Community** **Health & Wellbeing** **Climate & Environment**

11.4.   Explore opportunities which support the transition of freight from road to rail.
Travel & Connectivity **Economic Growth** **Climate & Environment**

11.5.   Identify EV charging locations for freight.
Travel & Connectivity **Economic Growth** **Climate & Environment**

Climate resilience

The growing frequency and severity of extreme weather events including flooding, storms, droughts, wildfires and air pollution pose risks to Bicester. Creating communities which are resilient to climate change is one of the six key themes in LTCP.

We intend to deliver transport and place-shaping schemes to withstand the increases in severe weather events. We will develop blue green infrastructure and build on Cherwell's Green and Blue Strategy[78] and Green Infrastructure Framework[79]. This will ultimately support the LTCP vision of a transport network that contributes to a climate positive future by 2050. Delivering urban green spaces will deliver biodiversity and air quality benefits, assist with revoking the existing AQMA[80] in Bicester along with providing active and healthy places for residents.

Objective BIC12: Deliver infrastructure and placemaking schemes which are resilient to changing climate

Objective BIC12 focuses on climate resilience to the benefit of:

- **Biodiversity**
- **Air Quality**
- **The Local Economy**
- **Reduced Damage**
- **Flooding**
- **Infrastructure**

As already demonstrated, the transport sector is responsible for a large percentage of carbon emissions in the area, directly contributing to climate change. It is therefore essential that the schemes that we are going to deliver consider the wider effects to the environment and are resilient to the changing climate. We also need to ensure that these schemes will enhance the environment and make nature more accessible to residents.

National Planning Policy Framework identifies provision of safe and accessible green infrastructure as a way to enable and support healthy lives.[81] Green infrastructure is defined as a "network of multi-functional green and blue spaces and other natural features, urban

and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity." Examples of green infrastructure include links to the rights of way network, sustainable drainage systems, tree planting in public spaces, green roofs, rain gardens and green walls. Developing green infrastructure adjacent to more traditional infrastructure has the potential to deliver many ecosystem services.

The council recognises the value of green infrastructure in benefitting all our lives. In 2021, it commissioned a review of the role and benefits of green infrastructure in Oxfordshire.[82] The report estimated that investing in green infrastructure will provide £6 billion in economic benefits up to 2050 in Oxfordshire, due to reduced flood risk, better health and wellbeing, improved air quality, thriving biodiversity, among others.

In Bicester, this means protecting existing green spaces, making them more accessible, such as Bure Park and Gavray Meadows and creating new green spaces in new developments like North West Bicester where 40% is targeted for green infrastructure[83]. Finally, this objective will help deliver the policies of the LTCP in Bicester, including **Policies 2 - 9, 13, 18, 21, 23, 28 and 30.**

We will deliver Objective BIC12 through the following actions:

12.1.   Ensure development and highways schemes protect and enhance existing green and blue infrastructure in line with Cherwell District Council Local Plan.
`Travel & Connectivity` `Health & Wellbeing` `Social & Community` `Climate & Environment` `Culture & Assets`

12.2.   Develop a strategy to provide greening of and placing solar panels on bus stops, train stations, signage, mobility hubs, etc.
`Travel & Connectivity` `Health & Wellbeing` `Climate & Environment` `Culture & Assets`

12.3.   Work with partners using nature-based solutions to ensure new green and blue infrastructure is created in new developments and highways schemes to protect and enhance biodiversity.
`Travel & Connectivity` `Health & Wellbeing` `Social & Community` `Climate & Environment` `Culture & Assets`

Innovation and new technologies

Objective BIC13 concentrates on innovation and new technologies for our communities. Innovation can mean a number of things depending on the context. However, in accordance with LTCP, innovation is defined as anything which is new or being applied in new ways or contexts to traditional approaches. This can range from new technologies to new processes or approaches. Further details regarding this are outlined in the councils Innovation Framework.

Objective BIC13: Utilise emerging and future technologies to develop innovation in Bicester

Objective BIC13 is in relation to innovation, the benefits of this are:

- **New Technology**
- **Decarbonisation**
- **The Local Economy**
- **Green Transport**
- **Business Growth**
- **Digital Connectivity**
- **Green Freight**

Bicester has been home to innovation for years. Within the town is a former RAF airbase which now houses Bicester Motion, an estate at the forefront of mobility technology. In the Oxfordshire Local Industrial Strategy published by Oxfordshire Local Enterprise Partnership (OxLEP), Bicester was one of the towns identified as a Living Labs Testbed, a scheme where smart living pilots can be undertaken at scale using emerging technologies integrated into major housing developments[84]. Utilising new technology and allowing innovation to flourish, Bicester will be able to maximise its potential as a growing town.

Providing better connectivity within Bicester and the wider region will enable this growth. Exploring opportunities to improve transport via new technologies will be necessary to achieve our vision of an inclusive, safe, and net-zero transport system. This objective supports various policies of the LTCP including **Policies 2, 11, 15, 18, 20 - 25, 29, 38 and 41 - 43**.

We will deliver Objective BIC13 through the following actions:

13.1.   Working with partners, explore innovation opportunities to support the delivery of the following, but not limited to:
   a. Electric charging hubs for bus, car, e-bikes etc.
   b. East-West Rail 5G network Bicester and Bletchley (short term) and between Oxford and Bicester on to Milton Keynes (long term).
   c. Develop integrated SMART Infrastructure.
   d. Work with partners to develop a zero-emission shared self-driving vehicles to link key employment sites.
   e. Deliver EV charging infrastructure at Bicester Park and Ride and across Bicester to enable the transition to EV vehicles.
   f. Drone flights at Bicester Motion.
   g. Explore innovative Mobility as a Service (MaaS) solutions within Bicester.
   h. Utilising the growth in Bicester to explore innovative ways to integrate new developments and existing communities.

   `Travel & Connectivity` `Economic Growth` `Social & Community` `Climate & Environment` `Culture & Assets`

13.2.   We will seek to:
   a. Facilitate forthcoming new technology to inform future movement and place networks.
   b. Pro-actively seek funding opportunities to deliver and support innovation.
   c. Facilitate forthcoming new technology on our transport network.
   d. Undertake monitoring and evaluation of schemes.

e. Support the county and other LAs by providing data and insights (living lab).

Travel & Connectivity Economic Growth Social & Community

Culture & Assets

Conclusion and Next Steps

This MAP Plan has set out the objectives and actions to enable the residents of Bicester and Mid-Cherwell to live healthy, active and happy lifestyles by taking a people first approach.

Taking a holistic approach to how people embark on their day-to-day journeys will create the opportunity to delivery an inclusive transport network which thinks of every aspect someone's journey from the moment they leave the front door to the moment they return home. What this document must do is deliver a transport network where children can walk, wheel and cycle to school, deliver choice for how people travel and support the creation of places which people want to visit and spend time in.

The MAP Plan will be a live document which will be monitored, and subsequent updates will share in greater detail, as funding is secured, how we will engage with residents to deliver identified schemes. Subject to the findings of the governments New Town Taskforce this plan will be required to be reviewed to ensure it meets the aspirations of the community from a movement and place perspective.

This document is the start of a journey which will support the long-term investment in people of Bicester and Mid-Cherwell. It will be a focal point for those investing in the area and help secure additional funding to achieve the vision of the MAP Plan and LTCP.

Objectives summary

Table 1 below sets out the objectives identified for Bicester and their connection to the nine MAP Plan outcomes:

Objective		Outcome								
		1	2	3	4	5	6	7	8	9
BIC1	Create a sense of place through implementing healthy place-shaping interventions	✔	✔	✔	✔	✔	✔			✔
BIC2	Deliver a comprehensive and inclusive walking, cycling and wheeling network	✔	✔	✔	✔		✔			✔
BIC3	Enhance bus infrastructure by improving facilities and access	✔			✔	✔	✔			
BIC4	Enhance bus services	✔			✔	✔	✔			
BIC5	Create a network of mobility hubs	✔			✔	✔	✔	✔	✔	✔
BIC6	Work alongside partners to improve rail services and infrastructure	✔			✔	✔	✔			✔
BIC7	Support the development of a car club network and car share schemes	✔				✔	✔	✔		✔
BIC8	Implement demand management measures in areas to compliment sustainable transport	✔	✔	✔	✔	✔	✔			✔
BIC9	Deliver movement infrastructure schemes	✔	✔							✔
BIC10	Deliver future movement infrastructure schemes	✔	✔							✔
BIC11	Work with freight and delivery operators to improve movement efficiency and provide zero emission deliveries	✔	✔	✔	✔	✔	✔	✔	✔	✔
BIC12	Deliver infrastructure and placemaking schemes which are resilient to future changing climate	✔	✔	✔	✔	✔	✔	✔		✔
BIC13	Utilise emerging and future technologies to develop innovation in Bicester	✔		✔		✔	✔	✔		

Table 1: Bicester Objectives vs MAP Plan outcomes.

Objectives and Actions

Objective BIC1: Creating a sense of place through implementing a healthy place-shaping interventions.

1.1. Prepare a strategy and action plan to develop place shaping solutions for improved public realm within the town centre, central corridor, local/district centres and surrounding villages. For example, Heyford Park and Ambrosden.

1.2. Build upon and deliver a cohesive wayfinding scheme, to benefit all residents and visitors.

1.3. Conduct an audit across Bicester and villages within Mid-Cherwell using Healthy Streets Toolkit, reviewing crossing points, side roads, barriers to support implementation of place-shaping schemes along with inclusive and accessible walking, wheeling and cycling routes.

1.4. Collaborate with the community and partners to support the introduction of murals, artwork, rest places, greener spaces, pocket parks, and community parks.

1.5. Collaborate with communities and partners to identify locations to deliver play streets.

1.6. Working with partners to explore regeneration opportunities in and around the town centre with a focus on place shaping.

Objective BC2: Deliver a comprehensive and inclusive walking, wheeling and cycling network.

2.1 Ensure the delivery of walking, wheeling and cycling schemes contained within adopted documents (such as LCWIPs and SATN) to create seamless links to existing and new developments and any subsequent update to them

2.2 Create a strategy and action plan to deliver quality pedestrian corridors to integrate with other modes of transport

2.3 Explore opportunities to work with partners and stakeholders to create movement corridors which enable and prioritise extensive walking, wheeling, cycling and public transport

2.4 Work with the community and partners to deliver behaviour change to support the delivery of walking, wheeling and cycling schemes and to influence modal patterns away from car usage.

2.5 To support the delivery of schemes in the capital programme:
   a. Middleton Stoney Road Active Travel Scheme
   b. London Road Active Travel Scheme

2.6 Progress schemes in the pipeline
   a. A41 (close to M40 Junction 9/Siemens access to Vendee Drive)
   b. A41 (county boundary towards the A4421 Roundabout
   c. 'Cattle Creep' scheme

2.7 Develop blue green infrastructure including investigate changes to the PRoW and Greenway network to enable use by a wider range of Non-Motorised Users for different journey purposes
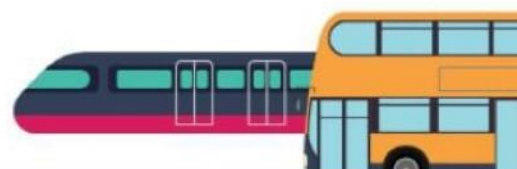
2.8 Work with partners to deliver a suite of behaviour change initiatives which will support the delivery of new infrastructure and provide the skills and confidence to walk, wheel and cycle, including but not limited to:

   a. Bikeability for schools, families and adults.
   b. Work with partners to explore a community bike loan scheme.
   c. Explore opportunities to work with local employers to deliver bike share schemes.
   d. Work with partners to develop Active Travel Hub / Bike Kitchen.

2.9 Ensure all developments provide direct links to wider walking, cycling and wheeling schemes such as LCWIP, SATN, PRoW and Greenway routes to align with Oxfordshire County Council's standards (e.g. cycling and walking).

2.10 Prepare a strategy and action plan to deliver with partners a network of inclusive cycle parking, hubs, hangars including provision for non-standard cycles within the town centre and along key bus routes.

2.11 Remove or redesign Access Control Barriers to ensure walking, cycling and wheeling is accessible to everyone with no barriers in place for continuous movement.

2.12 2.15Work with partners and the community to assess the feasibility of an e-scooter and e-bike network.

Objective BIC3: Enhance bus infrastructure.

3.1 Working alongside public transport operators to develop a strategy and action plan for a bus route hierarchy and to implement bus prioritisation/SMART infrastructure along key movement corridors including as per IDP:

   a. Bus priority on B4030 and Vendee Drive Roundabout improvements.
   b. Improvements to A41 corridor; infrastructure improvements and bus priority to enable greater reliability on the A41 corridor to/from Junction 9 to Ploughley Lane.
   c. B4100 between Baynard's Green roundabout and A4095 junction.
   d. Bus only link, west of Howes Lane – link to the Howes Lane and Lords Lane realignment.
   e. Through route for buses between the A4421 Charbridge Lane and A41 Aylesbury Road.

3.2 Develop a strategy and action plan with local community and stakeholders to identify opportunities for the improvement of bus infrastructure/hubs (e.g. waiting facilities, location for new bus stops, Real Time Information, AI, raised kerbs, lighting, shelters, CCTV, onward travel maps and greening/solar.) including the following:

   a. Town Centre interchange at Pioneer Square.
   b. Bus routes into strategic employment sites.
   c. Bus routes through North West Bicester and Middleton Stoney Road.

3.3 Work with stakeholders to investigate the opportunities to enhance bus stops and public realm at Pioneer Square and assess future needs

3.4   Explore solutions where there is conflict between public transport and other transport modes.

3.5   Work with public transport operators to deliver a zero-emission bus fleet within Bicester and Mid Cherwell.

Objective BIC4: Enhance bus services.

4.1   Develop a strategy and action plan with stakeholders and partners to identify opportunities to deliver and fund long distance coach services which link to regional and national locations.

4.2   Work with operators to provide new services to existing communities, new residential areas and existing/new employment, community and bus services linking to surrounding villages.

    a. NW Bicester bus service connecting to the town centre.

    b. Investigate the potential of providing a new bus service to strategic employment sites (developments to fund additional services).

    c. Heyford Park.

    d. Other areas across Mid Cherwell

4.3   Work with partners to enhance bus services to meet demands, with consideration given to increasing frequencies (including "turn up and go" services) and express, or limited stop services and the optimisation of existing services.

4.4   Work with bus operators and employers to ensure improved reliability, attractiveness and resilience of services.

4.5   Work with partners to develop a digital strategy to support the bus network within Bicester and surrounding areas.

4.6   Work with partners to develop a behavioural strategy to raise awareness about the existing bus network and enhancements.

Objective BIC5: Create a network of mobility hubs.

5.1   Explore the feasibility and opportunities to provide a network of mobility hubs within Bicester including, including but not limited to:

    a. Bicester North Railway Station

    b. Bicester Village Railway Station

    c. Bicester Park and Ride

    d. Pioneer Square

    e. Explore other strategic locations across Mid-Cherwell

5.2   Explore opportunities to improve mobility hubs by:

    a. Improving waiting facilities

    b. Providing digital connectivity
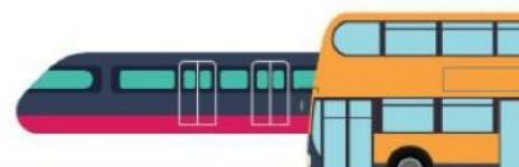
 c. Providing rest, and toilet facilities, etc
 d. Providing cycle parking and connections
 e. Providing EV charging facilities, helping to support parcel/taxi operators
 f. Linking to long distance coach services
 g. Co-locating with complimentary land uses and services

Objective BIC6: Work alongside partners to improve rail services and infrastructure.

6.1 Support and promote additional services to improve the passenger experience at Bicester North and Bicester Village Rail Stations.

6.2 **Bicester Village Railway Station**

 a. Support the upgrade of the station to accommodate an increase in patronage by enhancing the waiting facilities, interaction of bus and train services, alongside information and improve and enhance cycling and e-mobility.

 b. Support the delivery of East West Rail services unlocking the benefits of regional connectivity between Oxford and Cambridge.

 c. Work with partners to deliver 5G connectivity along the East West Rail route.

 d. Promote and support the delivery of the electrification of the East West Rail route.

6.3 Work with EWR Company to ensure they deliver an alternative to the London Road Crossing making appropriate provision for walking, wheeling, cycling, public transport and motor vehicle solutions, and to consider appropriate opportunities to maximise sustainable and active door-to-door connectivity.

6.4 **Bicester North Railway Station**

 a. Explore feasibility of additional pedestrian access
 b. Assess existing and future parking capacity
 c. Develop feasibility to enhance cycling access

6.5 **Heyford Railway Station**

 a. Work with stakeholders to explore better connectivity between Heyford Station and the residential areas. Subject to the New Towns Taskforce decision, further collaboration will be required to ensure seamless door to door connectivity between Heyford Station (other stations) and Heyford Park.

 b. Work with partners to monitor the impact of future e-bike trials in Heyford Park.

 c. Explore feasibility of enhanced rail connectivity to support employment, education and leisure.

6.6 Ensure delivery of high-quality public transport and walking, wheeling and cycling links with all rail stations in Bicester area.
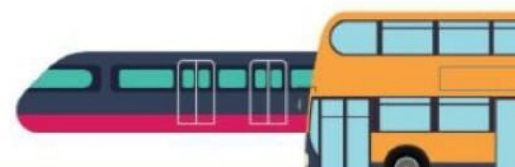
6.7 Provide charging infrastructure for zero-emission battery trains.

6.8 Enhance station facilities to meet future population growth, and to improve accessibility and consider opportunities for new stations.

Objective BIC7: Support the development of a car club network and car share schemes.

7.1 Identify with partners a comprehensive network of car clubs, including the prioritisation of parking for car clubs.

7.2 Aim for car clubs to be zero emission only.

7.3 Work with developers and business to provide EV charging and parking to support car clubs and car share.

7.4 Collaborate with partners and businesses to develop a car share awareness/ expansion programme.

Objective BIC8: Implement demand management measures in areas which are well served by sustainable transport.

8.1 Identify the demand management tools and appropriate locations where these may be required in short to medium term, agree further measures to compliment the delivery of Southeast Peripheral Road to enable an increase in walking, wheeling and cycling for local journeys within Bicester.

8.2 Identify and deliver School Zones

8.3 Using a Safe System approach, we will reduce vehicle speeds inside Bicester's peripheral roads and throughout residential areas to prioritise the safe movement of people within Bicester.

8.4 Work with partners to investigate opportunities to consolidate public parking within the town centre, to reduce the need to travel by car as per the LTCP, to prioritise sustainable travel.

8.5 Work with partners to limit the number of parking spaces at existing and future employment hubs, through the implementation of Travel Plans and sustainable travel measures.

8.6 Explore the viability of a Clean Air Zone and Zero Emission Zone identified in the CDC Air Quality Action Plan 2024

8.7 Explore opportunities to deliver a Workplace Parking Levy and Control Parking Zones.

Objective BIC9: Deliver movement infrastructure schemes.

9.1 Support the delivery of:
   a. A4095 realignment (NW Bicester)
   b. Highways and environmental improvements to the central corridor: Kings End to Queen Ave.
   c. Improvements to Middleton Stoney Road / Kings End / Oxford Road roundabout.
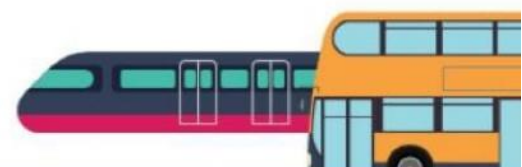
    d. Caversfield junction improvements (Junction of Aunt Ems Lane and B4100)

    e. Western corridor Changes and improvements to Howes Lane/Bucknell Road Junction: North West Bicester all other phases.

### Objective BIC10: Deliver future movement infrastructure schemes.

10.1   Progress the current ongoing schemes in the pipeline:
    a. Eastern Peripheral Movement Corridor

10.2   Work with partners to develop the following previously identified schemes:
    b. A41 Corridor / South East Peripheral Road
    c. Vendee Drive / A41 highway improvements

Objective BIC11: Work with freight and delivery operators to improve movement efficiency and provide zero emission deliveries

11.1   Explore opportunities to identify further HGV restrictions in areas with high walking, wheeling and cycling movements and consider enforcement.

11.2   Collaborate with partners to develop feasibility of first and last mile delivery hubs using cargo bikes and e-cargo bikes at employment sites.

11.3   Support the rollout of parcel / grocery lockers at key transport locations such as Bicester Village and Bicester North Rail Station's, Bicester Bus Interchange (Pioneer Square), Heyford Park, Bicester Park and Ride, Mobility Hubs, and local/ district centres to support integrated travel.

11.4   Explore opportunities which support the transition of freight from road to rail.

11.5   Identify EV charging locations for freight.

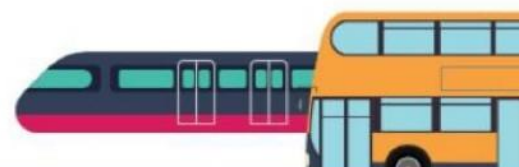### Objective BIC12: Deliver infrastructure and placemaking schemes which are resilient to changing climate.

12.1   Ensure development and highways schemes protect and enhance existing green and blue infrastructure in line with Cherwell District Council Local Plan.

12.2   Develop a strategy to provide greening of and placing solar panels on bus stops, train stations, signage, mobility hubs, etc.

12.3   Work with partners using nature-based solutions to ensure new green and blue infrastructure is created in new developments and highways schemes to protect and enhance biodiversity.
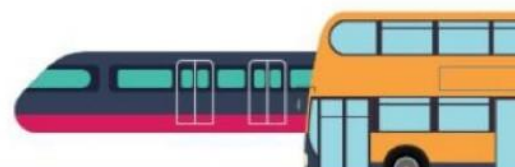
Objective BIC13: Utilise emerging and future technologies to develop innovation in Bicester.

13.1 Working with partners, explore innovation opportunities to support the delivery of the following, but not limited to:
   a. Electric charging hubs for bus, car, e-bikes etc.
   b. East-West Rail 5G network Bicester and Bletchley (short term) and between Oxford and Bicester on to Milton Keynes (long term).
   c. Develop integrated SMART Infrastructure.
   d. Work with partners to develop a zero-emission shared self-driving vehicles to link key employment sites.
   e. Deliver EV charging infrastructure at Bicester Park and Ride and across Bicester to enable the transition to EV vehicles.
   f. Drone flights at Bicester Motion
   g. Explore innovative Mobility as a Service (MaaS) solutions within Bicester.
   h. Utilising the growth in Bicester to explore innovative ways to integrate new developments and existing communities.

13.2 We will seek to:
   a. Facilitate forthcoming new technology to inform future movement and place networks.
   b. Pro-actively seek funding opportunities to deliver and support innovation.
   c. Facilitate forthcoming new technology on our transport network.
   d. Undertake monitoring and evaluation of schemes.
   e. Support the county and other LAs by providing data and insights (living lab).

Glossary

Term	Definition
Access Control Barriers	Access control infrastructure such as bollards used to address a safety issue or prevent illegal motor vehicle access. It must not limit access for people walking, wheeling and cycling.
Active travel	Active travel refers to modes of travel that involve a level of activity. The term is often used interchangeably with walking and cycling, but active travel can also include trips made by wheelchair, mobility scooters, adapted cycles, e-cycles, scooters, as well as cycle sharing schemes.[85]
Air Quality Management Area (AQMA)	Since December 1997 each local authority in the UK has been carrying out a review and assessment of air quality in their area. This involves measuring air pollution and trying to predict how it will change in the next few years. The aim of the review is to make sure that the national air quality objectives (PDF) will be achieved throughout the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment. If a local authority finds any places where the objectives are not likely to be achieved, it must declare an Air Quality Management Area there.
Annual Mean Modelled Concentration	The annual mean is the average concentration of a pollutant measured over one year.
Car club	Car clubs provide residents, visitors or businesses with access to a vehicle as a short-term rental, usually by the hour. Car clubs may also include other vehicles such as vans alongside cars. Car club operating models include commercial car clubs, peer-to-peer commercial car sharing and community car clubs.
Car share	Lift sharing, also known as car sharing, car-pooling or ride sharing is the coordinated matching up of lifts between drivers and passengers who share a common or similar route.
CDC	Cherwell District Council
Census	A national survey of the population of the United Kingdom, taking place every 10 years. This includes asking questions on car ownership and travel to work. The last two were in 2011 and 2021.
Connected and Autonomous Vehicle (CAV)	Vehicles equipped to exchange information with surrounding environment and can operate in a mode which is not being controlled by an individual
Controlled Parking Zones (CPZs)	An area where parking is only permitted in designated parking bays, and the rest of the kerbside space is restricted by yellow lines. Any illegally parked cars are issued with a parking ticket.
Decide and Provide	The Decide and Provide approach to transport planning decides on a preferred vision of the future and then provides the means to work towards that whilst also accommodating uncertainty about the future.
Defra	Department for Environment, Food and Rural Affairs - A department of the UK Government of the United Kingdom that is responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities.
Department for Transport (DfT)	A department of the UK Government of the United Kingdom that is responsible for the transport network.

Term	Definition
Electric vehicle (EV)	A vehicle that uses an electric motor for propulsion, comprising BEV's, as well as plugin hybrid electric vehicles that have an attached petrol or diesel engine to power the battery engine.
Fatal collision	A collision in which at least one person is killed.
Freight	Freight is the general term for goods transported from one place to another by any means. Freight can therefore be moved in a variety of ways including by Heavy Goods Vehicles (HGV), Light Goods Vehicles (LGV), rail, cargo bikes and emerging modes such as drones.
Heavy Goods Vehicles (HGV)	Commercial trucks that feature a gross combination mass of over 3500kg. In the UK HGVs have a max legal length of 16.5m.
Injury collision	A collision involving human injury or death.
Killed or Seriously Injured (KSI)	The number of people, or number of collisions on the highway network which result in people being, killed or seriously injured as a result of a road traffic collision.
Light Goods Vehicles (LGV)	Commercial trucks that feature a gross combination mass of under 3500kg.
Living Labs	The Eco-Bicester Living Lab (EBLL), which is a joint collaboration between Oxford Institute for Sustainable Development (OISD) at Oxford Brookes and BioRegional Development Group, has been developed to capture the learning and innovation that is happening in Bicester.
Local Cycling and Walking Infrastructure Plans (LCWIPs)	LCWIPs are a strategic approach to identifying cycling and walking improvements at the local level. They enable a long-term approach to developing local cycling and walking networks over the next ten years and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.
Local Transport and Connectivity Plan (LTCP)	Oxfordshire County Council's new Local Transport Plan.
Local Transport Note (LTN) 1/20 – Cycle Infrastructure Design	Guidance for local authorities on delivering high-quality, safe cycle infrastructure. Cycle Infrastructure Design
Micromobility	Micromobility refers to a range of small, lightweight vehicles that are driven by users personally. This includes electric bikes (e-bike): Bicycles with a battery-powered assist and electric scooter (e-scooters): Motorised stand-up scooter with an electric motor. It can also include private e-scooters, rollerblades and 'hoverboards'.
Mobility Hub	Mobility hubs bring together shared transport with public transport and active travel making it easier for people to interchange from one mode of transport to another.
Mode of transport	Method of travelling from one place to another.
Multi-modal	Using two or more modes of transport, like bus, train, walking, or cycling, in one journey.
National Cycle Network (NCN)	The UK-wide network of signed paths and walking routes for walking, wheeling, and cycling outdoors. Routes forming part of the National Cycle Network shall be designed in accordance with current best practice design guidance, in collaboration with the local community and provide convenient links to key destinations – connecting cities, towns and countryside.
National Travel Survey (NTS)	A household survey designed to monitor long-term trends in personal travel and to inform the development of policy. It is the primary source of data on personal travel patterns by residents of England within Great Britain.

Term	Definition
Non-Motorised Users (NMU)	A 'non-motorised user' (or NMU) is someone walking or cycling, or a horse rider.
Office for Rail and Road (ORR)	Is the independent economic and safety regulator for Britain's railways. They also regulate performance and efficiency on England's strategic road network.
Oxides of Nitrogen (NOₓ)	Combustion processes emit a mixture of nitrogen oxides (NO_X), primarily nitric oxide (NO) which is quickly oxidised in the atmosphere to nitrogen dioxide (NO_2). Nitrogen dioxide has a variety of environmental and health impacts. It is a respiratory irritant which may exacerbate asthma and possibly increase susceptibility to infections. In the presence of sunlight, it reacts with hydrocarbons to produce photochemical pollutants such as ozone. NO_2 can be further oxidised in air to acidic gases, which contribute towards the generation of acid rain.
Particle Matter (PM)	Airborne PM includes a wide range of particle sizes and different chemical constituents. It consists of both primary components, which are emitted directly into the atmosphere, and secondary components, which are formed within the atmosphere as a result of chemical reactions. Of greatest concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Air Quality Objectives are in place for the protection of human health for PM_{10} and $PM_{2.5}$ – particles of less than 10 and 2.5 micrometres in diameter, respectively.
Place shaping	Creating places which improves the quality of life for residents, enables growth and supports vibrant sustainable communities.
Predict and Provide	Predict and Provide can be broadly described as an approach to transport planning that uses current or historical traffic patterns to determine the future need for infrastructure.
Public realm	The public realm is the publicly accessible spaces between buildings that allow people to move around and interact. It includes streets, squares, parks, and other outdoor spaces.
Public Rights of Way (PRoW):	Network of routes where public use is legally protected.
Quality Pedestrian Corridors (QPC)	A quality pedestrian corridor is a walkway that's comfortable, safe, and well-connected, with adequate space for pedestrians. It also includes features like lighting, signage, and crossing facilities.
Real Time Information (RTI)	Live tracking of bus and rail services provided either via information screens of applications.
Section 106 (S106) contribution	A financial contribution made by a developer under Section 106 of the Town and Country Planning Act 1990, often for a specific purpose (e.g. new infrastructure).
Severance	This refers to barriers to movement and consist of hard severance features – such as rivers, major roads and railways and soft severance features – minor roads.
Strategic Active Travel Network (SATN)	The Strategic Active Travel Network is a proposal for a countywide Active Travel network of walking and cycling routes. Oxfordshire towns already have LCWIPs, creating a network of walking and cycling routes within towns. The SATN will connect these networks, enabling longer-distance walking and cycling across the county. Some of these routes already exist, others are proposed and will be developed in the future.
Strategic Road Network (SRN)	Roads managed by National Highways comprising motorways and some A roads

Term	Definition
Sustainable drainage systems (SuDS)	Designed to manage stormwater locally (as close its source as possible), to mimic natural drainage and encourage its infiltration, attenuation and passive treatment.
Vision Zero	The aim of vision zero is to have zero road fatalities or serious injuries on Oxfordshire's transport system by 2050. This aligns with and will contribute to the global political commitment to improve road safety made through the Stockholm Declaration.
Walking, Wheeling, and Cycling	Walking, wheeling and cycling refers to modes of travel that involve a level of activity. The term is often used interchangeably with walking and cycling, but walking, wheeling and cycling can also include trips made by wheelchair, mobility scooters, adapted cycles, e-cycles, scooters, as well as cycle sharing schemes.
Zero Emission Zones (ZEZs)	An area where all vehicles except those with zero tailpipe emissions are restricted or charged.

References

[1] Cherwell District Council (2024). Bicester Transport Topic Paper December 2024 | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/downloads/file/16083/bicester-transport-topic-paper-december-2024 [Accessed 15 Oct. 2025].

[2] New Towns Taskforce (2025). New Towns Taskforce Report to Government. [online] Available at: https://assets.publishing.service.gov.uk/media/68d694b79cb44667f7a1cee7/New_Towns_Taskforce_Final_Report.pdf [Accessed 15 Oct. 2025].

[3] Department for Business and Trade (2019). Oxfordshire Local Industrial Strategy. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/oxford-cambridge-arc-local-industrial-strategies/oxfordshire-local-industrial-strategy.

[4] Skyports News Team (2024). First look at UK vertiport revealed as planning secured | Skyports Infrastructure. [online] Skyports Infrastructure. Available at: https://skyports.net/first-look-at-uk-vertiport-revealed-as-planning-secured/.

[5] Bicester Heritage (2016). Bicester Heritage | About. [online] Bicester Heritage. Available at: https://bicesterheritage.co.uk/about.

[6] Oxfordshire County Council (2025). Oxfordshire Data Hub – Welcome to the Oxfordshire Data Hub. [online] Oxfordshire.gov.uk. Available at: https://data.oxfordshire.gov.uk/ [Accessed 15 Oct. 2025].

[7] Cherwell District Council (2025). Chapter 8: Rural Areas Strategy | Chapter 8: Rural Areas Strategy | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/info/279/local-plan-2042-reg-19/1248/chapter-8-rural-areas-strategy [Accessed 15 Oct. 2025].

[8] Transport Scotland (2023). Best practice in active travel and its associated benefits Literature review Best practice in active travel and its associated benefits Transport Scotland. [online] Available at: https://www.transport.gov.scot/media/53143/literature-review-best-practice-in-active-travel-and-its-associated-benefits-april-2023.pdf.

[9] Donkin, A., Childs, M. and Marmot, M. (2024). Transport's role in creating a fairer, healthier country. IPPR Progressive Review, [online] 31(3), pp.174–180. doi:https://doi.org/10.1111/newe.12416.

[10] Cooper, E., Gates, S., Grollman, C., Mayer, M., Davis, B. and Bankiewicz, U. (2019). Transport, health, and wellbeing: An evidence review for the Department for Transport Prepared for: Department for Transport Prepared for: The Department for Transport. [online] Available at: https://assets.publishing.service.gov.uk/media/5dd6b167e5274a794517b633/Transport__health_and_wellbeing.pdf.

[11] Public Health England (2014). Everybody active, every day An evidence-based approach to physical activity. [online] Available at: https://assets.publishing.service.gov.uk/media/5a7d8109ed915d2d2ac09597/Framework_13.pdf.

[12] Oxfordshire County Council (2023). HEALTH AND WELLBEING STRATEGY Oxfordshire, 2024-2030 FULL FINAL VERSION -December 2023. [online] Available at: https://mycouncil.oxfordshire.gov.uk/documents/s68558/231207_HWB_Item%207_Annex%202-%20Health%20and%20Wellbeing%20Strategy_full_Final-Draft.pdf.

[13] Department for Environment, Food, and Rural Affairs (2022). Air Quality Management Areas (AQMAs)- Defra, UK. [online] uk-air.defra.gov.uk. Available at: https://uk-air.defra.gov.uk/aqma/.

[14] Department for Environment, Food, and Rural Affairs (2022b). UK Air Quality Limits- Defra, UK. [online] uk-air.defra.gov.uk. Available at: https://uk-air.defra.gov.uk/air-pollution/uk-limits.php.

[15] Cherwell District Council (2024a). Air quality | Air quality | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/info/69/pollution/463/air-quality [Accessed 15 Oct. 2025].

[16] Oxfordshire County Council (2025). Oxfordshire Data Hub – Welcome to the Oxfordshire Data Hub. [online] Oxfordshire.gov.uk. Available at: https://data.oxfordshire.gov.uk/ [Accessed 15 Oct. 2025].

[17] Cherwell District Council (2024). Air quality | Air quality | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/info/69/pollution/463/air-quality [Accessed 15 Oct. 2025].

[18] Office For National Statistics (2019). Road transport and air emissions - Office for National Statistics. [online] Ons.gov.uk. Available at: https://www.ons.gov.uk/economy/environmentalaccounts/articles/roadtransportandairemissions/2019-09-16.

[19] Common examples of sedentary behaviour include watching TV, using a computer, using the car for short journeys and sitting down to read, talk or listen to music. This type of behaviour is thought to increase your risk of developing many long-term conditions, such as heart disease, stroke and type 2 diabetes, as well as weight gain and obesity Benefits of exercise - NHS

[20] Fingertips | Public health profiles. 3 years data combined (2021/22 – 2023/24). Bicester East – 35.4%, Bicester North – 30.4%, Bicester South – 33.3%, Bicester West – 35.7%. Year 6 prevalence of overweight (including obesity). Fingertips | Department of Health and Social Care

[21] University of Cambridge (2019). Children who walk to school less likely to be overweight or obese, study suggests. [online] University of Cambridge. Available at: https://www.cam.ac.uk/research/news/children-who-walk-to-school-less-likely-to-be-overweight-or-obese-study-suggests.

[22] Appleby, K. (2021). Impact case study – Schoolchildren who switch to walking or cycling may have a healthier body weight - NIHR School for Public Health Research. [online] NIHR School for Public Health Research. Available at: https://sphr.nihr.ac.uk/news-and-events/impact/impact-case-study-schoolchildren-who-switch-to-walking-or-cycling-may-have-a-healthier-body-weight/.

[23] Cooper, E., Gates, S., Grollman, C., Mayer, M., Davis, B. and Bankiewicz, U. (2019). Transport, health, and wellbeing: An evidence review for the Department for Transport Prepared for: Department for Transport Prepared for: The Department for Transport. [online] Available at: https://assets.publishing.service.gov.uk/media/5dd6b167e5274a794517b633/Transport__health_and_wellbeing.pdf.

[24] Oxfordshire County Council (2020). Cherwell District Summary. [online] Cherwell.gov.uk. Available at: https://modgov.cherwell.gov.uk/documents/s51088/Appendix%202%20-State%20of%20the%20District%20report%202020.pdf.

[25] Albion (2024). Jobs & Economy - Albion Land Axis J10. [online] Albion Land Axis J10. Available at: https://www.axisj10.co.uk/our-proposals/jobs-economy/ [Accessed 17 Oct. 2025].

[26] Sport England (2025). Active Lives Adult Survey November 2023-24 Report sportengland.org 2. [online] Available at: https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2025-04/ActiveLivesAdult-Nov23-24_V9-23-04-25-10-03-03-02.pdf?VersionId=aZVjaW4MK37mqMAWm_Th9un7WRjSeF7u.

[27] Cooper, E., Gates, S., Grollman, C., Mayer, M., Davis, B. and Bankiewicz, U. (2019). Transport, health, and wellbeing: An evidence review for the Department for Transport Prepared for: Department for Transport Prepared for: The Department for Transport. [online] Available at: https://assets.publishing.service.gov.uk/media/5dd6b167e5274a794517b633/Transport__health_and_wellbeing.pdf.

[28] Cooper, E., Gates, S., Grollman, C., Mayer, M., Davis, B. and Bankiewicz, U. (2019). Transport, health, and wellbeing: An evidence review for the Department for Transport Prepared for: Department for Transport Prepared for: The Department for Transport. [online] Available at: https://assets.publishing.service.gov.uk/media/5dd6b167e5274a794517b633/Transport__health_and_wellbeing.pdf.

[29] Cherwell District Council (n.d.). Creating healthy communities | Bicester Garden Town - Health | Cherwell District Council. [online] www.cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/info/260/bicester-garden-town/711/bicester-garden-town---health.

[30] Cherwell District Council (2025b). Health Routes in Bicester | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/downloads/download/1154/health-routes-in-bicester [Accessed 15 Oct. 2025].

[31] Institute of Health Equity (2021). Marmot Places - Institute of Health Equity. [online] Institute of Health Equity. Available at: https://www.instituteofhealthequity.org/taking-action/marmot-places.

[32] 47% in Census 2021, 40% in Census 2011. These include employed residents in Bicester excluding those working from home.

[33] 53% in Census 2021, 53% in Census 2021. These include employed residents in Bicester excluding those working from home.

[34] Oxfordshire County Council (2025). Settlement based journey to work origins. [online] Tableau.com. Available at: https://public.tableau.com/views/2011CensusTTWOriginSettlementLB/LAleveljourneyorigins?:embed=y&:showVizHome=no [Accessed 15 Oct. 2025].

[35] Department for Transport (2022). The second cycling and walking investment strategy. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/the-second-cycling-and-walking-investment-strategy.

[36] Public Health England (2019). Review of interventions to improve outdoor air quality and public health. [online] Available at: https://assets.publishing.service.gov.uk/media/5fbf93258fa8f559dbb1add9/Review_of_interventions_to_improve_air_quality_March-2019-2018572.pdf.

[37] Cycling UK (2024). New research and strategy on cycling, walking and wheeling for rural communities | Cycling UK. [online] Cyclinguk.org. Available at: https://www.cyclinguk.org/article/rural-mobility-reports [Accessed 15 Oct. 2025].

[38] Department for Transport (2021). Future of Transport: Rural Strategy Call for Evidence Summary of Responses. [online] Available at: https://assets.publishing.service.gov.uk/media/6141d754d3bf7f05b5a90340/future-of-transport-rural-strategy-call-for-evidence-summary-of-responses.pdf.

[39] Cycling UK (n.d.). Written Evidence. [online] Available at: https://committees.parliament.uk/writtenevidence/22258/pdf/.

[40] 5% in Census 2021, 8% in Census 2011. These include employed residents in Bicester excluding those working from home.

[41] Cherwell District Council (2024). Bicester Transport Topic Paper December 2024 | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/downloads/file/16083/bicester-transport-topic-paper-december-2024 [Accessed 15 Oct. 2025].

[42] Department for Transport (2025). Backing British business: Prime Minister unveils plan to support carmakers. [online] GOV.UK. Available at: https://www.gov.uk/government/news/backing-british-business-prime-minister-unveils-plan-to-support-carmakers.

[43] ZapMap (2024). Electric vehicle (EV) charging points in Bicester - Zapmap. [online] Zap-map.com. Available at: https://www.zap-map.com/charge-points/bicester [Accessed 15 Oct. 2025].

[44] Department for Transport (2020). Gear Change A bold vision for cycling and walking. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

[45] MHCLG (2021). National Design Guide. [online] Available at: https://assets.publishing.service.gov.uk/media/602cef1d8fa8f5038595091b/National_design_guide.pdf.

[46] Stad Gent (2017). The Circulation Plan. [online] Stad Gent. Available at: https://stad.gent/en/mobility-ghent/circulation-plan.

[47] Oxfordshire County Council (2022). Active travel | Oxfordshire County Council. [online] Oxfordshire County Council. Available at: https://www.oxfordshire.gov.uk/transport-and-travel/connecting-oxfordshire/active-travel.

[48] Department for Transport (2020). Cycle Infrastructure Design. [online] Available at: https://assets.publishing.service.gov.uk/media/5ffa1f96d3bf7f65d9e35825/cycle-infrastructure-design-ltn-1-20.pdf.

[49] Department for Transport (2020). Gear Change A bold vision for cycling and walking. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf.

[50] Active Travel England (2025). About us. [online] GOV.UK. Available at: https://www.gov.uk/government/organisations/active-travel-england/about.

[51] Holding, K. and Clarke-Jacques, E. (2025). Community Outreach Active Travel End of Year 1 Report -February 2025. [online] Available at: https://www.oxfordshire.gov.uk/sites/default/files/file/adult-social-and-health-care/COATProgressReportEndYear1.pdf.

52 Department for Transport (2020). Gear Change A bold vision for cycling and walking. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

53 BBC News (2024). Hereford bike share scheme hits million kilometre milestone. [online] BBC News. Available at: https://www.bbc.co.uk/news/articles/cpeezz5wx5wo.

54 North Northamptonshire Council (2020). Voi e-scooters | North Northamptonshire Council. [online] Northnorthants.gov.uk. Available at: https://www.northnorthants.gov.uk/buses-and-transport/voi-e-scooters [Accessed 16 Oct. 2025].

55 5% in 2021, 8% in 2011. These include employed residents in Bicester excluding those working from home.

56 65% in 2021, 68% in 2011. These include employed residents in Bicester excluding those working from home.

57 Oxfordshire County Council (2025). Settlement based journey to work origins. [online] Tableau.com. Available at: https://public.tableau.com/views/2011CensusTTWOriginSettlementLB/LAleveljourneyorigins?:embed=y&:showVizHome=no [Accessed 15 Oct. 2025].

58 2% in Census 2021, 4% in Census 2021. These include employed residents in Bicester excluding those working from home.

59 Oxford City Council (2021). Transport statistics – Oxford City Council. [online] Oxford City Council. Available at: https://www.oxford.gov.uk/statistics-oxford/transport-statistics.

60 CIHT (2018). Buses in Urban Developments. [online] Available at: https://www.ciht.org.uk/media/4459/buses_ua_tp_full_version_v5.pdf.

61 Office of Rail and Road (2017). Estimates of station usage | ORR Data Portal. [online] Orr.gov.uk. Available at: https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage/.

62 Rail Delivery Group (2023). Rail travel emits 10 times less carbon than car travel, new figures show. [online] Rail Delivery Group News. Available at: https://media.raildeliverygroup.com/news/rail-travel-emits-10-times-less-carbon-than-car-travel-new-figures-show.

63 The statistics cover the following MSOAs: Cherwell 012, 013, 014, and 015.

64 CoMo UK (2025). Shared cars > Overview and benefits. [online] Como.org.uk. Available at: https://www.como.org.uk/shared-cars/overview-and-benefits#car-club-annual-reports.

65 When asked about changes in car ownership, 22% of respondents stated that the number of cars in their household had decreased since joining the car club. https://CoMo UK Annual Car Club Report 2023

66 CoMo UK (2025). Shared cars > Overview and benefits. [online] Como.org.uk. Available at: https://www.como.org.uk/shared-cars/overview-and-benefits#car-club-annual-reports.

67 CoMo UK (2025). Shared cars > Overview and benefits. [online] Como.org.uk. Available at: https://www.como.org.uk/shared-cars/overview-and-benefits#car-club-annual-reports.

68 Cherwell District Council (2024a). Air quality | Air quality | Cherwell District Council. [online] Cherwell.gov.uk. Available at: https://www.cherwell.gov.uk/info/69/pollution/463/air-quality [Accessed 15 Oct. 2025].

69 Oxfordshire County Council (2023). Parking for new developments Parking Standards for New Developments. [online] Available at: https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-policies-and-plans/PARKINGS.PDF.

70 Oxfordshire County Council (2025). Workplace parking levy | Oxfordshire County Council. [online] http://www.oxfordshire.gov.uk. Available at: https://www.oxfordshire.gov.uk/residents/roads-and-transport/workplace-parking-levy.

71 Oxfordshire County Council (2025). Controlled parking zones (CPZs) | Oxfordshire County Council. [online] Oxfordshire County Council. Available at: https://www.oxfordshire.gov.uk/residents/roads-and-transport/parking/parking-permits/controlled-parking-zones [Accessed 16 Oct. 2025].

72 Department for Environment, Food, and Rural Affairs (2024). Local Authority Details- Defra, UK. [online] Defra.gov.uk. Available at: https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=55 [Accessed 16 Oct. 2025].

73 DEFRA (2024). Concentrations of particulate matter (PM10 and PM2.5). [online] GOV.UK. Available at: https://www.gov.uk/government/statistics/air-quality-statistics/concentrations-of-particulate-matter-pm10-and-pm25.

74 Cherwell District Council (2015). Bicester Sustainability Transport Strategy Volume 1 (Oct 2015) | Cherwell District Council. [online] Cherwell.gov.uk. Available at:

https://www.cherwell.gov.uk/downloads/download/313/bicester-sustainability-transport-strategy-volume-1-oct-2015 [Accessed 16 Oct. 2025].

[75] Oxfordshire County Council (2022). Freight and Logistics Strategy 2022 -2050. [online] Available at: https://www.oxfordshire.gov.uk/sites/default/files/file/roads-and-transport-connecting-oxfordshire/FreightandLogisticsStrategy.pdf.

[76] RAC (2024). Record number of cars in UK but growth beaten by vans. [online] Rac.co.uk. Available at: https://www.rac.co.uk/drive/news/motoring-news/record-number-of-cars-in-the-uk-but-rate-of-growth-beaten-by-delivery-vans/ [Accessed 16 Oct. 2025].

[77] BBC (2024). Highland Council says staff benefit from using e-cargo bikes. BBC News. [online] 30 Oct. Available at: https://www.bbc.co.uk/news/articles/cx28m0mzjvwo.

[78] Cherwell District Council (2025a). Bicester – Cherwell Green and Blue Infrastructure Strategy. [online] Cherwell.gov.uk. Available at: https://lucmaps.co.uk/CherwellGBIDigitalReport/bicester/.

[79] Natural England (2023). Home. [online] designatedsites.naturalengland.org.uk. Available at: https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx.

[80] Department for Environment, Food, and Rural Affairs (2015). AQMA Details- Defra, UK. [online] Defra.gov.uk. Available at: https://uk-air.defra.gov.uk/aqma/details?aqma_ref=1656 [Accessed 16 Oct. 2025].

[81] Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. [online] GOV.UK. Available at: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf.

[82] Oxfordshire County Council (2021). Green infrastructure and access to nature | Oxfordshire County Council. [online] Oxfordshire County Council. Available at: https://www.oxfordshire.gov.uk/residents/environment-and-planning/countryside/natural-environment/environmental-policy-and-planning/green-infrastructure.

[83] Oxfordshire County Council (2021). Green infrastructure and access to nature | Oxfordshire County Council. [online] Oxfordshire County Council. Available at: https://www.oxfordshire.gov.uk/residents/environment-and-planning/countryside/natural-environment/environmental-policy-and-planning/green-infrastructure.

[84] Bicester Living Lab (2025). Home. [online] Bicesterlivinglab.org. Available at: https://bicesterlivinglab.org/ [Accessed 17 Oct. 2025].

[85] Department for Transport (DfT) (2022). Active Travel: Local Authority Toolkit. [online] Available at: https://www.gov.uk/government/publications /active-travel-local-authority-toolkit/active-travel-local-authority-toolkit [Accessed Oct. 2024].