OxRAIL 2040: Plan for Rail

OXFORDSHIRE COUNTY COUNCIL

Foreword

We are proud to lead one of the most forward-thinking county councils in England in respect of tackling climate change and delivering sustainable and inclusive growth for our residents and businesses.

Our OxRAIL 2040: Plan for Rail sets out an ambitious vision and timescale to achieve a greener and more connected Oxfordshire, placing rail at the centre of thriving, accessible communities.

With substantial numbers of new homes being constructed across our County and unparalleled investment in the life sciences, advanced manufacturing and research facilities, improved connectivity by rail is essential for enabling people to travel quickly, efficiently and sustainably across Oxfordshire.

Working closely with our rail partners, we will support the introduction of more spacious and frequent trains. Our vision for an 'Oxfordshire Metro' will mean safe, comfortable and reliable journeys, seamlessly linked with high-frequency electric buses, making public transport the natural choice.

By shifting more freight to rail, we will ease congestion on major roads like the A34 and this in turn will reduce maintenance costs to the taxpayer and improve air quality.

We are tackling the climate emergency head-on by pursuing ambitious plans to decarbonise our railway. We are making it more resilient and adapted to changing weather conditions, while taking care to redevelop existing stations and construct new ones to the highest environmental standards. We will work closely with partners to ensure that Oxfordshire's railway is diesel-free by 2040, delivering cleaner air, better health and more efficient freight operations.

Oxfordshire's railway stations – both current and new – must be welcoming, accessible and feature best-in-class facilities. This will involve constructing interchanges or 'mobility hubs' to support onward travel, with a strong emphasis on public transport and sustainable travel such as cycling and walking. Substantial investment will be made in transport connections to and from workplaces and visitor attractions to support increasing numbers of passengers, as well as in the areas immediately surrounding our stations to make them more attractive.

The past few years have seen more than £750 million of investment in our railway – including additional and new rolling stock and station upgrades, notably in Oxford. However, the pace and scale of investment needs to accelerate if we are to deliver national requirements for significant growth across the Oxford-Cambridge Growth Corridor. We are proud to work alongside the Oxford Growth Commission, the recently established Oxford Strategic Rail Promoters Group and key business partners to champion the need for greater investment in our railway.

Partnership is at the heart of all that we do. Our inhouse rail team works closely with colleagues at Network Rail, our three passenger rail operators, freight operating companies and the British Transport Police to make Oxfordshire's railways bigger, better and safer. We are particularly proud of the amazing work of the Oxfordshire Community Rail Partnership – adding social value through 'getaways', producing local access maps and pursuing innovative youth engagement activities – and we are delighted to continue supporting their work.

We are ready to work with our partners in government and in the private sector to identify robust sources of funding and finance to deliver on this vision. We have local powers and levers to deploy and these will evolve and grow with further devolution.

Our OxRAIL 2040: Plan for Rail will help establish Oxfordshire's integrated transport network as one of the best in England. Through our ambitious investment plans, we will ensure that everyone can use our railway to get to where they want, when they want secure in the knowledge that their journey will be a safe, comfortable and enjoyable experience.

Councillor Liz Leffman

Leader of the Council

Councillor Judy Roberts

Cabinet Member for Place, Environment and Climate Action

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1. Introduction

OxRail 2040: Plan for Rail – sets out our (Oxfordshire County Council) ambitions for the future of the railway in Oxfordshire. It establishes a bold vision for rail as a central component of a fully integrated, world-class and sustainable transport network and prescribes the improvements, initiatives and investment required to make this vision a reality.

The Plan forms a key element of our Local Transport and Connectivity Plan (LTCP). It supports the delivery of our LTCP and complements other adopted strategies including our Active Travel Strategy, Bus Service Improvement Plan (BSIP), Freight and Logistics Strategy, Mobility Hub Strategy and Movement and Place Plans.

This Plan was developed in collaboration with stakeholders across government, the rail industry, local authorities, businesses and communities. A full record of engagements is provided in a separate report on our website. Feedback received through consultation has directly influenced the final document. These refinements reflect our commitment to co-developing a Plan that meets the needs and expectations of the County's residents, businesses and partners.

We are committed to investing our resources, expertise and policy levers in support of this Plan. Delivering OxRail 2040 will depend on strong collaboration across government, the rail industry and local and regional partners, alongside significant investment in new infrastructure, rolling stock and stations. We are ready to work with our partners in government and in the private sector to identify robust sources of funding and finance to deliver on this vision. We have powers and levers to deploy and these will evolve and grow with further devolution.

The potential returns are great. Government's Modern Industrial Strategy identifies Oxfordshire as being at the centre of industries that will underpin the growth of our country. Packaged with other measures, our railway can help unlock further growth, delivering new homes, new jobs and prosperity across the Oxford – Cambridge corridor.

Current changes in local government, the prospect of further devolution and the creation of Great British Railways (GBR) together present an important opportunity to shape the future of Oxfordshire's railway. By working with our partners, we can ensure this opportunity is realised and that the railway is fully integrated into the County's wider spatial planning and transport strategy, delivering benefits for people, the economy and the environment.

"This Plan was developed in collaboration with stakeholders across government, the rail industry, local authorities, businesses and communities"

Our railway in numbers

A snapshot of Oxfordshire's rail network – today and tomorrow

The Network at a Glance

23
National Rail stations

5
Main line corridors incl. East West Rail

16m
Annual Passenger Movements entries & exits (2023/24)

1.3m
Interchanges across Oxford, Didcot & Banbury

70
Trains/day freight services → removing 6,000 HGVs/week

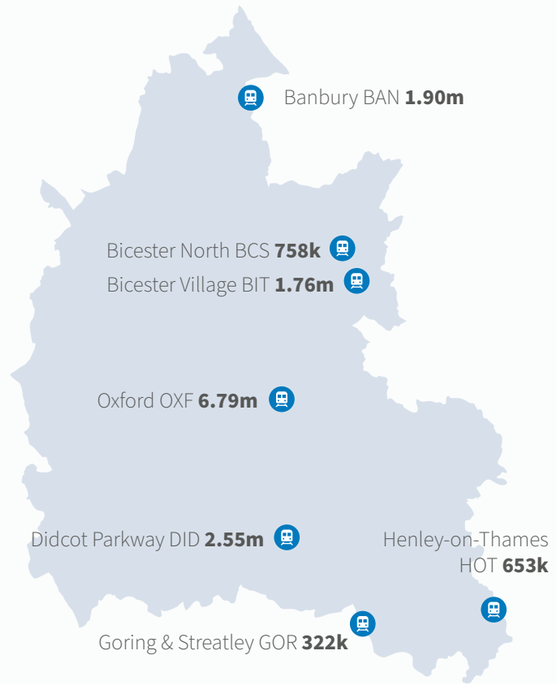
Performance snapshot

Chiltern Railways
- **86%** Overall Satisfaction
- **78.9%** On-Time

Great Western Railway
- **84%** Overall Satisfaction
- **61.5%** On-Time

CrossCountry
- **75%** Overall Satisfaction
- **48.2%** On-Time

Top 7 Oxfordshire stations by annual passenger usage



Our busiest stations

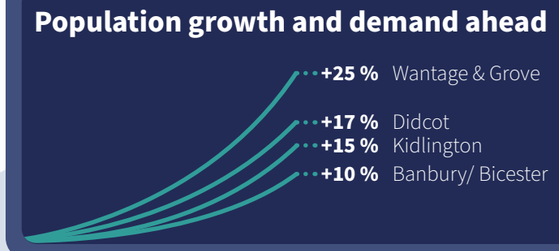
Oxford and Didcot Parkway belong to the top
10% **of busiest stations in Great Britain**

90%
of passenger flows in Oxfordshire come from the top 7 stations

Accessibility and inclusivity

- **Step-free access** at all major hubs
- Oxfordshire Metro concept Integrates **rail + bus + active travel**.
- Cowley Branch reopening serves deprived neighbourhoods and **creates new jobs**.
- **Active-travel access upgrades** at Charlbury, Hanborough, Radley.

Population growth and demand ahead



Growth of
+9%
750k (2023)
→ **815k by 2032**

Freight and environment

- **~70** freight trains/day across county
- Removes 6,000 HGVs/week = **300 t CO_2 saved/week** (estimate)
- Electric Freight Spine: Didcot → Bicester → **Bletchley by 2037**

Target:
- **Net-Zero railway by 2040**
- **Zero-emission trains by 2050**

Our County sits at the centre of four railway corridors, occupying a key strategic position on the national network. Our corridors connect the Thames Valley and south of England with the midlands and north and London with the west of England and Wales. All our corridors act as arteries linking our places together into a single network.

The Great Western Main Line plays a key role in the national rail freight network with flows from Southampton using the section between Reading and Didcot and flows from the Mendip quarries joining west of Swindon. In total two-to-three freight services an hour use these routes and travel onto the route to Oxford for onward travel to the midlands and north.

The Great Western Main Line (GWML) is the intercity rail corridor linking London Paddington with Reading, Didcot, Swindon, Bristol, the south-west and south Wales.

Electrification of the route has enabled the introduction of bi-mode trains, increasing passenger capacity. Services through Didcot Parkway, including stopping services calling at Cholsey and Goring & Streatley, are fully electric.

Didcot Parkway to Banbury providing a strategically important link between the Thames Valley and the midlands and north. Local services between Didcot Parkway, Oxford and Banbury pick up intermediary calls, albeit at a reduced frequency north of Oxford and use diesel trains. A direct service between Oxford and Bristol has recently been trialled and we support its full adoption as an hourly service.

The Cowley Branch Line is currently a freight only route which diverges from the Didcot to Banbury route just south of Oxford providing rail connectivity to the BMW Plant-Mini at Cowley. two-to-three freight trains per day operate on the route largely to/from Southampton.

The Chiltern Main Line is the second primary artery connecting our County to London Marylebone and Birmingham Moor Street/Snow Hill with calls at Bicester North and Banbury. A service also operates between Oxford and London Marylebone with calls at Oxford Parkway, Islip and Bicester Village. The route is not electrified leading to use of a mixture of diesel multiple units and Mk III and MK5A coaching stock hauled by diesel locomotives. Some rail freight services operate on the section between Oxford and Bicester Village serving a safeguarded aggregate rail terminal at Oxford Parkway and MOD facility at Bicester. **East West Rail** will make use of the section between Bicester Village and Oxford with the first phase of this route operating services between Oxford, Bletchley and Milton Keynes due to start by 2026. Later phases will enable onward connectivity to Bedford and Cambridge.

The North Cotswold Line runs through the Cotswolds national landscape between Oxford, Moreton-in-Marsh and Worcester/ Hereford. Known for its scenic route and historic character, the line plays a vital role in connecting rural communities with our larger urban centres, whilst also supporting our vital tourism economy. The line has benefited from incremental infrastructure upgrades, which has improved reliability and enhanced service quality. A direct service from London Paddington means several stations on the route get a very limited service pattern.

The Regatta Line links our stations at Henley-on-Thames and Shiplake with the GWML at Twyford. These services are currently operated by older diesel trains. Eastbound from Twyford there is a semi-fast service from Twyford to London Paddington or the all-stops Elizabeth line service serving the heart of the city and Canary Wharf. Westbound services from Twyford terminate at either Reading or Didcot Parkway, meaning that two or more interchanges are required for journeys between Henley-on-Thames, Shiplake, Wargrave and Oxfordshire beyond Didcot Parkway.

Some communities, particularly Wantage, Grove, Carterton, Witney and Eynsham in South and West Oxfordshire, have no direct connections to rail.

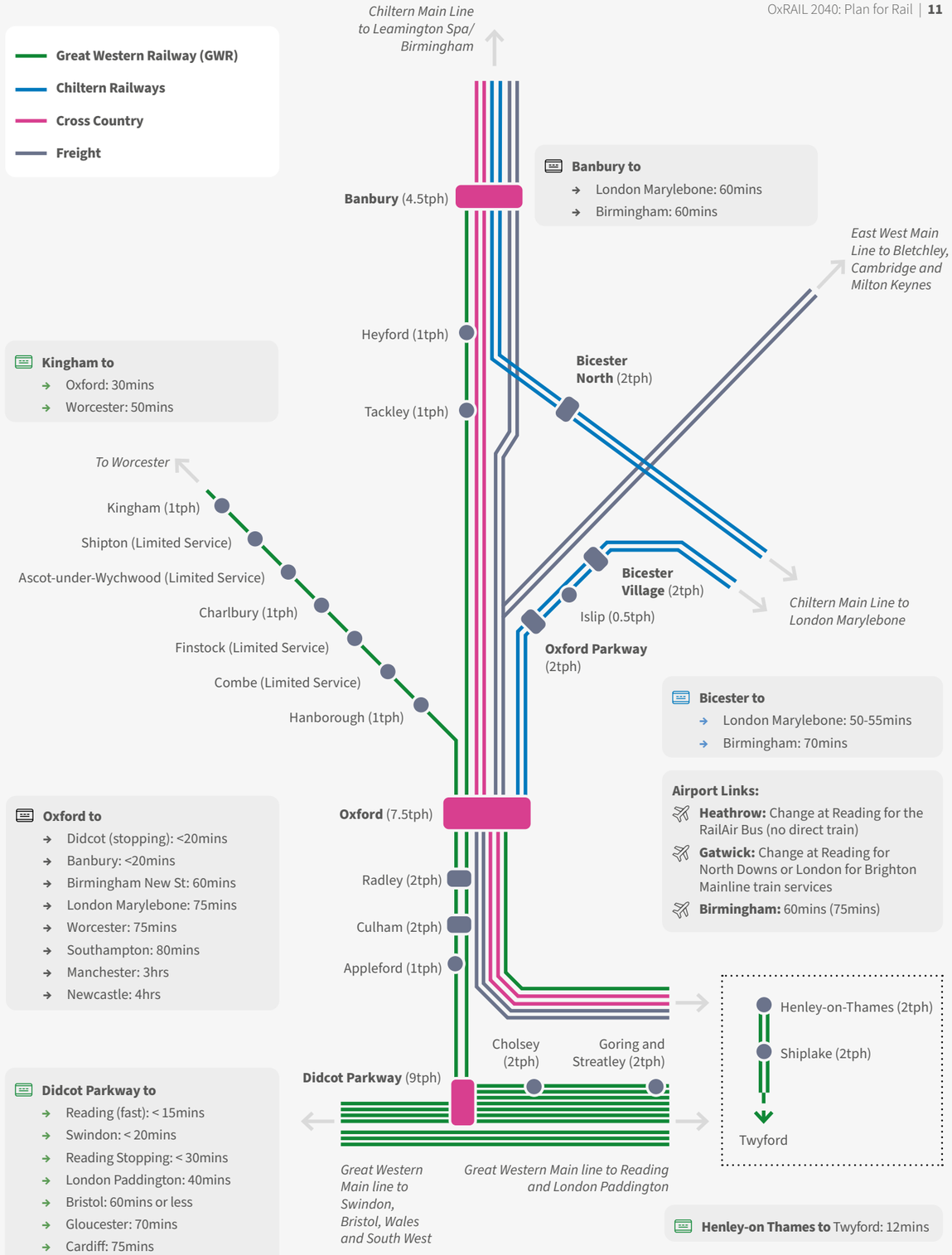


Diagram of current train services in Oxfordshire

2. Opportunities and challenges

Our railway underpins the strength of our economy, helps our places and our people to thrive and contributes to the protection of our environment. However, it can and must do more.

Solving the challenges facing our network in the coming years is an opportunity to better equip our County to grow and to support the prosperity of the country as a whole.

Oxfordshire today

Oxfordshire is a County of global significance. It has a £24 billion economy and is home to around 725,000 people and 33,000 businesses supporting over 430,000 jobs. It brings together world leading science, research, talent and innovation with a rich cultural heritage and strong communities. Anchored by the University of Oxford and major centres such as Harwell Science and Innovation Campus, Culham Science Centre, Milton Park and BMW Mini at Cowley, it has a uniquely dynamic mix of global research and local enterprise.

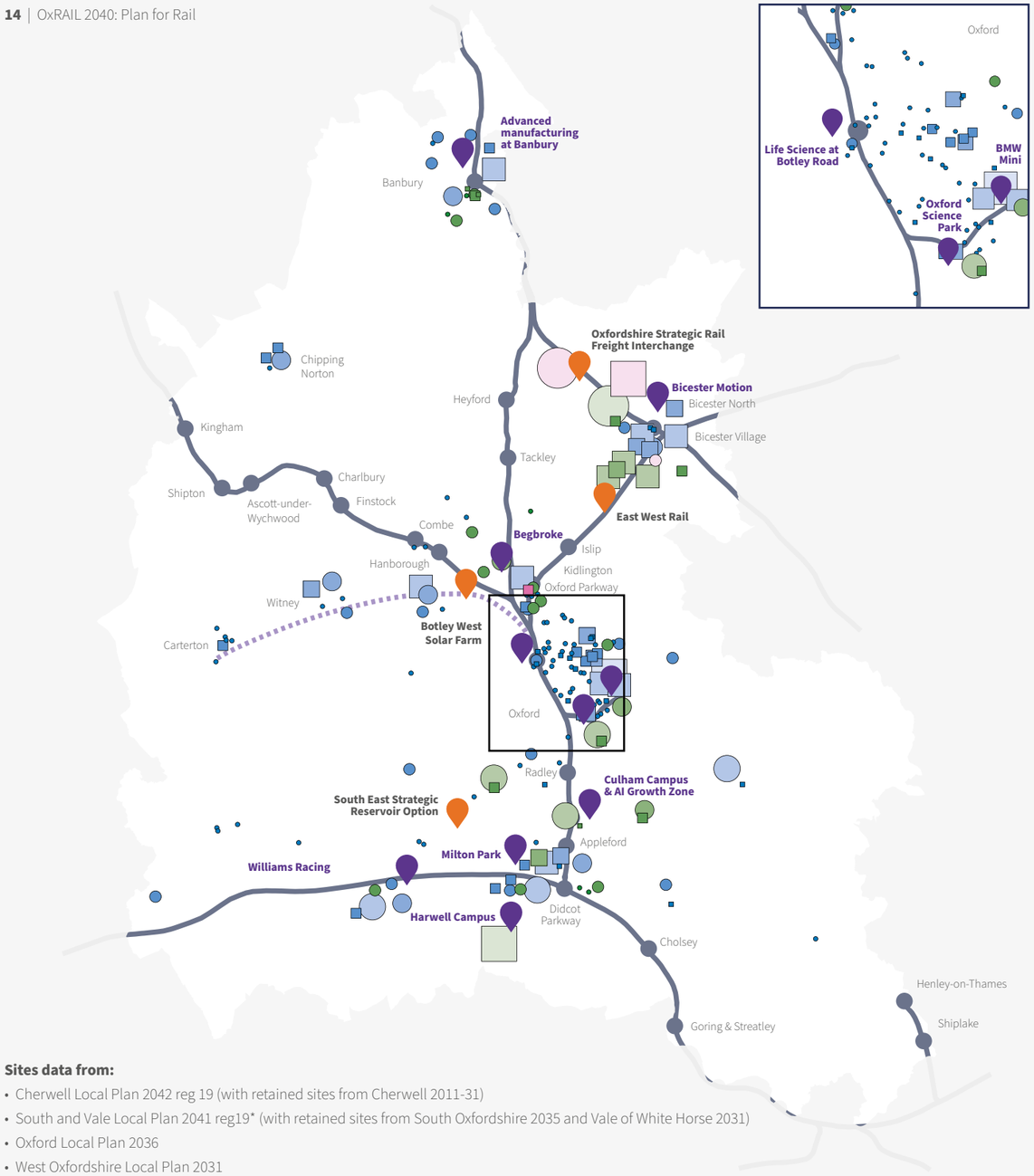
Despite being a predominantly rural County with a rich natural landscape and dispersed settlements, Oxfordshire is home to some of the UK's most dynamic economic clusters that attract investment, talent and ideas from across the globe. These include life sciences and medical technologies in Oxford's biomedical corridor, space and satellite technologies at Harwell and Didcot and automotive and advanced engineering in Bicester and Banbury. Alongside this, digital innovation and creative industries are thriving at hubs such as Milton Park and Culham Science Centre. The rail network is central to connecting these communities, businesses and opportunities, while also helping to safeguard Oxfordshire's environment and rural character.

However, our Oxfordshire Works Plan recently identified that across the County, the places in which people live are not always well-connected to economic opportunity. The needs of residents, commuters and visitors are clear: affordable, reliable, sustainable and uncongested travel that allows people to access work, education, health, leisure and tourism conveniently. Businesses require access to labour pools, markets and viable floorspace. A rail system that does not meet these needs risks reinforcing car dependency and limiting Oxfordshire's ability to grow sustainably.

To unlock the County's full potential, the railway must evolve. This means:

- connecting our innovation ecosystem reducing reliance on congested and unsustainable road transport
- supporting knowledge economy enterprises to maximise their skilled labour catchments
- attracting inward investment by removing barriers to major markets and international gateways
- tackling climate change by delivering a more efficient and resilient transport system for users
- offering affordable, attractive, reliable and inclusive travel choices with accessible options for all, enabling residents, commuters and visitors to reach jobs, housing, education, health and leisure without relying on private cars.

Key opportunities to be seized and challenges to be overcome are set out on the following pages.



Sites data from:

- Cherwell Local Plan 2042 reg 19 (with retained sites from Cherwell 2011-31)
- South and Vale Local Plan 2041 reg19* (with retained sites from South Oxfordshire 2035 and Vale of White Horse 2031)
- Oxford Local Plan 2036
- West Oxfordshire Local Plan 2031

*Noting the letter from the inspector as of 1 Oct 2025.

Map of housing and employment growth

Using the railway as a catalyst for growth and placemaking, supporting new homes, jobs and investment

A critical challenge facing our County and the wider region is an acute shortage of housing to accommodate our growing population and affordable employment space and to enable our enterprises to expand.

Oxfordshire is already planning for significant growth – from new housing and employment sites to nationally significant infrastructure projects (NSIPs), new health and education facilities and major employment and leisure developments. The scale of this development is as shown in the map.

Our growth projections would see our total population rise to over 800,000 by 2031. Some of our towns and communities will experience very significant growth (west of Didcot by 36%, Wantage & Grove by 25%, Didcot by 17%, Kidlington by 15%, Banbury and Bicester by 10% each).

The challenge for rail is to accommodate and support this growth sustainably.

By this, we do not only mean the impact on our climate but also achieving a sustainable impact on our local environment, the liveability and safety of our communities and the financial burden of maintaining our transport infrastructure. The railway offers an option to shift some future trips off our roads by integrating spatial development with the railway and our wider sustainable network, possibly increasing the quantum of houses and commercial space at a site and making these places more attractive to live and work in.

"The challenge for rail is to accommodate and support this growth sustainably"

A substantial amount of our planned housing and employment growth is concentrated close to the rail network but it is not always served effectively by it:

- The communities at Wantage and Grove, for example, are adjacent to the Great Western Main Line but their nearest station is at Didcot, around 12 kilometres away.
- Carterton and Witney rely on services along the North Cotswold Line 10-15 miles away.
- There is no station close to the expanding Begbroke Science Park.
- Culham and Heyford have rail services but connectivity is currently poor.

If rail can be better equipped to serve growth, it presents a significant opportunity. It becomes more feasible to densify development, limit the impact on our highways and make investment more attractive. To achieve this, though, we need the railway to:

- Provide access to the network as close as possible to our key current and future employment sites
- Integrate with other modes to facilitate seamless 'first and last mile' access between existing and future residential communities and employment sites
- Ensure that services are inherently reliable and of high quality
- Be competitive on journey times, price and convenience with road travel
- Be a viable and inclusive option for all members of society.

A solution will need support of its stakeholders and high-quality integration with the places it serves. This is where we view the real opportunity of our role. Our city and district council partners have local plans with significant new allocated development. Bringing together spatial planning and the development of the railway creates the opportunity to deliver.

The Cowley branch Line: enabling housing growth and job creation in south Oxford

Reopening of the Cowley Branch Line to passenger services will be a much-needed capacity solution to support future growth on East West Rail. The south of Oxford is a research and innovation hub for life sciences and technology. It is also a key location for delivering much-needed housing. Reopening the branch line could happen quickly and simply and a business case funded by the County Council alongside our partners at Oxford City Council and in the private sector found that it would deliver a strong return on investment. The project would deliver cross-Oxford connectivity – which is at the heart of our Oxfordshire Metro concept but now requires Government support to complete the detailed design and move towards delivery. Such support has recently been provided following confirmation from Government for £120m for reopening the Cowley branch line as part of a wider funding package across the Oxford-Cambridge Growth Corridor.

Improving access to regional, national and international markets and gateways

Beyond the Oxford – Cambridge Growth Corridor, there are other key sectors with high growth potential located in neighbouring regions. The government's Modern Industrial Strategy highlights, for example, the Life Sciences strengths in Greater London and the West Midlands. There are Advanced Manufacturing clusters in the West Midlands and the West of England (including Bristol, Gloucestershire and Swindon) and Digital & Technology specialisms in Greater London, the West of England and West Midlands.

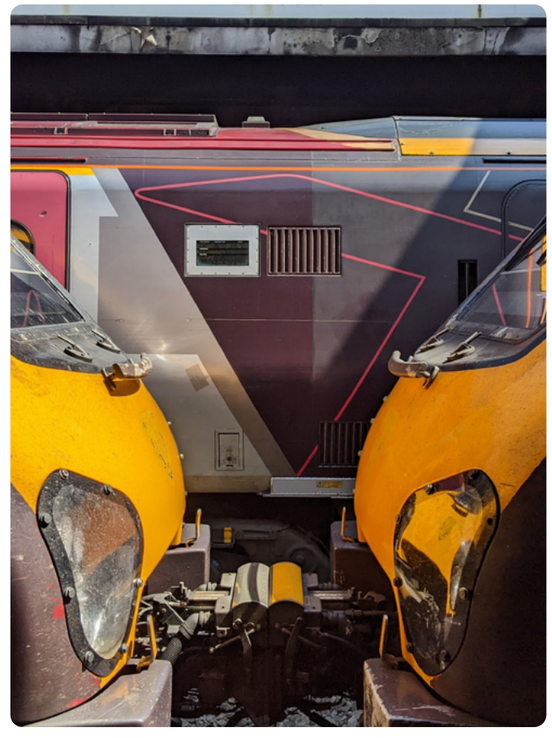
Research undertaken by EEH explained the way in which improved connectivity between areas of shared specialisms can support growth. These included:

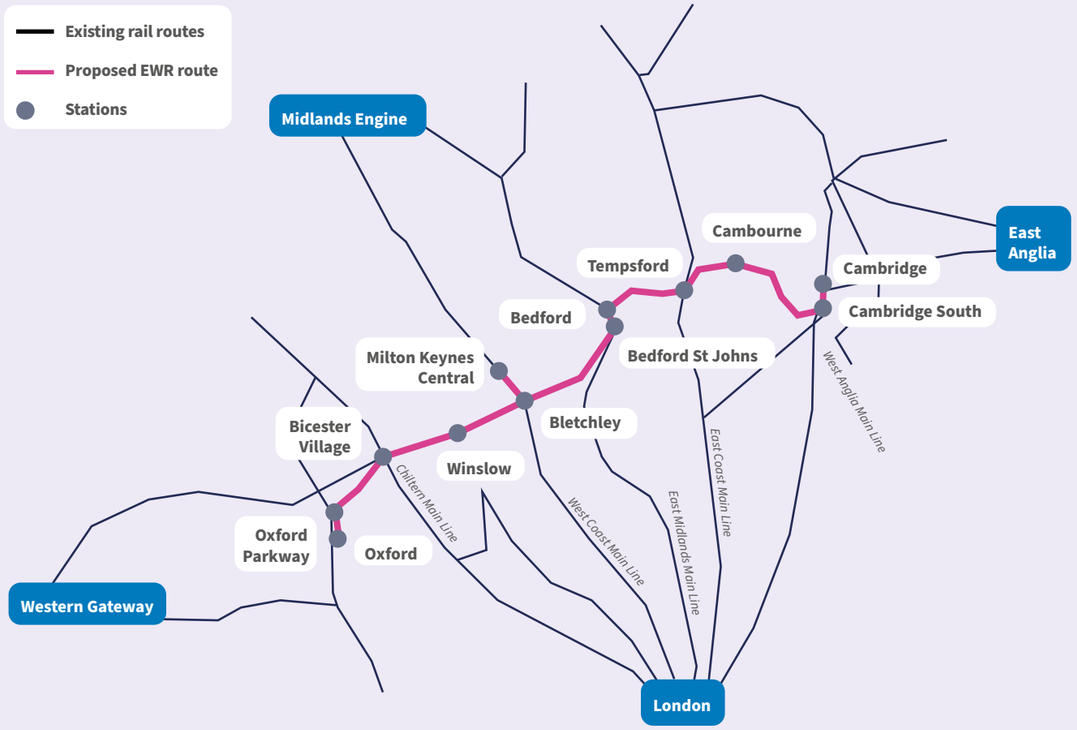
- Increased interaction and engagement between cluster bases, leading to greater integration and the potential for agglomeration
- Increasing labour mobility and labour catchments, boosting productivity
- Increasing access to affordable commercial floorspace
- Facilitating greater collaboration between universities
- Alleviate housing pressures by providing greater location choice to residents.

Therefore, strong connectivity between Oxfordshire and neighbouring regions with shared specialisms will be vital. Only rail can achieve this effectively and sustainably. The alternative of relying on private car journeys will limit interaction and mobility and applies more pressure to our congested highways.

There is strong north-south connectivity, with a number of fast, direct services connecting our County to London and the West Midlands, but there are significant gaps. East – West connectivity along the Oxford – Cambridge Growth Corridor and with the West of England is currently weak. Only Didcot is provided with direct services with Bristol, Cheltenham/Gloucester and Swindon. Many of our key growth sites – such as Culham, Heyford and Abingdon - lack direct connections beyond Oxfordshire.

Our key growth sectors are globalised in scale. International travel and the need to generate continued inward investment is critical. It is therefore paramount that our specialist sectors have strong access to international gateways, particularly our airports. Oxfordshire is served by international airports located in our neighbouring regions – primarily Heathrow but also Birmingham and Gatwick. Heathrow is the UK's only hub airport, largest port by value and the world's most connected airport. London Heathrow is, one of the most important drivers of the Thames Valley and Oxfordshire economies. Connectivity with these vital international gateways must be strong.





East West Rail: The key to unlocking the Growth Corridor

East West Rail will provide, for the first time in sixty-years, direct rail services between Oxford, Bicester, Bletchley, Milton Keynes, Bedford and Cambridge, linking those towns and cities, their people and their economies. This new railway will help to unblock some of the constraints on growth, by offering a sustainable means of linking new housing and new working space to our existing communities and beyond.

The proposed theme park development by Universal Studios and the development of the new Oxford United football stadium, means that the corridor will also take on new significance to the leisure economy, supporting significant job creation. East West Rail will be delivered in three stages, starting in the coming year with the first direct services between Oxford and Milton Keynes. It is vital that the remaining two stages – connecting Oxford with Bedford and then later to Cambridge – are delivered in full and on time. This will require continued funding support from Government, the continued effectiveness of the East West Rail Company and full collaboration with local and industry partners, such as through the East West Main Line Partnership and England's Economic Heartland. While most of the works will physically take place outside of Oxfordshire, we are committed to supporting the success of the project and to informing important future network configuration decisions for services in and around Oxford. We will also continue to work with regional partners to maximise the wider benefits of East West Rail, including on-ward linkages through interchange at key locations on the route such as at Milton Keynes and potentially beyond.

Map of East West Rail

Supporting our foundational and visitor economies

Although significant attention is given to our high growth sectors, which distinguish our County's economy, most employment is grounded in meeting local needs. The foundational economy encompasses goods and services that are essential to everyday life, such as health and social care, education, utilities, housing and local retail.

We cannot innovate, grow and prosper without these firm foundations. For this reason, we must balance the needs of our global-facing sectors with this far more localised foundation of our economy and society.

Many short trips within our foundational economy can be accommodated via our bus and active travel (walking, wheeling and cycling) networks. However, these sectors face future threats.

Like many areas, our County has a diminishing working age population, compounded by the more rural nature of our settlements and dispersal of our population. We will need to attract people to employment from further afield and may therefore need to accommodate increasing numbers of medium and long-distance trips within the foundational economy. Maximising the labour pool of our towns and city will be key for future resilience and this must not be dependent on private car use. The highway networks in our urban areas are constrained by congestion, as are the strategic routes connecting our County.

Many trip attractors within our foundational economy are not situated close to railway stations. This includes most of our largest hospital sites and further education colleges. Integration with other modes of transport is essential.

Oxfordshire's visitor economy

The visitor economy is a central pillar within our County's foundational economy. Currently worth £2.3bn in GVA and supporting nearly 40,000 jobs, it attracts over 28 million trips annually. There are over 2 million overnight trips accommodated each year (with nearly 800,000 of these from international visitors). Our attractions are widely dispersed, from those within our towns and city to those across our national landscapes and rural areas. Many of these are accessible via the railway – Bicester Village for example is served by direct trains between Oxford and London and around 12% of its visitors travel by rail.

Our visitor economy will continue to grow. The proposed theme park development by Puy du Fou north of Bicester would be a major new attractor and of national scale, with potential for over 1.4 million annual visitors if fully developed. The new Oxford United football stadium close to Oxford Parkway would also attract new trips and shift existing patterns as the club moves away from its current base at the Kassam Stadium.

To reman vibrant, our visitor economy must be supported by strong connectivity with our neighbouring regions (and their airports) - to ensure that our visitors can reach Oxfordshire easily – and within our County, so that all our residents can access employment opportunities within the sector.

Enabling sustainable, accessible transport for education, health and leisure journeys

The success of our economy is intrinsically linked to quality of life and the cohesive functioning of our society. Many of the journeys undertaken on our transport network are not made for work. They are for all the other critical reasons people travel to live healthy, happy and fulfilling lives – for access education and healthcare, experience our leisure economy or to meet with family and friends. Ensuring equitable access to transport is key.

Whilst Oxfordshire is a generally prosperous County, pockets of our communities do experience hardship and deprivation, with some neighbourhoods around our urban centres amongst the most deprived nationally. Various underlying issues are driving these outcomes and improving transportation will not be a silver bullet, but it can make a real difference. Convenient, reliable and affordable public transport options provide communities with access to opportunities and services which can be key to alleviate the impacts of deprivation.

In our rural communities, public transport often acts as a lifeline for those without access to private car, providing connections to facilities in our towns and cities and avoiding social isolation. Whilst the railway cannot serve every community directly, it is vital that through integration and the quality of facilities that the network remains accessible.

The railway also contributes directly by offering good quality employment opportunities and by working within our communities delivering real social value. We must ensure that the railway is seen as a viable option to lower income residents, so as not to limit horizons, ensuring equal access and promoting the use of sustainable travel options for all.

Tackling climate change while maintaining a reliable, resilient railway

Our environment is central to our identity and attracts visitors from around the world – supporting important local jobs and businesses. Highlights include stunning natural landscapes and historic urban areas with spectacular architecture renowned across the globe.

Protecting this environment is paramount to our County's identity. We are acutely aware of our role in addressing the global climate crisis – we declared a climate emergency in 2019 and are committed to achieving carbon neutrality in our operations by 2030 and for Oxfordshire to be carbon neutral well ahead of 2050. Transport remains the largest contributor to the UK's carbon emissions. While rail contributes only a small proportion of these emissions, this will change as the road vehicle fleet electrifies. Almost all rail services in Oxfordshire currently rely on diesel traction in some form. As well as contributing to carbon emissions these diesel journeys pollute our sensitive local environments with damaging particulates and noise. We apply the same expectations to our railway as we do to our other transport modes – that they must be zero carbon at the point of use.

Even before it decarbonises, rail has the potential to contribute greatly to emissions reduction and wider environmental protection by attracting journeys which are currently undertaken on our roads. We have described the criticality of journeys made into our urban areas, to our economy and the fabric of our society. When over reliant on private car, these journeys can pollute our air, emit noise, sever communities and demand space in our towns and cities which could otherwise be put to better use. The widespread use of private car takes up severely limited road space and makes congestion common across the County.

Whilst we reduce our emissions, we must also equip our County for the realities of a changing climate. Nationally, we are experiencing more extremes of weather, with heavy rainfall events and longer, hot and dry periods particularly during spring and summer. This places additional pressure on our built assets and on our residents and visitors as they move around our County. We must ensure that our transport network remains resilient, predicting where stress may be experienced and intervening to make improvements as required. We must also ensure that our public environments, whether that be on board our vehicles or at our railway and bus stations, are able to remain comfortable environments even during periods of heavy rainfall or warm weather.

"Protecting this environment is paramount to our County's identity"

Freight

The County accommodates significant road freight traffic - much of it using the national strategic network via the A34 and M40 - making its way between the south coast ports and distribution networks in the west midlands, north-west and Scotland. Whilst the efficient distribution of goods is vital for our economy, this freight traffic places significant environmental and financial burden on our strategic and local networks. It may be some considerable time before our country's LGV and HGV fleet can fully decarbonise, so our railway should urgently offer an alternative. Our rail network permits these strategic north-south movements and indeed is already well used taking an estimated 6,000 HGVs of the A34 every week with over seventy regular freight services every day. We need our railway to accommodate a substantial growth in freight movements and alleviate the burden on our overcrowded highways.

The outcomes we need the railway to enable to protect and enhance our environment are:

- Be competitive on journey times and price with private car and road haulage to encourage modal shift and influence travel behaviour
- Decarbonise to become net zero – ideally with zero emissions at the point of use
- Remain resilient as our climate changes
- Equip itself to remain an attractive environment for passengers even during more extreme weather events and periods.

"We need the railway to remain resilient as our climate changes"

3. Vision for rail in Oxfordshire

Our vision

We have prepared this OxRail 2040 Plan drawing from this understanding of the railway's role within our economy, our society and our environment. It has been designed to speak to the specific outcomes we require from our railway, whilst also aligning very clearly to the transport vision set out in our LTCP.

"A central part of a world-class integrated, accessible and sustainable transport system"

The OxRail 2040 vision is for our railway to be a central part of a world-class integrated, accessible and sustainable transport system that enables all parts of the County to thrive and:

- ensures that Oxfordshire retains its position of significance within our regional and national economy.
- enables significant growth and development, supporting new housing and job creation.
- ensures that Oxfordshire's growing communities can thrive through full participation in our economy and in society.
- contributes to the protection and enhancement of our natural and historic environment and ensures our resilience to a changing climate.

Outcomes

To deliver our vision we have identified a series of improvements, which we believe are necessary to fully equip our railway to fulfil its role within Oxfordshire. The three thematic chapters of this OxRail 2040 Plan discuss these in turn:

- **Improving connectivity and enhancing infrastructure** – outlining the train service specification that we believe is required and the infrastructure and operational approaches we believe are needed to make this a reality.
- **Climate action** – outlining how we expect the rail industry to achieve net-zero greenhouse gas emissions from our rail operations through the deployment of electrification, battery trains and zero-carbon infrastructure. We will also consider how our network needs to respond in the face of a changing climate.
- **Rail as placeshaper** – outlining the key role that our railways and train stations will have in shaping our communities and serving the transport and wider needs of everyone who lives in Oxfordshire.

Within these chapters, we set out where support from partners and stakeholders will be required to deliver our vision, alongside the specific actions we will take to achieve the outcomes identified.

We are clear on the outcomes we need our railway to drive. These are drawn from our vision and rooted in our understanding of how rail supports our economy, our society and the protection and enhancement of our environment. We have set these out below. Our key focus now is to deliver the improvements needed to deliver these outcomes.

The remainder of the Plan explores in greater detail the themes introduced here. As part of the Plan we provide a "plan on a page" which summarises the key interventions which we reference throughout the Plan.

Enable our economy to grow and become more productive, by making land for housing and employment more viable, avoiding the constraints posed by road congestion and opening labour markets for employers to wider catchments covering the whole County and beyond.

Support the foundational economy by offering convenient access to our town and city centres where jobs and key facilities are increasingly located.

Properly integrate with other modes of sustainable transport, in order that people can reach employment and facilities located beyond the immediate environs of a station and be within reach of a station wherever they live within the County.

Support our transition to net-zero, by decarbonising and offering users – both passengers and freight – a low carbon alternative to private car travel.

Be predictable and reliable, fostering trust amongst both passengers and businesses.

Be competitive with road transport, in terms of cost, convenience, speed and quality.

Be safe and inclusive, to ensure that all of our residents can participate in our economy and our society.

Support and reflect our communities, whether they be our urban areas or our rural communities, all residents should feel pride in their local station and the railway.

Priorities

The Plan proposes a wide range of interventions, all of which are important to Oxfordshire's future. At the heart of this are four priorities that are critical to achieving the OxRail 2040 vision of a modern, inclusive and sustainable railway. These priorities will deliver the greatest impact for residents, businesses and communities, while other elements of the Plan remain vital supporting components to ensure a balanced and connected network.

Across the Plan, we introduce four priorities. These are the projects which truly stand out in terms of their importance to our County and which, when delivered, would mark a true step-change to our railway, with impacts felt far beyond the network itself. These priorities are:

- **The Oxfordshire Metro concept** – our name for the County's integrated sustainable transport network, bringing together our active travel corridors, bus services and railway into a coherent and cohesive system. The Oxfordshire Metro concept would begin with integrated ticketing across modes, but would evolve through integrated branding, information provision, timetabling and more.
- **The Oxfordshire Electric Freight Spine** – delivering an electrified railway between Didcot in the south and Bicester to the north, a continuous backbone of our zero-carbon railway. Co-ordinated with further electrification beyond our borders – to Bletchley – this would offer both freight and passenger operators the ability to operate more cost-efficient, high-quality and environmentally friendly trains.
- **Oxford Station redevelopment –** creating a step change in rail capacity at Oxford station, shaping our County's busiest station into a landmark civic space, a regeneration catalyst and a world-class transport hub. The evolution of our railway and of Oxford as a city will demand a larger, bolder and more interactive station, one which is a fitting reflection of Oxford's astonishing historic streetscape and an enabler of its future as a place to live, visit and invest in.
- **Proposed new stations to support growth –** including new stations on the Cowley Branch Line and at Begbroke, Wantage & Grove and Ardley, alongside upgrades to our existing stations delivered through the Oxfordshire Stations Action Plan.

Together, these priorities reflect the overarching themes of connectivity, climate action and placeshaping focusing investment and partnership where it will make the biggest difference for Oxfordshire's people, economy and environment. Each of these priorities will be realised progressively through the phased delivery of the Plan, with specific milestones in Phase 1 (2025-2030), Phase 2 (2031-2037) and Phase 3 (2038 onwards).

"At the heart of this are four priorities that are critical to achieving the OxRail 2040 vision of a modern, inclusive and sustainable railway"

4. Improving connectivity and enhancing infrastructure

Future rail network and services

The Network Rail led Oxfordshire Rail Corridor Study (ORCS) examined how the railway in Oxfordshire can best support economic growth. The study was delivered jointly by key local partners, the Department for Transport and Network Rail (supported by Oxfordshire County Council) and identified a need for further connectivity (in terms of new and additional services) and the infrastructure needed to deliver this. This report has heavily influenced our thinking and proposals.

The ORCS study recommended a range of new service patterns. These related to identified weaknesses in the railway's ability to support growth and opportunities presented by existing and new infrastructure. The specific challenge areas identified were:

- The level of service between Wolvercote Junction (where the North Cotswold line diverges from the Didcot Parkway to Banbury route) in the north and Didcot in the south (and to London, Birmingham and the North Cotswolds beyond);
- The absence of a route and associated service linking Oxford and Cambridge;
- The absence of services serving Oxford Littlemore and Oxford Cowley along the Cowley Branch Line;
- Direct access from growth centres to Oxford such as Wantage and Grove and Begbroke; and
- Linkages to other centres and technology clusters in the south-west, particularly in the Bristol area, as well as more frequent services between Oxford and Birmingham.

A series of peak and off-peak service patterns proposed to resolve these connectivity issues were outlined within the ORCS report.

We have an ambition to go beyond ORCS to meet our economic aspirations. The study was undertaken pre-pandemic. Rail patronage in Oxfordshire is continuing to recover but the way people are travelling and where they are travelling to, particularly commuting, has changed. However, the importance of rail connectivity to our County and the underlying strengths and weaknesses of our network have not.

Using ORCS as a framework and considering key service patterns and flows that we know are important across our County, we have developed an ambitious Indicative Train Service Specification (ITSS) which we believe should be the aspiration for the County to achieve. The premise of this proposed specification is to:

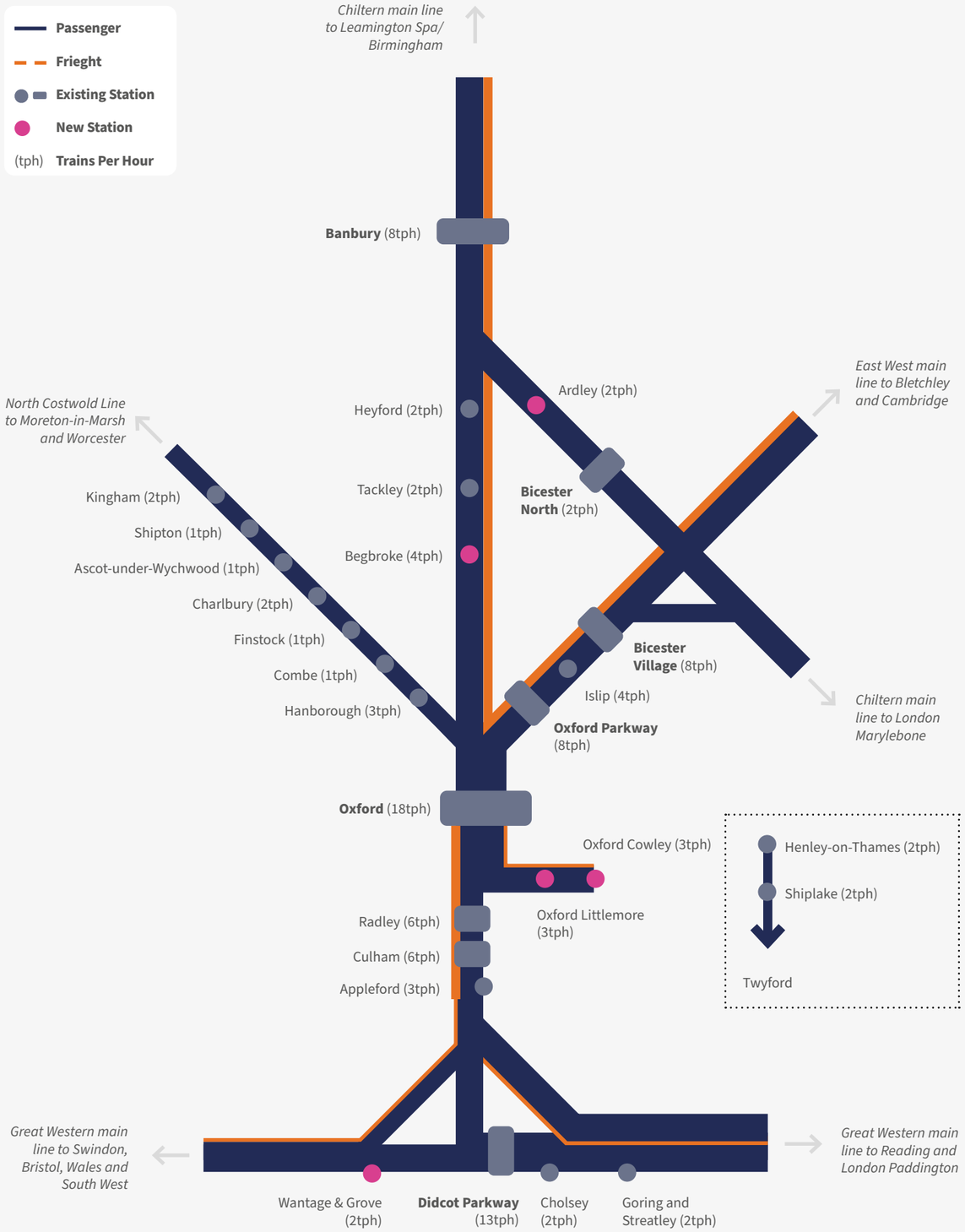
- realise the wider connectivity opportunities offered by East West Rail
- ensure the wider integration of services on the Cowley branch line
- offer a metro-style service frequency connecting stations between Banbury, Oxford and Didcot
- improving rural connectivity, particularly for those stations on the North-Cotswold Line.

Our proposed train service is summarised in the diagram and train service pattern tables both shown below. The services shown are agnostic of operator given the on-going transition of operators into public ownership. These service patterns reflect a typical weekday.

Throughout the remainder of the Plan we identify key activities which we will use to track its progress. These are identified by a four digit reference (Px.xx).

Realising these services is at the heart of our Plan and as such we will monitor progress to achieving this service specification as a dedicated activity (P3.01). Whilst the delivery of the ITSS will be progressive and require most of the other activities outlined as part of this Plan it is critical that we track progress against this overarching goal.

"The way people are travelling and where they are travelling to, particularly commuting, has changed"



Our proposed train service specification

Service	Station Calls in Oxfordshire
InterCity Services	
London Paddington to Oxford	Didcot Parkway, Oxford
London Paddington to Banbury	Oxford, Begbroke, Banbury
London Paddington to Worcester/Hereford	Didcot Parkway, Oxford, Hanborough, Charlbury, Kingham
Bournemouth to Manchester	Oxford, Banbury
Southampton to Yorkshire/North-East	Didcot Parkway, Oxford, Banbury
Cambridge to Bristol	Bicester Village, Islip, Oxford Parkway, Oxford, Radley, Culham, Wantage and Grove
Cambridge to Southampton	Bicester Village, Oxford Parkway, Oxford, Didcot Parkway
Birmingham to Bristol	Banbury, Begbroke, Oxford, Radley, Culham, Wantage and Grove
London Marylebone to Cowley	Bicester Village, Islip, Oxford Parkway, Oxford, Oxford Littlemore, Oxford Cowley
London Marylebone to Cowley	Bicester Village, Oxford Parkway, Oxford, Oxford Littlemore, Oxford Cowley
Birmingham to Oxford	Banbury, Heyford, Tackley, Begbroke, Oxford
Cambridge to Oxford	Bicester Village, Oxford Parkway, Oxford
Cambridge to Oxford	Bicester Village, Oxford Parkway, Oxford
London Marylebone to Birmingham	Bicester North, Ardley, Banbury
London Paddington to Bristol via Bath	Didcot Parkway
London Paddington to Bristol via Bristol PW	Didcot Parkway
London Paddington to South Wales	Didcot Parkway
London Paddington to Cheltenham	Didcot Parkway
Regional Services	
Moreton-in-Marsh to Didcot Parkway	Kingham, Shipton, Ascot-under-Wychwood, Charlbury, Finstock, Combe, Hanborough, Oxford, Radley, Culham, Appleford, Didcot Parkway
Milton Keynes to Didcot Parkway	Bicester Village, Islip, Oxford Parkway, Oxford, Radley, Culham, Appleford, Didcot Parkway
Milton Keynes to Didcot Parkway	Bicester Village, Islip, Oxford Parkway, Oxford, Radley, Culham, Didcot Parkway
Banbury to Oxford Cowley	Banbury, Heyford, Tackley, Begbroke, Oxford, Oxford Littlemore, Oxford Cowley
London Paddington to Hanborough	Goring and Streatley, Cholsey, Didcot Parkway, Appleford, Culham, Radley, Oxford, Hanborough
London Paddington to Didcot Parkway	Goring and Streatley, Cholsey, Didcot Parkway
Twyford to Henley-on-Thames	Shiplake, Henley-on-Thames

What the proposed service pattern delivers for Oxfordshire

Improved connectivity within the County: The proposed train service specification shown in the previous pages significantly increases connectivity within our County. All our stations would benefit from an enhanced timetable providing far stronger links to Oxford, our market towns and our employment and innovation clusters. Communities at Cholsey and Goring & Streatley would regain direct services to Oxford.

Direct Connections	Today	Future
Banbury - Oxford	2.5 tph	6 tph
Bicester/Oxford Parkway - Oxford	2 tph	8 tph
Oxford - London	4 tph	6 tph
Banbury - London	2 tph	3 tph
Hanborough - Oxford	1 tph	3 tph
Goring & Streatley and Cholsey - Oxford	-	1 tph

New stations to increase access to rail: For many communities in Oxfordshire, particularly those in rural areas, access to rail remains limited. New stations are therefore central to growth, linking fast-growing towns and employment hubs to the network and reducing car dependency. We are promoting and co-funding the development and delivery of four new railway stations (Oxford Littlemore (P1.02), Oxford Cowley (P1.02) – both on the reopened Cowley Branch Line (P1.01) - Begbroke (P2.01) and Wantage and Grove (P2.02)) and working closely with the rail industry on early development of a fifth station at Ardley (P3.02), recognising the need to consider the potential impacts of the proposed Strategic Rail Freight Interchange (SRFI) which is subject to the National Strategic Infrastructure Project (NSIP) process.

Improved rural connectivity: Providing an hourly service to all stations on the North Cotswold Line (with two trains per hour at main stations on the route and a third train per hour at Hanborough) will significantly improve access to rail throughout the day. We will continue to work with our neighbours including Gloucestershire, Warwickshire and Worcestershire as part of the North Cotswold Line Taskforce to understand how best these services could enhance connectivity beyond our borders combined with a mass rapid transit solution for the Oxford – Witney – Carterton growth corridor. Combined measures will ensure West Oxfordshire's connectivity is transformed from its current position.

Improved regional and national connections: The service pattern would deliver improved connectivity north – south and east -west. It looks to optimise the potential of East West Rail by extending services from Milton Keynes and Cambridge beyond Oxford to Didcot and onwards to the south coast and West of England (P1.03 and P2.03). Connections with London are enhanced with more of our stations gaining direct services to/from the capital. Our connectivity with the West of England would be enhanced through the retention of the current trial service between Bristol and Oxford via Bath and Swindon (P1.04), with potential for this service to be further enhanced. Services to/from the West Midlands would be enhanced with more of our stations gaining direct services to/from Birmingham.

Keeping freight at the heart of our railway: It is envisaged that the route between the Great Western Main Line and West Coast Main Line at Bletchley will become a critical route for rail freight with the route from Didcot Parkway to Bletchley forming the 'Oxfordshire Electric Freight Spine' (P3.03). Operating mixed traffic railways which include local stopping, long distance and freight trains is complex as these services compete for capacity. We believe the infrastructure solutions we have outlined as part of this plan will enable us to optimise this across our County.

Supporting infrastructure

Our railway as it is today could not accommodate the service pattern we have outlined. There are four main infrastructure areas which require focus on Oxfordshire's rail network to support the proposed service pattern and the growing demands of freight traffic. These are:

- the repurposing of the Cowley Branch Line to support passenger traffic alongside freight
- track capacity and speed (including across junctions) on the currently largely two-track section of railway between Radley and Oxford
- the capacity of the single-track section between Wolvercote Junction and Hanborough on the North Cotswold Line
- the limited capacity of the complex and at-grade junction arrangements at Didcot (between the Great Western Main Line and the route to Oxford and Banbury)
- Increasing line speed and capacity (including to the north of Oxford) whilst maintaining safe local community connectivity across the railway.

The absence of electrification today means we cannot meet our aspirations for a zero emissions railway. We will need an electrified network in the right places which makes use of continuous electrification (for long-distance high-speed and freight services) and non-continuous electrification in conjunction with battery train deployment. This will strengthen and improve reliability of our services and we will work in partnership with government and the industry to electrify the network from Didcot Parkway to Oxford and beyond to deliver the zero-emission transport network we need alongside providing a continuously electrified railway between Didcot Parkway and Bletchley (P3.03).

Sustainable infrastructure design and bio-diversity net-gain

Ensuring all railway infrastructure in our County is designed and delivered in a way to maximise the energy efficiency and reduce embodied carbon will be critical to success. We want to see all refurbished railway buildings and their operations meet BREEAM Excellent rating and for new buildings to achieve the Outstanding rating. We will strive to pursue a net-zero emissions value chain from our designers and suppliers ensuring that embodied carbon emissions are reduced and offset as far as possible (P2.04). These core requirements will be outlined in an Oxfordshire Railway Sustainable Infrastructure Requirements Document (P2.05).

We should ensure that bio-diversity net-gain is a core requirement of all major infrastructure projects and working closely with our stakeholders and communities we want our railways stations to become a focal point for people and sustainable wildlife. To support this, we will develop an Oxfordshire Railway Bio-Diversity Net-Gain Requirements Document (P1.05) building on the forthcoming Oxfordshire Local Nature Recovery Strategy and Bio-diversity Action Framework.

Integrating Oxfordshire's public transport

'Oxfordshire Metro concept' will bring together rail, bus and active travel modes (walking, wheeling and cycling) under a single integrated transport system for Oxfordshire. Whilst we are at the early development stages of this concept, this Plan sets out an early vision of what it might deliver. Significant work is required alongside rail and bus operators as well as private organisations such as taxi operators and shared micromobility providers to develop this vision and its implementation.

Oxfordshire Metro concept is a bold concept which is aligned with key Government aims such as the emerging National Integrated Transport Strategy and builds on the vision, targets and policies for transport set out in the Oxfordshire Local Transport and Connectivity Plan. Where they are planned well and integrated successfully, bus and rail can be a powerful public transport offering. Bus provides an essential connection to the rail network across the whole County and can provide connectivity for areas which currently have limited access to the rail network.

Oxfordshire Metro concept

The Oxfordshire Metro concept will be a scalable project which integrates the County's bus and train services with first- and last-mile connectivity.

We believe that we can deliver fully integrated bus services through our relationships with operators by expanding the work of the Oxfordshire Bus Enhanced Partnership. We will potentially require support of additional funding and powers, which could be delivered by Government's devolution plans, to fill gaps in services that commercial operators are unable to deliver.

We will also need the power to have an effective voice in decision making on the railway and this could include deciding where local revenue support is used to support rail services which provide an important indirect economic or social output, but which do not prove profitable.

Oxfordshire Metro concept would provide a one stop shop for public mobility ensuring:

- **A single ticketing platform** allowing use of tickets and tap-and-go technology across bus and train in Oxfordshire, with easy-to-understand fares that provide passenger incentives to grow use of bus and train. Examples are capped fares for multiple trips in Oxfordshire, local season tickets including the Smartzone in Oxford and flexible tickets that reflect the changing patterns of our residents' working week. We will work with neighbouring systems to ensure this is interoperable across County lines
- **Timetable co-ordination** between bus and train and ensuring that services operate at times that support key workers (particularly those working shifts) and the Oxfordshire economy and that in our core areas that people can rely on a 'turn-up and go service' (a service at least every fifteen minutes) and appropriate service levels on evenings and at weekends regardless of mode
- **A consistent and recognisable brand** across all transport modes within Oxfordshire Metro concept so that people can recognise and trust that the transport system is being managed and delivered in a co-ordinated way
- **Seamless travel planning across modes** with a single journey planning app across all modes and clear cross-modal interchange information available on vehicles (buses and trains) at interchanges.

How it will be delivered

Oxfordshire Metro concept will build on Oxfordshire's strong bus partnerships and close working with rail operators. Gaps in provision where commercial services are not viable may require future devolved funding and powers, for example through a Mayoral Strategic Authority. Although the Council is not seeking franchising powers at this point, as the County has some of the best bus operations in the country, regulation may be a possibility with devolution to push the agenda forward.

Next steps

Meaningful progress will begin in Phase 1 (2025–2030), with early priorities such as integrated ticketing. Delivery will accelerate as new transport powers and funding are secured and as rail reform provides Oxfordshire with a stronger voice in shaping the railway. The Oxfordshire Metro concept will form the core of a new model of joint investment and local accountability in transport.

"We believe that we can deliver fully integrated bus services through our relationships with operators by expanding the work of the Oxfordshire Bus Enhanced Partnership"

Our broader ambitions for improved rail connectivity

Improving links to West Oxfordshire

The North Cotswold Line is West Oxfordshire's sole gateway to the rail network. It is vital that the current stations function as effective railheads for important visitor attractions such as Blenheim Palace and towns further from the railway, such as Carterton, Chipping Norton, Eynsham and Witney, which are all expecting significant housing growth in the coming decade. The emerging West Oxfordshire local plan outlines the need to serve new developments and housing. Brize Norton is a key part of this in its role as a key cluster for defence and dual-use innovation. This will mean better connectivity will be needed to rail stations as well as improvements to services to and from stations.

Development on the A40 Corridor in West Oxfordshire, particularly around Eynsham, Witney and Carterton continues to put significant pressure on travel by road. Without the development of alternative transport options, increasing congestion will continue to impact on the economy, environment and quality of life. The opportunity for major regeneration schemes, for example in Carterton, will also be reduced.

Development along the A40 corridor from Oxford to Witney and Carterton will be critical to future sustainable growth in West Oxfordshire. RAF Brize Norton and its associated supply chain and local industrial ecosystem also look to be a long-term feature of the West Oxfordshire economy. These factors have led to a protected route for mass rapid transit options, which may include rail, being included in the emerging West Oxfordshire Local Plan.

We have previously commissioned technical examinations of the feasibility of a new railway linking the North Cotswold Line with Carterton. We recognise that there is an aspiration from the communities for a rail link between Oxford and Carterton and we will continue to develop options for medium- to longer-term mass rapid transit (which may include rail) for this corridor to identify deliverable plans and financing mechanisms for its implementation (P3.05). We will do this whilst working with the rail industry to maximise the utility of the existing railway together with developing mobility hubs to provide sustainable travel options for West Oxfordshire.

Enhancing our international connectivity

Improving connectivity between Oxfordshire and international airports will be important for our globalised sectors, our visitor economy and for inward investment. Improving the functionality of Reading station – as our key onward gateway to Heathrow and Gatwick – is a key aspiration. Providing a western access link to Heathrow remains a key long-term ambition (P3.06) and we will continue to work closely with stakeholders to support and develop proposals which we believe are essential to enhancing the international links with Oxford. Our ITSS would enhance connectivity to Birmingham Airport, with a train every 20-minutes from Oxford and with regional airports including Manchester and Southampton.

Expanding rail freight opportunities

We are keen to support the rail freight industry with growth to and from our existing rail connected freight sites, particularly supporting continued growth in MOD flows to our two rail connected sites in Bicester and Banbury and growth in BMW-Mini traffic between Cowley, Swindon and Birmingham. The provision of several new freight terminals in and around our County could also support further freight growth. The full opening of East West Rail will enable intermodal freight trains from Felixstowe and domestic intermodal services from the North-East, Yorkshire and East and West Midlands to serve our economy.

"We will continue to work closely with the rail industry to understand the implications of the proposed Strategic Rail Freight Interchange at Ardley (Oxfordshire SRFI) building on the engagement already undertaken"

East West Rail has a significant role to play in rail freight movements to the Golden Triangle of Logistics, including the new Northampton Gateway site, as it will help make rail more competitive against road haulage and ensure that the 75% growth target for rail freight by 2050 is met. As East West Rail stretches further east opportunities will continue to grow through links to terminals and ports in the East Midlands and east. Additionally, to support the construction sector and with the growth of Oxford city and its surrounding areas an additional aggregates terminal close to the city is potentially required. Therefore, we are working with rail freight colleagues to propose:

- complementary intermodal facilities at existing sites in the North (Bicester), Central (Appleford) and South (Theale) of our wider region (noting Theale is in Berkshire) to support domestic intermodal services directly to our County. These would be particularly helpful for large retailer and supermarket movements.
- collaborating closely with the rail freight industry using our new Minerals and Waste Local Plan, to explore the need and forecast future demand for rail aggregate depots to support construction activities across our County over the coming five to ten years.

We will work closely with the rail freight industry and private sector bodies to understand and explore the potential opportunities to further expand rail freight opportunities across the County (P1.06).

We will continue to work closely with the rail industry to understand the implications of the proposed Strategic Rail Freight Interchange at Ardley (Oxfordshire SRFI) building on the engagement already undertaken. It is understood that the site would provide access for freight services from the north and London/south-east. At present it is unclear how trains would operate effectively to the site from major freight hubs like Southampton. Careful consideration needs to be given to how the site will be served by rail freight without unduly impacting capacity on the route from Bicester to Banbury, wider rail services or the aspiration to develop a new station at Ardley. We will continue to work with key stakeholders including the infrastructure manager, train operators and the site promotor as the plans develop.

Delivering the infrastructure interventions

Our Plan's investment priorities are split into three phases, Phase 1(2025-2030), Phase 2 (2031-2037) and Phase 3 (2038+), that reflect our short-, medium- and longer-term actions. We will work closely with our industry partners to develop and deliver these proposals over the coming fifteen plus years. We believe the following infrastructure interventions will be required in Oxfordshire to support our ambition:

Phase 1 (2025-2030) – The foundations for growth

- Reopening of the Cowley branch line to passenger traffic (P1.01)
- Introduction of platform 5 at Oxford station (P1.07)
- Developing our new stations (P1.02, P2.01, P2.02 and P3.02)

Phase 2 (2031-2037) – Enhancing capacity and connectivity

- Four-tracking between Radley and Oxford (P2.06)
- North Cotswold line improvements (P2.07)
- Oxford station masterplan (P2.08)

Phase 3 (2038+) – Realising our railway's full potential

- Oxfordshire electric freight spine (P3.03)
- Electrification to Banbury and beyond (P3.07)
- Additional capacity at Didcot Parkway (P3.08)

Our Plan has the following embedded assumptions:

- East – West Rail to Cambridge is open for operation by the end of the plan period;
- Great British Railways (GBR) is active and establishes:
  - A rolling plan of further electrification;
  - A plan to replace diesel powered rolling stock with zero carbon alternatives and associated infrastructure (depot and crew) requirements; and
  - The development and agreement with DfT of a national freight strategy (which includes decarbonisation of the network as a key priority); and
- Rail devolution is incorporated into the Government's plans for the creation of Mayoral Strategic Authorities across England.

More details about the schemes summarised above is provided below.

Phase 1 – 2025-2030 – The foundations for growth

Reopening of the Cowley branch line to passenger traffic (P1.01)

Reopening the Cowley branch line to passenger traffic and the addition of two new stations serving Oxford Cowley and Oxford Littlemore (P1.02), will transform connectivity to nationally significant employment sites. These include ARC Oxford (formally the Oxford Business Park), the Ellison Institute of Technology and the Oxford Science Park. New services will also connect some of Oxfordshire's most deprived communities in Littlemore and Blackbird Leys directly into the city centre in less than ten minutes, with the possibility of direct connections to Oxford Parkway, Bicester and beyond via either East West Rail or the Chiltern Main Line service. This will improve the public transport options for journeys into and around Oxford and the County, increasing overall capacity locally, reducing costs of congestion on our roads and significantly contributing to the productivity and economic output capacity of the local innovation economy.

We have worked closely with our partners at Oxford City Council, the private sector and Network Rail to fund, prepare and submit a business case for the reopening. It demonstrates the widespread support for the project from business, the public and local government. Substantial local funding has been agreed, including capital allocation from the City and County Councils and local land owners. The UK Government has recently committed £120m of funding in support of the scheme. We are working with our partners to actively engaging government to secure the final elements of support so that full funding and services are agreed and to develop a clear delivery plan to be put into place. The plan will also ensure that the new stations have high-quality pedestrian and cycle links removing barriers to access. We will continue to work with industry partners to develop and support delivery of required new rail infrastructure and upgrades to make serving these communities in Oxfordshire with rail a reality.

Introduction of platform 5 at Oxford (P1.07)

The infrastructure manager is developing plans for a new fifth platform to provide additional through movement capacity at Oxford station. This is essential to deliver the train services being pursued during the earliest part of our outlined service pattern in the period up to 2030. We support the ongoing development process as it is critical to the success of our Plan. We will keep in close contact with the process to ensure that it delivers for our plans for Oxfordshire Metro concept and is cognisant of wider proposals for Oxford railway station in the longer term. We will continue to work with the infrastructure manager to bring forward plans for a new western concourse and additional track capacity between Oxford and Oxford North Junction in the short- to medium-term in advance of the full Oxford station masterplan being realised.

Preparing for our new stations (P1.02, P2.01, P2.02 and P3.02)

We have identified four new stations in Oxfordshire as priorities. In addition to the two stations on the Cowley Branch Line outlined earlier (Oxford Littlemore and Oxford Cowley (P1.02)) we have aspirations for additional new stations at Begbroke (P2.01), Wantage and Grove (P2.02) with a potential fifth station at Ardley (P3.02). These are needed to ensure housing growth is sustainable and to support economic growth and connectivity of employment opportunities. They will be key in supporting the Movement and Place Plans we are putting in place across the County.

To kickstart more detailed work we have already conditionally approved up to £10 million from Enterprise Zone funding to rail plan priorities, and it is expected that this will lever in further funding from partners as work progresses.

Connecting West Oxfordshire (P3.05)

We will continue to develop options for longer term mass rapid transit (which may include rail) for the A40 corridor in West Oxfordshire and will identify deliverable plans and financing mechanisms for its implementation. We will do this whilst working with the rail industry to maximise the utility of the existing railway together with developing mobility hubs to provide sustainable travel options for West Oxfordshire.

Phase 2 – 2031-2037 – Enhancing Capacity and Connectivity

Four-tracking Radley to Oxford station (P2.06)

Our work in partnership with the DfT and Network Rail on the Oxfordshire Rail Corridor Study (ORCS) highlighted a range of issues and incremental improvements needed on the railway between Radley and Oxford Station. These relate to accommodating passenger train movements crossing over the Oxford Main Line from the planned to be re-opened Cowley branch line and the capacity needed for freight traffic and other train movements.

The ORCS study suggested a series of incremental improvements (by adding new track sections). These logically result in creating a four-track railway between Radley and Oxford Station which is central to the second five-year period within this plan. We will however work with the infrastructure manager to understand what space-saving and safeguarding is required and whether the introduction of this additional capacity can be sequenced to provide the peak hour capacity needed for new services in the first five years of the Plan. We will work closely across the rail industry to establish whether the full service we outlined could be provided with a series of dynamic passing loops rather than end-to-end four tracking.

The development of a four-track railway should be largely deliverable within land already owned by the railway, however a number of existing bridges over the Thames will need to be renewed and station facilities examined (as part of delivering the Oxfordshire Metro concept). We will work with our local district councils and other partners (such as the Environment Agency) to understand the planning requirements for any new infrastructure needed to realise a four-track railway. We will carefully consider the phasing of this in conjunction with electrification between Didcot Parkway and Oxford which is planned to be delivered by the end of 2032.

North Cotswold line improvements (P2.07)

We are proposing that a half-hourly service is operated between at least Morton-in-Marsh and Oxford with one service in the hour calling at all stations. A third train per hour would terminate at Hanborough by extending one of the existing London Paddington to Didcot Parkway stopping services. To realise this an electrification extension could be required as far as Hanborough but this would be considered during project development in conjunction with the potential for battery train operation beyond Oxford.

A key challenge to an uplifted service pattern on the North Cotswold line is the long single line section between Wolvercote Junction and Charlbury. As part of the ORCS work with Network Rail, we have identified that reinstating a second track between Hanborough and Wolvercote would provide the flexibility to operate the improved services. This forms part of creating an effective 'turn up and go' service on the Oxford to Didcot Parkway corridor and would be key to reconnecting communities on the North Cotswold line as well as supporting the visitor economy through, for example, providing improved accessibility to Blenheim Palace (via services to Hanborough station). Improved service frequencies on this route would address growing desire to travel between Oxfordshire, the wider Thames Valley and longer-distance routes.

We envisage the reintroduction of this second line to be relatively straight forward and would include the construction of a second platform at Hanborough, creation of a West Oxfordshire Mobility Hub and associated station works as well as the introduction of a third track at Wolvercote between Wolvercote South and Wolvercote North junctions. The provision of a West Oxfordshire Mobility Hub at Hanborough is critical to support projected growth in West Oxfordshire in the medium- to long-term and providing onward bus and active travel links to key settlements such as Salt Cross, Eynsham and Witney.

We will continue to work as part of the North Cotswold Line Taskforce to identify how further potential service improvements could also be enabled through to key western connections such as Worcester to link in with planned growth locations such as Worcestershire Parkway which has been identified as a location for a potential New Town development of c. 10,000 homes.

Oxford station masterplan (P2.08)

While much is already happening to create greater capacity at Oxford station, the introduction of East West Rail and the volume of additional services outlined within our aspirations will lead to additional demand. This will require significant improvement at Oxford Station for the long-term.

Oxford needs a rail gateway into our County with world class facilities that meets the needs of all of its users and that is a space which is a destination in its own right. The long-term masterplan for Oxford station will become clear during Phase 1 of the plan and we anticipate that the end state master plan could be completed by the end of Phase 2. We will work closely with stakeholders to consider the provision of entrances, public transport integration (including cycling and bus interfaces) and redevelopment of the wider land around Oxford station. Until the masterplan is realised, we will work with our partners to dramatically improve interchange opportunity via our first and last mile and mobility hub themes.

Connecting West Oxfordshire

Work will be progressed in building out the business case for the Oxford-Witney-Carterton mass rapid transit option, in support of enhanced development along the identified growth corridor.

Phase 3 – 2038 and beyond – Realising our railway's full potential

The Oxfordshire electric freight spine (P3.03)

Oxfordshire is committed to achieving a net-zero carbon transport network and a zero emissions railway by 2040. The development of the Oxfordshire Metro concept (P3.04) will support these aims by encouraging modal shift from private to public transport. While the Great Western Main Line (GWML) is electrified between London and Cardiff and South towards Chippenham and Newbury, earlier plans to electrify the line to Oxford were curtailed following a DfT review in 2015.

To support the full decarbonisation of rail freight and long-distance high-speed services a continuous electrification system for relevant parts of the network must be delivered. Our plan therefore proposes an Oxfordshire Electric Freight Spine that will connect the GWML at Didcot Parkway to the West Coast Main Line at Bletchley to provide a continuous electrified route for freight trains to reach the West-Midlands and north-west from the GWML at Didcot.

Electrification to Banbury and beyond (P3.07)

As part of our commitment to zero emissions from transport we will work with the DfT and the infrastructure manager to gain commitment to expand electrification beyond the Oxfordshire electric freight spine (P3.03) to Banbury and onward to Leamington Spa and Coventry. This route will be operated by battery trains in the medium- to long-term although freight services and some GBR InterCity services will likely be operating as diesel-electric bi-modes given technical constraints on battery power. Electrification of this corridor will allow its freight and InterCity services to be fully electric within our County.

We will also encourage central Government to make the case for creating both the incentives and the certainty that the rolling stock industry needs to procure zero-emission traction particularly in the rail freight sector.

Additional capacity at Didcot Parkway (P3.08)

The new services, stations and infrastructure that we are targeting in Phases 1 and 2 up until 2038 will put pressure on known pinch points in the network. We anticipate that the period beyond Phase 2 will see East West Rail completed to Cambridge (P2.03), a further growth in freight demand and realisation of a number of additional long-distance services passing through Oxford. This will lead to an increase in movements between the Great Western Main Line and the route to Oxford and Banbury at Didcot that cannot be accommodated by the present network without impacting on other existing long distance and regional services. This will require significant upgrading of capacity in the Didcot area. The main requirements have been identified in Network Rail's ORCS study and will be:

- grade separation at Didcot East to remove crossing movements to and from the Great Western Main and the route to Oxford and Banbury;
- introduction of additional capacity at Didcot North Junction (via a third, bi-directional line allowing better management of through and stopping services passing through Didcot); and
- development of a sixth platform at Didcot station to accommodate planned additional terminating services and improve reliability of Reading bound trains that stop at Didcot.

The scale of this work is not to be underestimated. Didcot is a major node in the national rail network and is critical to delivering a significant part of our Oxfordshire Metro concept plans and the ORCS proposals. This will be a long-term programme that will need to prove deliverability, particularly where impact on other longer distance services is concerned. To this end, we will commit to seeking (and in part resourcing) a joint programme with the infrastructure manager, train operator and DfT to develop plans for and advance design of this intervention.

"Didcot is a major node in the national rail network"

Infrastructure needs beyond Oxfordshire

East West Rail to Bedford and Cambridge (P2.03)

We welcome the planned start of passenger services in the coming months between Oxford and Milton Keyes, following the success of the first commercial rail freight service using the new East West Rail link. Providing passenger connectivity between Oxford and Milton Keynes will link two key centres of economic innovation. The DfT and East West Rail Company have indicated that direct services from Oxford to Bedford will be targeted for introduction by the end of the first period of this plan (2030), once the Marston Vale line has been upgraded.

Whilst outside of our County we see the link between Bedford and Cambridge as a critical assumption to realise our ambitions within this plan. Whilst confirmation of the delivery of this section of route and its associated timescales are awaited, we strongly support the scheme and will remain closely involved in this project with an ambition that the route to Cambridge is electrified throughout, not just in our region.

Other interventions

Many of the services which operate to and through our County and region also pass through other pinch points elsewhere on Britain's rail network. Some of these are critical to unlocking services which operate beyond our region outlined within our service specification. We will continue to actively support these interventions and will work with our neighbouring counties and the wider rail industry to secure development and delivery of these schemes. The core interventions we believe are crucial to realising our service pattern are:

- Non-continuous electrification of the Chiltern Main Line (P2.09) to support deployment of battery electric multiple units as part of the widescale battery train deployment across our County in Phase 2.
- Phase 3 of Reading station development (P2.10) which would see the oldest parts of the station and the bay platforms (Platforms 1-6) brought in line with the rest of the station. It is one of the busiest rail hubs in Britain (nearly 15 million passengers a year) and the second busiest interchange station outside of London with nearly four million passengers a year changing trains at the station.
- Heathrow Western Rail Link (P3.06) to provide direct connectivity for people in Oxfordshire (and to the west of Heathrow) to Europe's largest international hub airport
- Remodelling of junctions at Coventry (P3.09) to increase throughput between Nuneaton and Leamington Spa. This would also include sections of double tracking between Coventry and Leamington Spa
- Electrification of the route from Basingstoke to Reading (P3.10) to enable third rail shoe capable electric freight locomotives (and potential new tri-mode passenger trains) to operate from Southampton
- Full electrification of the East West Main Line beyond Bletchley to Bedford and Cambridge including links to the Port of Felixstowe in the east (P3.11).

"We will continue to actively support these interventions and will work with our neighbouring counties and the wider rail industry to secure development and delivery of these schemes"

5. Climate Action

Rail is the heart of a zero-emissions transport system

To meet our decarbonisation targets we need to drive modal shift of people and goods onto our rail network whilst also considering decarbonisation of the railway itself. To decarbonise the railway there is a need to focus on new rolling stock, electrification, climate adaptation.

By extension, electrification also reduces or removes CO_2e, NOx Particulate Matter and noise emissions from our station environments and from the railway's neighbours.

As well as decarbonising our network, we must ensure that our railway is resilient to our changing climate. Focus must be placed on priority assets and on providing robust rail operations. This will require working within and outside of the railway industry and involve stakeholders beyond traditional railway engagement.

This chapter describes three core areas around which our climate action activities will be based:

1. **Modern, green trains** –ensure passenger trains and freight locomotives are powered by sustainable electricity with an ambition to deliver this through a net-zero supply chain.
2. **A resilient railway** – ensuring that our infrastructure is ready for a changing climate, sustaining levels of reliability via proactive action and contingency plans to deal with unforeseen events.
3. **Green, clean railway** – harnessing and using renewable energy for our rail network and embedding nature first and circular economy principles. Air quality at our stations and transport hubs should be of the highest standard and sustainable infrastructure design a base level requirement.

Case study #1 – DP World Port of Southampton Modal Shift Programme

DP World is the owner and operator of DP World Southampton which is the second largest container terminal in the UK after the Port of Felixstowe. As part of the port's operations DP World has been focusing on offering end-to-end supply chain solutions from the factory floor to the customers door. As part of this the Modal Shift Programme (MSP) financially incentivises cargo-owners to utilise rail as a sustainable supply chain option for importing containers within a 140-mile radius of Southampton. The programme has seen a 9% increase in total rail share from the port reversing several years of declining rail movements. Rail emissions reduce on average by 80% compared to lorries (based on UK Department for Business, Energy and Industrial Strategy greenhouse gas reporting conversion factors 2022). The MSP has seen over 64,000 lorry journeys transferred to rail avoiding over six million HGV road miles and equating to the removal of over 17,000 tonnes of CO_2e from UK supply chains. The initiative has resulted in four new daily train services from DP World Southampton to Wales, the Midlands and Yorkshire.

Modern, green trains

All of Oxfordshire's rail services are reliant on diesel traction in some form. Our Intercity Express Trains are already capable of making use of 25kV AC overhead wires but can only operate in diesel mode across Oxfordshire's non-electrified railway north of Didcot. All other passenger services are currently operated by diesel-only trains and freight services are hauled by diesel locomotives.

As well as contributing to the railway's carbon emissions, many of these diesel passenger trains are ageing. The Class 16X rolling stock operated by Chiltern (on Oxford – London Marylebone) and Great Western Railway (on Didcot – Oxford/ Banbury and Regatta Line services) are approaching life expiry, having been built in the 1990s. Their age means that, despite welcome refurbishment investment, they can fail to meet passenger expectations on on-board comfort and accessibility, they can also be less reliable and have higher running costs that electric equivalents.

Switching to electric traction power for passenger and freight trains will not only move us towards our zero emissions aims but will also improve the passenger experience, accessibility, performance and help make best use of network capacity by speeding up passage through pinch points – particularly for heavier freight trains.

New trains bring new opportunities

The introduction of new passenger trains across Oxfordshire (P2.11) brings the opportunity to provide spaces for everyone. We expect new trains to have the latest technology including comprehensive passenger information screens, electronic device charging, free and fast Wi-Fi and wherever possible, level-boarding. Trains will be longer and there will be more seats with spacious walkthrough links and full accessibility at the heart of train design. Where appropriate we will seek to increase cycle carrying capacity to support active travel links across our network.

Our new trains, coupled with our planned changes to service frequencies and the rollout of our Oxfordshire Metro concept, will lead to a zero-emissions transport network for Oxfordshire which will become a benchmark for the rest of the country. We have a proven track record of providing support in securing zero emissions public transport as demonstrated by our recent introduction of zero emission buses in Oxford.

Case study #2 - Oxford's zero-emissions bus fleet

The Oxford ZEBRA bus project was an £84 million scheme delivered using a grant secured from the Department for Transport, private operator investment (from Go-Ahead and Stagecoach) and a £6 million contribution from Oxfordshire County Council.

The project saw the procurement of 159 high quality electric buses, leading to Oxfordshire having one of the largest non-diesel fleets, per capita, in Britain. This included the procurement of the first open-top double deck vehicles used for our City Sightseeing buses.

The vehicles are zero emissions and their high-quality interiors, excellent performance and consistent branding has helped increase patronage significantly. The buses have been responsible for a marked reduction in NOx levels across the City from around 38% to only 4% of emissions.

Oxfordshire electric freight spine

Electrification must form a core part of any solution for the delivery of green trains. As such, we have a bold vision for an "electric freight spine" of continuous overhead line electrification linking the Great Western Main Line (GWML) at Didcot Parkway to the West Coast Main Line (WCML) at Bletchley to be delivered by the end of 2037. This will allow rail freight passing through our region to switch to electric and bi-mode locomotives and allow the bi-mode trains currently operating Worcester/Oxford – London Paddington services to operate in electric mode for longer.

The electric freight spine will also be key for the battery charging requirements for our new four- and five-car battery electric passenger trains which we expect to replace the legacy diesel fleet. These trains use energy stored in on-board batteries to continue to operate as an electric train even when away from overhead wires. Further electrification towards Banbury and Leamington Spa will follow, before 2050, to support full decarbonisation of all services using this route. As these proposals develop careful consideration will need to be given to infrastructure delivery to optimise the balance between disruption, time and cost.

We will continue to advocate for full electrification of East West Rail and beyond to the Port of Felixstowe and between Reading and Basingstoke.

"Further electrification towards Banbury and Leamington Spa will follow, before 2050"

How it will be delivered

With the existing GWML electrification at Didcot our electric freight spine will grow from the south of our region and spread northward. Building on the high-quality electrification infrastructure provided on the GWML means we can use power feeding arrangements that were installed in anticipation of electrification to Oxford and beyond. Careful phasing of electrification will be needed in conjunction with four-tracking between Didcot Parkway and Oxford.

Next steps

During Phase 1 (2025-2030) of this Plan, work will focus on partnering with the industry as it procures new battery trains for deployment across the County. During this phase, we also wish to see the development, design and early stage enabling works for the Oxfordshire electric freight spine project (P3.03) to enable delivery during Phase 2 (2031-2037). We would expect to see electrification to Oxford achieved by 2032 and the freight spine to be completed and operational by the end of Phase 2 or early years of Phase 3.

Also during Phase 2, we expect battery trains will be deployed on almost all passenger services throughout Oxfordshire including services on the Chiltern Main Line and the East West Rail Route. Battery trains on the Chiltern Main Line will most likely be realised through the deployment of a non-continuous electrification solution on the Chiltern Main Line between London Marylebone and Birmingham Moor Street complementing electrification provided as part of East West Rail.

We would expect to see electrification to Oxford achieved by **2032**

Today's rail network, electrification and proposed new stations

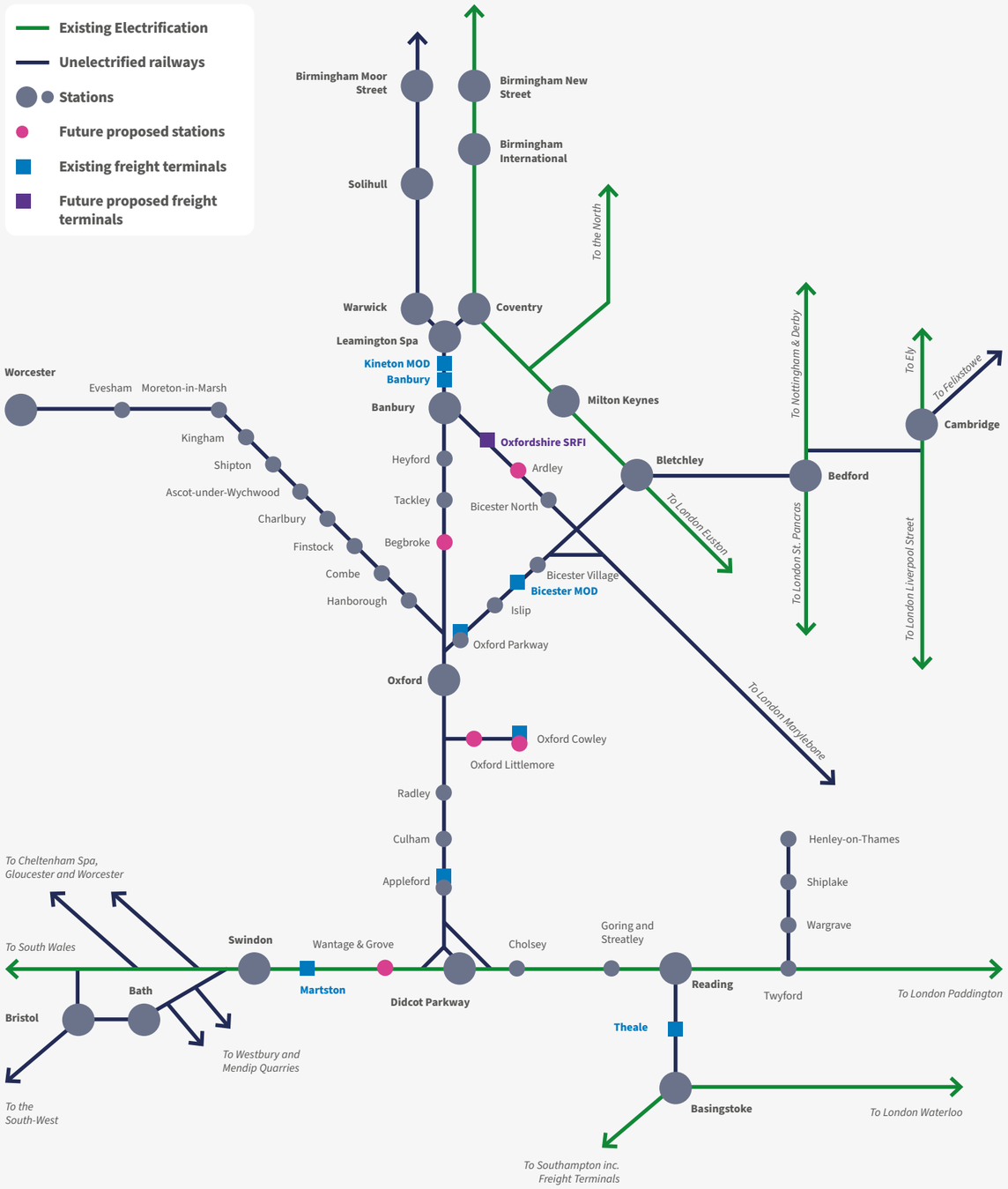


Figure 21: Today's Network, Electrification and Proposed New Stations

Phase 2 (2031 – 2037): Oxfordshire goes electric

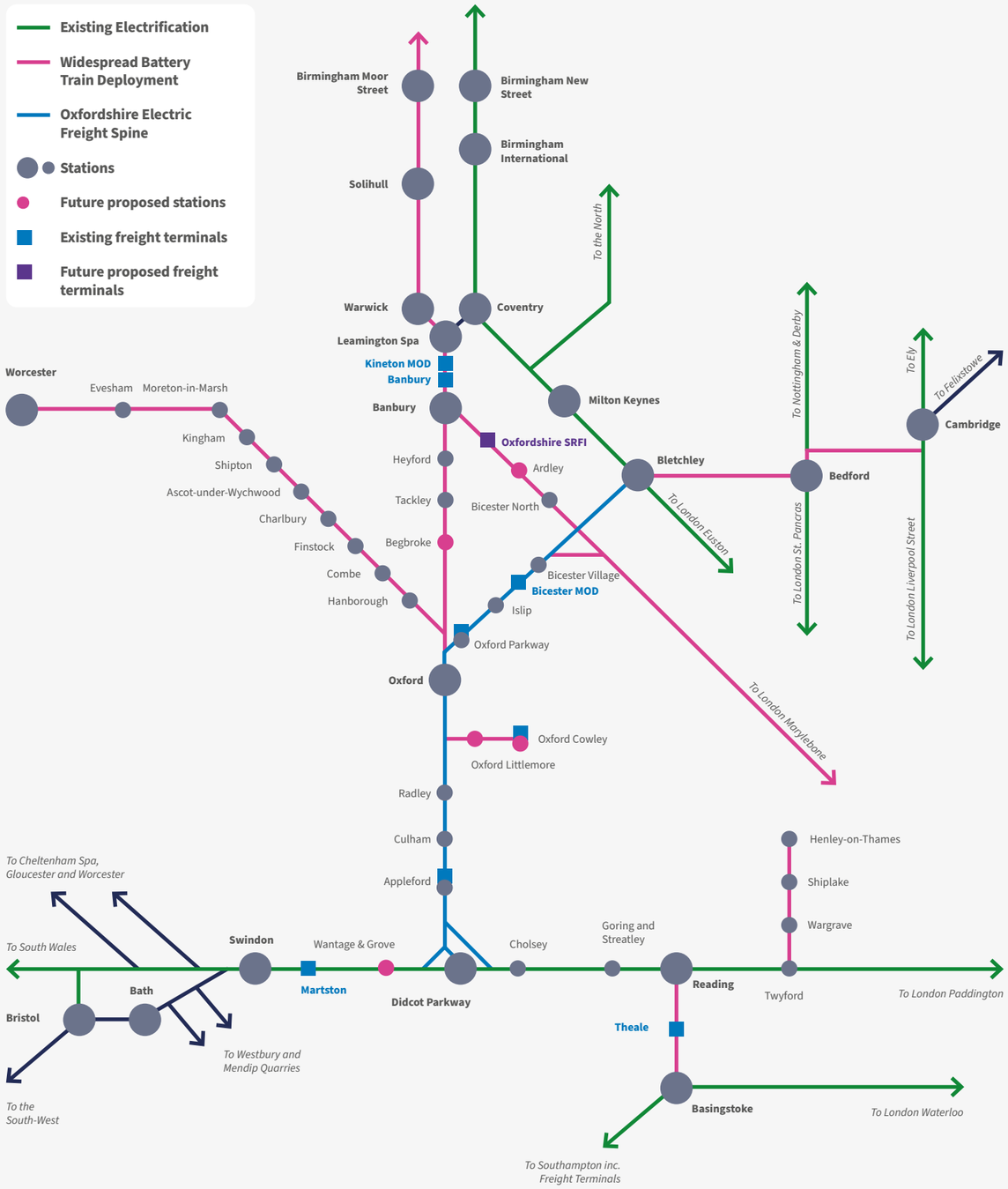


Figure 22: Map of Phase 2 (2031-2037): Oxfordshire goes electric

Phase 3 (2038+) Our end-state ambition

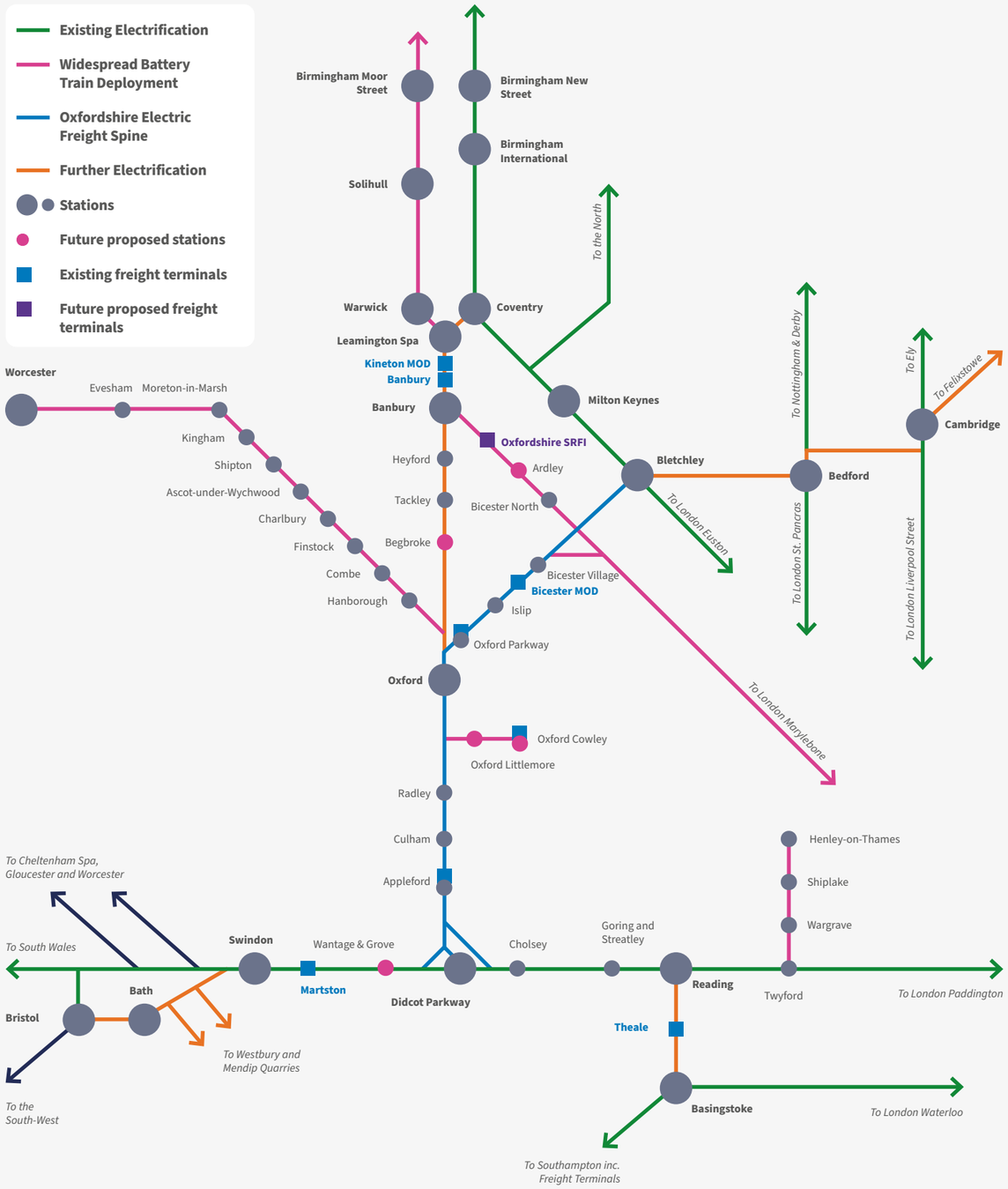


Figure 23: Map of Phase 3 (2038+) Our End-State Ambition

Clean energy to power electrification

As well as providing new electrification to support decarbonisation of our trains we want to see new and innovative solutions to providing clean energy to power that electrification. In 2019 a pioneering new project to provide solar energy directly into the rail power network in the Southern region was undertaken and this is being built on through work being undertaken by Network Rail in Bristol. Opportunity exists to consider wider applications and opportunity for renewable energy integration into railway traction systems. We will work with our local community energy company Low Carbon Hub, the rail infrastructure manager and other stakeholders to analysis the opportunities and technical integration of renewable energy on rail in Oxfordshire (P2.12). This will not only help us in delivering our electrification goals but could also provide locally generated clean and green energy to local communities in Oxfordshire.

Providing a climate resilient railway

With increasing extreme weather events we need to make sure that our railway continues to function and can recover quickly when instances do occur. Flooding is a major challenge across Oxfordshire and water management plays a key part in keeping our regions transport infrastructure operational. Working with the Environment Agency on projects such as the Oxford Flood Alleviation Scheme is critical in providing measures outside of the railway network to reduce the impact of flooding and climate events.

The infrastructure managers approach of renewing assets to a higher degree of resilience in reaction to our changing climate is key. Our Climate Change Adaptation Route Map was endorsed by the Oxfordshire Leaders Joint Committee in January 2025 and provides a comprehensive overview of what we believe is required to make Oxfordshire fit for our future climate. We need to embed the route

Case study #3 – Renewable energy for rail traction

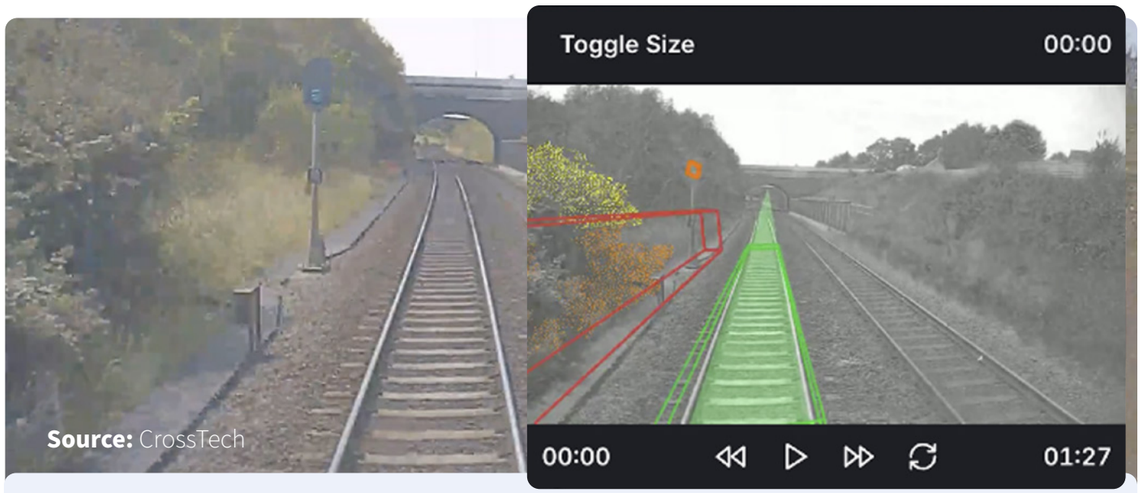
Network Rail Wales & Western Region is currently leading a national research and development project to fully analyse the challenges of providing low cost connections for renewable generation to 25kV overhead line traction systems and operating multiple connections. Early stage modelling, development and analysis is being undertaken and will provide the industry with the principles and system design techniques for future integration. This work has already gained interest from other European railway network operators. The developments build on the capability and analysis of the award-winning Rationalised Traction System (RATS) developed within Wales & Western Region to significantly reduce the equipment and land required for traction substations. This has seen a significant reduction to the cost of traction power supplies building on the credentials of the Great Western Main Line having the lowest national capital cost of power per installed kilowatt.

The integration of renewable energy into future traction power supplies will drive lower cost future designs and will support aims to continually reduce future decarbonisation costs. Wales & Western is currently delivering the first renewable site at Filton, near Bristol, and design for this is well underway. The solution provides a modular approach for renewable connections, using existing spare equipment whilst also providing local photovoltaic generation and battery storage on existing Network Rail land. This not only provides an excellent development facility for integrated traction power system operation with renewables, but also gives an opportunity to explore the use of solar storage for load balancing to allow lower cost maintenance of the railway. Work on the operation and wider power system benefits is being done by Network Rail in parallel with the design work, and this wider analysis is set to publish in stages from January 2026.

map thinking into the railway in Oxfordshire and ensure that we identify infrastructure and rolling stock priority assets along with robust contingency planning for these when things go wrong.

It is critical that any new enhancements provide added resilience (such as the four tracking of the section between Didcot Parkway and Oxford) and that this forms a part of the business case for their delivery. Our railway operations need to be able to be reliable regardless of the weather and people need to feel comfortable and be protected from weather extremes including temperatures and precipitation.

Remote monitoring approaches can identify problems with infrastructure before they become issues which impact the operations of the railway and enable infrastructure management teams to rectify items before they become a problem. We will work with the rail industry to make sure that remote condition monitoring is foundational to asset management (P1.08) and ensure that our priority railway assets are identified, designed, delivered, renewed and replaced with a changing climate in mind. The introduction of the Oxfordshire Metro concept allows us to ensure bus and rail can work together to support the needs of our region's passengers. We will ensure, as part of the Oxfordshire Metro concept, that robust contingency plans exist for public transport so that regardless of any issues arise people will still be able to get to where they are going. We will capture our plans and information around providing a climate resilient railway in an Oxfordshire Railway Climate Change Resilience Plan (P1.09) which will be developed during Phase 1 of our plan.



Source: CrossTech

Case study #4 - Preventative maintenance and remote condition monitoring – making our railways reliable

Remote condition monitoring approaches means that video and LiDAR assessment can be undertaken with equipment mounted on trains providing data for AI analysis to detect issues across the railway. Companies such as CrossTech© have been effectively using the technology on Oxfordshire's railways through working with local operators Chiltern and GWR. CrossTech© have successfully delivered computer vision-based inspection to help improve safety and performance across the railway. This example of a specialist AI technology SME working in tandem with a major asset owner to deliver for local communities is what we need to see more of in our industry.

Working with stakeholders beyond the railway

Another key strand to our Climate Change Adaptation Route Map is the need to establish working groups and forums between key stakeholders to support decision making and share ideas and successes to embed climate adaptation across the County. We have already been working closely with local farmers in Oxfordshire with a focus on flood alleviation to ensure that run-off water from our farmers' fields does not cause undue impacts on our roads and railways and we will seek to expand this across the County (P1.10).

"We have already been working closely with local farmers in Oxfordshire with a focus on flood alleviation to ensure that run-off water from our farmers' fields does not cause undue impacts on our roads and railways"

Case study #5 - Sustainable working from our County farmers – keeping our railways operational

The Evenlode Landscape Recovery Project has been pioneered by the North-East Cotswold Farmer Cluster CIC. The work being undertaken as part of the project aims to restore the habitats of the Evenlode, Glyme and Dorn rivers. The principal objectives are to deliver clean water, natural flood management, carbon sequestration, nature recovery and related social outcomes.

The partnership is working closely with major infrastructure providers such as Network Rail to establish how land could be managed differently to slow run off from fields and protect rail assets in a way that is beneficial to both the railway and public by providing better value resilience and providing added values to the environment through improved land management. The project has around £75m investment available with a £20m-£30m equity pot and is due to see investment through to 2055.

Green, clean railway

Away from removal of diesel trains and ensuring that our infrastructure is resilient to our changing climate we also need to ensure that the wider railway system reduces its emissions (both CO_2e and other air quality gases and particulates) and focuses on zero carbon operations.

Air quality improvements and noise reduction

Our proposals will enable us to provide a completely zero emissions railway across Oxfordshire before 2050. Until this is delivered, we need a relentless focus on minimising CO_2e, NOx and Particulate Matter (PM) emissions from existing diesel trains.

Some of these emission types are very localised and are most acutely felt in Oxfordshire's urban areas, particularly those places where trains idle in major stations such as Oxford. The Rail Safety and Standards Board have been investigating air quality at major railway stations around Britain identifying key challenge areas. We will establish a rail station air quality and noise monitoring network at Oxfordshire's major interchange and linking hubs (initially starting with Oxford station) alongside other key locations to track and monitor air quality (P1.11). We will make data collected from these sites publicly available.

For each site a clear and credible action plan will be put in place outlining how air quality improvements will be achieved in advance of the electric freight spine being delivered. This will include key initiatives such as reducing and removing engine idling. These plans and the progress made against them will also be made visible to the public. The electric freight spine, which was explored earlier, will bring an end to CO2 and NOx emissions from rail across our County and ensure that people living and working around our railway can be guaranteed clean and green environments.

Energy and waste efficient operations

We must ensure that energy efficiency is optimised across the railway, including at stations and depots, through initiatives such as retrofitting our railway buildings and car parks with solar panels and solar canopies. This approach could allow us to export this energy to the local grid where there is surplus and there is opportunity to source financing to support such services with this type of infrastructure becoming increasingly common in other areas of the road transport industry. To capture these opportunities, we will develop an Oxfordshire Railway Solar Energy Opportunities Register (P1.12) which will identify and track the progress of energy generation projects within our County.

Waste is a core component of sustainability and whilst many of our larger stations sites and rail operators have robust recycling schemes, we should be striving to divert 100% of waste generated away from landfill and ensure that appropriate facilities are present across our whole railway estate.

"Our proposals will enable us to provide a completely zero emissions railway across Oxfordshire before 2050"

6. Rail as place shaper

A railway that shapes people and places

Rail has a transformative role in shaping Oxfordshire's future beyond being a way to move people, it is a driver of placemaking, regeneration and inclusive growth.

Place shaping is the intentional act of changing a place to improve the quality of life for its residents, to foster community growth and support vibrant, sustainable communities. It involves a holistic, strategic approach that integrates various aspects of a place, such as its architecture, urban design, community engagement and cultural assets, to create a shared vision for its future and deliver cohesive, resilient environments.

This section highlights rail's contribution to the County's places, economic vitality, social equity and mobility. It presents a vision of a rail system that is visible, valued and inclusive, while supporting a net-zero, accessible and future-ready County. We recognise rail as a civic asset, embedded in daily life, local planning and community identity.

This approach aligns with Oxfordshire's LTCP and its Healthy Place Shaping policies, which promote well-designed, active and inclusive environments that support health and wellbeing. It positions rail as a key tool for shaping communities and driving regeneration recognising that transport and placemaking are interdependent and that rail investment must enhance both mobility and the quality of places.

Through this approach, rail can:

Anchor compact, mixed-use growth around rail stations and corridors

Enable seamless, sustainable transport across communities

Expand access to opportunity for all residents, businesses and visitors

Support regeneration and economic vitality

Existing stations: A framework of rail-led mobility hubs

To achieve the ambitions of this Plan and the concept of the Oxfordshire Metro concept, railway stations must evolve beyond access points into mobility hubs, integrated transport interchanges, community anchors and catalysts for regeneration. These hubs should support sustainable growth, enable seamless multimodal journeys and reflect the character and needs of the places they serve.

Building on the adopted Oxfordshire Mobility Hub Strategy, we have set a framework to guide what each station should deliver by role, scale and setting. This includes expectations around connectivity, accessibility, public realm, placemaking and multimodal integration, ensuring every station contributes to climate goals, transport efficiency and local identity. Our ambition is for all existing and new stations to meet the appropriate criteria for their hub category by 2040.

Delivery will be supported by three enablers:

- **Rail for all** – inclusive, accessible and welcoming to everyone.
- **Active travel and first- and last-mile connectivity** – safe, sustainable access by walking, cycling and micromobility.
- **Community rail and local identity** – ensuring stations feel like civic assets rooted in their communities.

Together, these outline the design principles, partnerships and interventions needed to ensure every station becomes a valued part of daily life, a gateway to opportunity and a visible symbol of our commitment to people, place and planet.

Our framework introduces a tiered classification for stations, based on strategic role, setting and potential. This is supported by essential criteria that will shape upgrades and new developments, aligning with the Oxfordshire Metro concept and incorporating future-facing ideas such as green stations. Crucially, classifications will evolve over time in response to changing demand, development and travel behaviour. For example, Oxford Parkway could become a Tier 1 hub if service frequencies expand and new demands, such as the Oxford United Football Stadium, are realised.

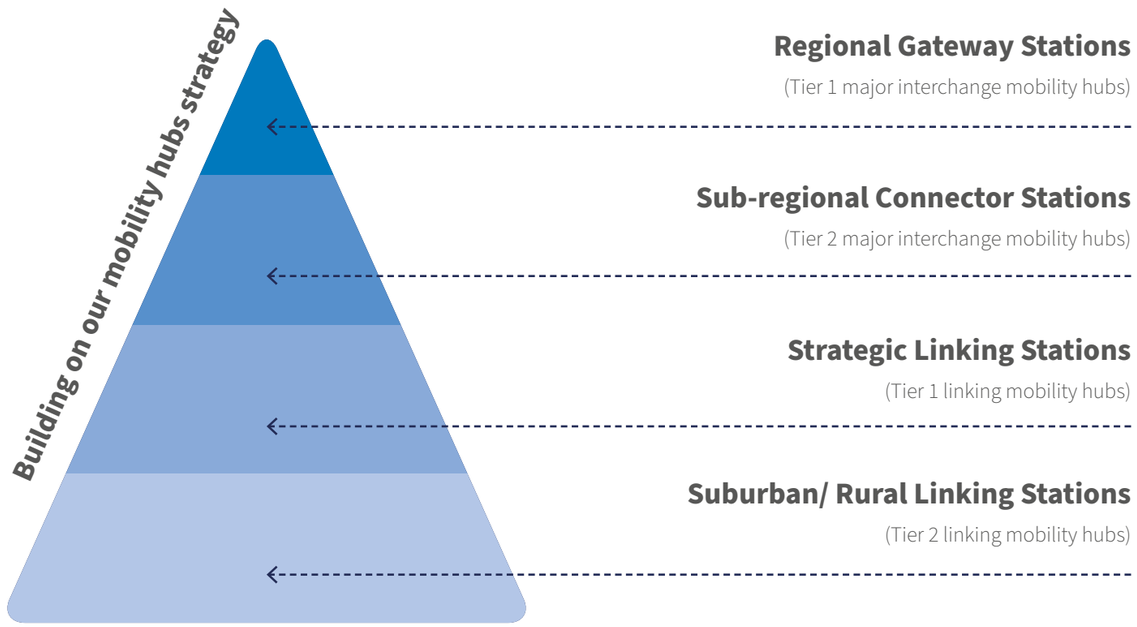


Figure 25: Railway station classification

To deliver this vision, we will launch the Oxfordshire Stations Action Plan (OSAP) (P1.13) - a comprehensive programme to benchmark and audit every station in the County, setting a clear path for transformation. Using the Mobility Hub Assessment Tool, OSAP will assess current conditions and define deliverables and timelines for each station, enabling targeted investment and strategic alignment. This will include the provision of an Active Travel Plan for all stations. The OSAP work will be underpinned by close collaboration with key stakeholders and communities, alongside Government support to unlock funding, drive innovation and champion inclusive, future-ready design.

Significant investment is already underway at Banbury, one of our Tier 1 Major Interchange Mobility Hubs, which is seeing the redevelopment of the lower ticket hall and provision of a new access and public transport route from Tramway Road (P1.14), which demonstrates our intent.

Through the station action plans, every Oxfordshire station will become a visible symbol of progress, supporting the shift to net zero and ensuring the rail network is integrated, accessible and welcoming for all.

Case study #6 - Banbury station regeneration: A community-led model for rail station improvements

Customer research and stakeholder feedback at Banbury Station, a major interchange within the County serving over 2.1 million passengers a year, highlighted the urgent need for modern facilities and better accessibility. Working in partnership with Chiltern Railways, Network Rail and Cherwell District Council and supported by Caterleisure, Banbury Business Improvement District and the Oxfordshire Community Rail Partnership, we helped deliver a programme of improvements that not only upgraded facilities but also trialled a new collaborative funding model. A dedicated Stakeholder Working Group brought together local councils, community partners and industry representatives to secure investment from rail budgets, developer contributions and private businesses, setting a precedent for future station enhancements.

The £820k programme delivered new accessible toilets, a station-wide steam deep clean and full repaint and a modern coffee shop with seating for fifty at no cost to the industry. Community initiatives complemented these upgrades, including the ‘People of Banbury’ exhibition celebrating local heroes, a photographic gallery of attractions and a new leisure trail and accessibility map linking the station to the town centre. Alongside this, Chiltern is investing in new colleague accommodation for train drivers at the depot, while we are delivering a wider connectivity scheme.

A key element is a new access and public transport route from Tramway Road to the station, designed to prioritise sustainable and active travel. The scheme will deliver a signal-controlled route for pedestrians, cyclists and bus users into the forecourt, alongside new footways, dedicated cycleways, safe pedestrian crossings and modern bus stops with integrated cycle facilities. These improvements, supported by enhanced car parking, drop-off bays, disabled provision and upgrades to lighting, drainage and landscaping, will make Banbury Station more accessible, sustainable and welcoming for all passengers.

The regeneration has transformed Banbury into a more inclusive gateway and created a blueprint for how station improvements can be delivered through innovation, partnership and community support.

Table of classification for railway stations in Oxfordshire

*Classified as growth hubs within ORCS.

	Regional Gateway Stations (Tier 1 Major Interchange Mobility Hubs)	**Sub-Regional Connector Stations** (Tier 2 Major Interchange Mobility Hubs)	**Strategic Linking Stations** (Tier 1 Linking Mobility Hubs)	**Suburban/Rural Linking Stations** (Tier 2 Linking Mobility Hubs)
Stations	• Oxford* • Banbury* • Didcot Parkway	• Bicester Village* • Oxford Parkway* • Bicester North • Hanborough* • Wantage and Grove (new)	• Charlbury • Cholsey • Culham* • Henley-on-Thames • Kingham • Radley • Goring & Streatley • Ox. Cowley (new) • Ox. Littlemore (new) • Begbroke (new)	• Appleford • Ascott-under-Wychwood • Combe • Finstock • Heyford • Islip • Shiplake • Shipton • Tackley
Primary role in the network	High-volume, strategically located regional and national interchanges, anchor points in the mobility network	Key modal interchanges serving strategic corridors, towns and economic zone, medium-scale, high-frequency access point	Serve small towns, villages or rural innovation clusters; support access to the wider network and reduce car dependency	Local, low-cost hubs enabling rural and village-scale communities to access the rail network
Connectivity and integration requirements	• Seamless links with strategic bus, rail, coach, micromobility and active travel • Real-time coordination • Car sharing parking • Direct Strategic Active Travel Network/ Greenways access	• Bus/rail integration • Car sharing and parking • Park & ride • Safe cycling and walking access • Support for micromobility and real-time user information	• Integrated local bus and active travel links • Access to Local Cycling and Walking Infrastructure Plans (LCWIPs) and Oxfordshire Greenways • Appropriate level of car parking	• Core access via walking, cycling and informal lift-share • Minimal infrastructure required
Design and public realm expectations	• Civic-scale infrastructure • Generous, climate-resilient public realm • Wayfinding and EV/active mode facilities aligned with hub strategy	• Place-sensitive architecture • Consistent branding; secure cycle parking • Weather protection • EV charge points	• Green station principles (biodiversity, solar, SuDS) • Rural-appropriate design • Compact footprint	• Simple, low-impact facilities (shelters, signing, wayfinding) • Visually sympathetic to setting
Accessibility and inclusion standards	• Fully step-free • Calm zones • Sensory wayfinding • Inclusive facilities (e.g. changing places, accessible toilets, seating, tactile surfaces, family friendly spaces and facilities)	• Fully step-free • Inclusive signing • Accessible interchange • Real-time information displays • Proximity to residential/ employment areas	• Basic step-free access; secure bike parking • Seating and weather protection • Accessible platform surfacing	• Volunteer-maintained environments; clear, inclusive signing • Passive safety design
Place and community role	• Regeneration anchors • Mixed-use development • Cultural gateways • Gateway to region and local identity	• Support modal shift for key corridors • Embed Greenways/ active travel • Enable local growth and sustainable commuting	• Community-informed design • Support for rural inclusion • Local economic/ tourism links • Opportunities for local identity	• Community ownership and branding • Station adoption • Artwork, planting, events (OxCRP support)
Innovation / freight opportunity	• Integrated last-mile freight, EV logistics • Car clubs • Science Vale growth	• Freight/staff access to business parks or enterprise zones	• Some last-mile freight delivery potential • Access to R&D and science centres	• Not typically applicable • Can support hyperlocal sustainable mobility initiatives

Oxford railway station – A nationally significant gateway

As Oxfordshire's busiest station, serving over 6.5 million passengers annually (with numbers set to grow), Oxford station is of Countywide and national importance. Its redevelopment must go beyond a transport upgrade, delivering a landmark civic space, a regeneration catalyst and an exemplar of rail as place shaper, while ensuring seamless integration with planned improvements across the network, including East West Rail, the reopening of the Cowley Branch Line, new stations, capacity upgrades and electrification. It should meet and exceed the framework's expectations for interchange, placemaking, accessibility and integration, becoming a flagship for what future-ready stations across Oxfordshire can achieve.

Oxford Station must be at the heart of the city's next phase of growth and integrated with Oxfordshire's wider rail and infrastructure programme, including:

- Reopening the Cowley Branch Line (P1.01) with two new stations at Oxford Littlemore and Oxford Cowley (P1.02), improving access to the city and strategic employment sites.
- Network enhancements such as Platform 5 and a Western Concourse at Oxford (P1.07), four-tracking between Radley and Oxford (P2.06) and electrification to Oxford and beyond (P3.03) —underpinning Oxford's role as a national gateway.
- The East West Rail connection to Milton Keynes (P1.03), Bedford and Cambridge (P2.03), positioning Oxford as a pivotal hub between the West and East of England.

The Oxford West End Spatial Framework recognises the critical role of the station gateway, highlighting the need for high-quality public realm and infrastructure that delivers a welcoming, accessible arrival experience.

Oxford deserves a station that reflects its civic identity, global reputation and sustainable ambitions. The current station falls short as an arrival point to one of the UK's most iconic cities. Redevelopment should therefore:

- Deliver a modern, architecturally distinctive place and building that instils local pride
- Create a high-quality public realm, with green infrastructure, safe walking routes and active frontages
- Seamlessly integrate the station into the city through thoughtful design, branding and wayfinding
- Enhance the experience for all users, with inclusive design, intuitive navigation and welcoming community spaces

As the network's primary interchange, Oxford station must set the standard for seamless multimodal travel, the backbone of a connected, low-carbon system. Key integration priorities include:

- Real-time coordination with local and regional bus networks
- High-quality walking and cycling links, including access to the Oxfordshire Strategic Active Travel Network (SATN)
- Provision for micromobility (e-bikes, cargo bikes, car clubs) and accessible modes
- Smart contactless ticketing, intuitive wayfinding, safe interchange and secure cycle hubs

Investment in Oxford Station will deliver far-reaching benefits. It supports our bold plan and the Local Transport and Connectivity Plan (LTCP), enables housing and job creation and advances mode shift and delivery of climate targets. More than that, we want to strengthen Oxford's identity as a globally leading university city, an outstanding science and innovation hub and a renowned model for sustainable, integrated urban growth.

How it will be delivered

In Phase 1 (2025–2030) of this plan, the infrastructure managers Oxfordshire Connect project will deliver Platform 5 and a new Western Concourse, improving capacity and the passenger experience. Oxfordshire County Council will play a supporting role, ensuring the station's redevelopment which includes a new station building and improved surrounding areas aligns with wider transport, active travel and regeneration priorities and integrates fully with the Oxfordshire Metro concept vision. This will be captured through the development of an Oxford station masterplan.

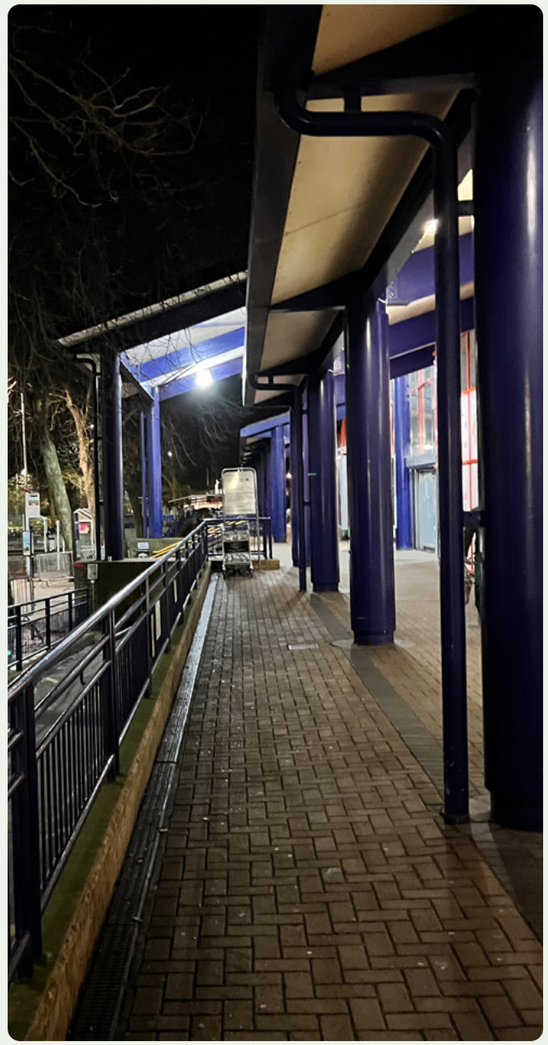
The full transformation into a landmark station and gateway will be realised in Phase 2 (2031–2037), completing the masterplan and embedding Oxford Station at the heart of the city's next phase of growth. Oxfordshire County Council will be key in providing a leadership and enabling role to achieve this vision.

As with our new stations, we will explore funding and financing models to deliver our ambitions. The redeveloped station will deliver enhanced commercial opportunities and we will examine how local levers could be deployed to secure contributions from the private sector

Our ability to co-ordinate work across stakeholders and industry groups at Oxford station will be key to the successful implementation of the masterplan. We will continue to ensure that initiatives which include local residents and stakeholders helps us shape out masterplan and make sure that it is fully inclusive and puts people at its heart.

Next steps

We will work closely with the infrastructure manager and other key rail industry stakeholders, Oxford City Council and other local stakeholders, land owners and developers to develop a credible master plan for the station which captures the level of ambition we need to make Oxford a world class gateway. We will ensure that this considers the emerging requirements from the Oxfordshire Metro concept and ensure that Oxford station can become a major transport interchange and gateway into our region.



Oxfordshire’s new railway stations

OxRail 2040 proposes four new stations, Oxford Cowley, Oxford Littlemore, Begbroke and Wantage & Grove, while also exploring the feasibility of a fifth at Ardley. These schemes will be developed through business case, design and delivery in partnership with Government, the infrastructure manager, operators, developers, commercial partnerships and district councils. We will identify financing solutions making full use of local powers and levers and drawing on best practice to secure private investment. Full timetable feasibility will be required for all proposals and further investment may be needed to provide capacity enhancements on the routes affected to ensure that current and future train operations are not adversely impacted.

Oxford Littlemore and Oxford Cowley (P1.02)

Reopening the Cowley Branch Line to passenger services (P1.01) is a vital early step in supporting Oxfordshire’s growth. The south and east of Oxford are home to world-leading life sciences and technology hubs, alongside major new housing developments. Direct rail access will connect these communities and jobs to Oxford city centre in under ten minutes, helping reduce congestion, support sustainable travel and strengthen cross-Oxford links.

Two new stations, **Oxford Cowley** and **Oxford Littlemore**, will serve major employment, education and residential areas, designed as high-quality interchanges with excellent active travel and bus connections.

Begbroke (P2.01)

A new station at Begbroke will serve the Oxford University innovation district and surrounding communities. Planned as a sub-regional connector, it will form part of the Didcot Parkway to Banbury route linking Oxford’s northern corridor of research, science and innovation assets. The station’s proximity to planned growth provides the potential to explore commercial opportunities to develop and deliver the station. Strong first- and last-mile integration will be central to its design, enabling seamless connections to bus, cycling and walking routes. Close working will be needed with the infrastructure manager to consider any impacts to existing infrastructure to support the delivery of the station. We are exploring all commercial opportunities to develop the station.

Wantage and Grove (P2.02)

We are promoting a new station serving Wantage and Grove, directly connecting these fast-growing towns to Oxford, Didcot, Swindon and Bristol. Our Strategic Outline Case, completed alongside OxRail 2040, indicates a good economic rationale for the station and positive markets for travel. Its location on the Great Western Main Line, intensively used today by passenger and freight trains, would require calls in new services, such as those proposed between Oxford and Bristol or extension of existing services and investment in supporting infrastructure. In parallel, Thames Water’s ‘South East Strategic Reservoir Option’ (SESRO), adjacent to potential locations for the station, offers both opportunities and challenges and we will continue to work with Thames Water on their proposals. We propose to continue business case development in this complex context in close partnership with the rail industry and SESRO, looking at innovative financing options and ensuring it aligns with and supports housing and employment ambitions in local plans.

Ardley (P3.02)

A potential new station at Ardley will be explored to see how it may support proposed the planned growth in the area including at Heyford Park (named as one of the locations recommended in the Government’s New Towns Taskforce Final Report) and new leisure developments including Puy de Fou. We will also review any potential impacts of the proposed Oxfordshire SRFI nearby. A passenger station at Ardley would enhance rural access to the rail network and contribute to Oxfordshire’s long-term spatial and economic development.

How it will be delivered

Delivery will take place in three phases:

- **Phase 1 (2025–2030):** Reopen the Cowley branch line with two new stations at Oxford Cowley and Oxford Littlemore, while progressing feasibility studies and business cases for Begbroke, Wantage & Grove and Ardley. We will launch the Oxfordshire Stations Action Plan (OSAP) which will undertake a comprehensive assessment of all existing rail stations and identify what interventions are required to begin upgrading stations into integrated, accessible mobility hubs.
- **Phase 2 (2031–2037):** Deliver new stations at Begbroke and Wantage & Grove on the assumption that viable business cases can be made, continue development of a potential Ardley station and expand OSAP upgrades to embed mobility hubs across the County.
- **Phase 3 (2038 onwards):** Complete Ardley station, if feasible and ensure all Oxfordshire stations operate as fully integrated, community-led hubs supporting long-term growth and resilience.

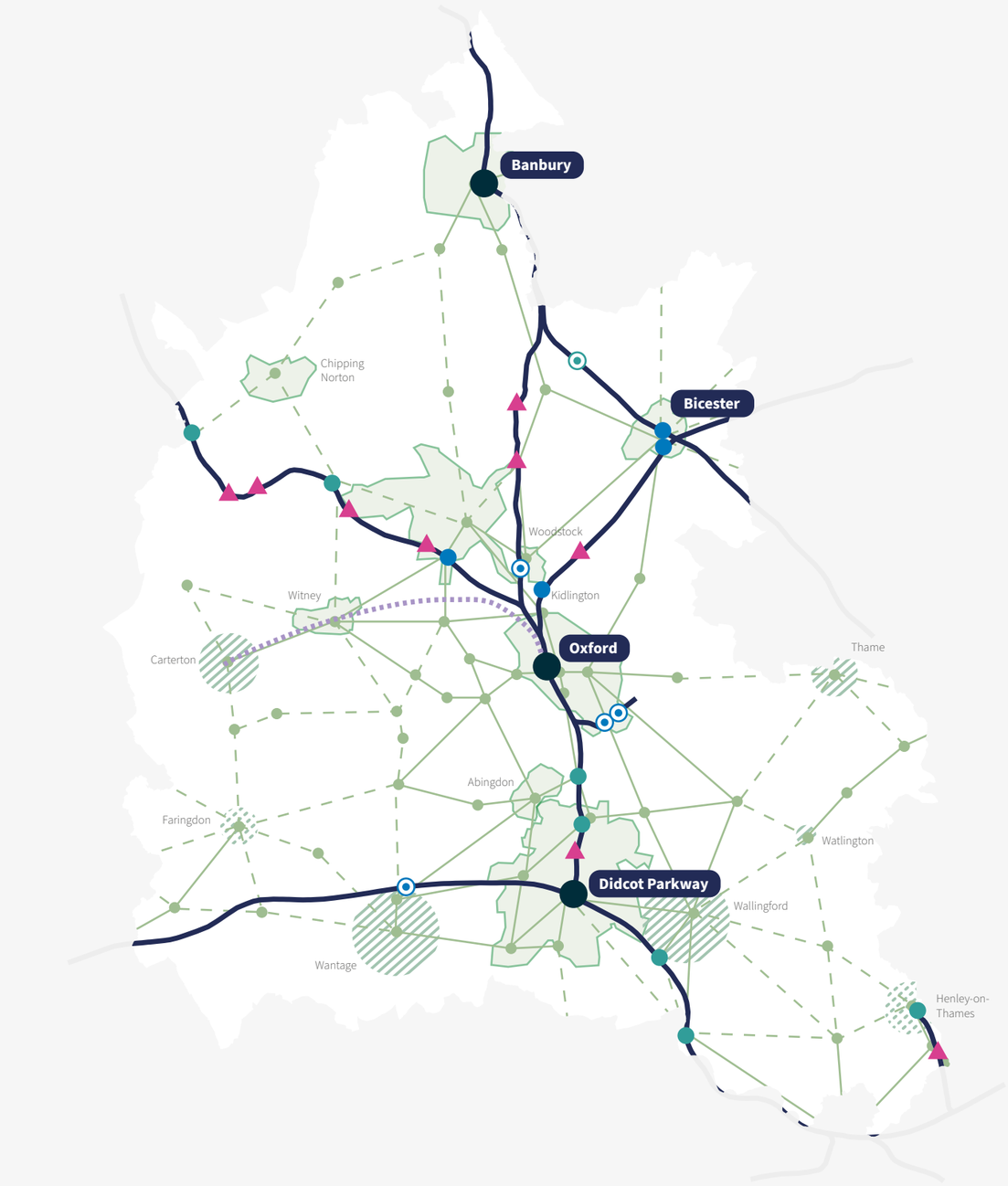
Together, these interventions will give thousands more residents, including those in rural communities, convenient access to rail, helping Oxfordshire to grow sustainably, inclusively and resiliently.

“Two new stations, Oxford Cowley and Oxford Littlemore, will serve major employment, education and residential areas”

Next steps

In line with our priorities, we will develop a programme of new stations and station improvements, working on delivery with public and private sector partners. To kickstart more detailed work we have already earmarked £10 million from Enterprise Zone funding to rail plan priorities, and it is expected that this will lever in further funding from partners as work progresses.

“We have already earmarked £10 million”



Map of railway station and active travel connectivity

Rail for all: Inclusive, accessible and welcoming to everyone

A truly inclusive railway must work for every resident in Oxfordshire, regardless of age, ability, geography, income or background. Rail must be more than just physically accessible, it should instil confidence, enable independent travel and reflect the diverse lived experiences of its users. This inclusive approach is fundamental to achieving the Oxfordshire strategic vision and supports wider goals around opportunity, equity and community dignity. It also reflects the strong themes raised in consultation, where accessibility, safety and rural connectivity were consistently highlighted as priorities.

Accessibility and inclusive design

We believe everyone should be able to use railway stations safely and comfortably. Delivering step-free access to every platform across the network is a foundational goal, ensuring that no resident is excluded due to mobility challenges. Inclusive station design must go further, however, by integrating sensory navigation aids such as tactile paving, audio cues and visual signing, alongside clear and consistent wayfinding. Fully accessible facilities, including toilets, seating and help points, should be standard. At major hubs such as a redeveloped Oxford station and where feasible at other large stations, we want to see enhanced changing places facilities and calm zones to provide quieter, stress-reducing spaces for those who may be overwhelmed in busy environments.

Accessibility also needs to recognise the requirements of people with non-visible disabilities and neurodiverse conditions. We want to see the principles of station-based calm spaces applied across the network, using sensory audits and co-design to create supportive environments. This includes improved lighting, reduced visual clutter, clearer signing and designated quiet routes through stations. By creating spaces that acknowledge and address diverse sensory and cognitive needs, more people will be able to travel independently, safely and with dignity.

To support the implementation of these areas we will establish a Oxfordshire Rail Station Accessibility Requirements Document (P1.15) to support those developing and designing proposals for our stations. This activity will fulfil recommendation two from the consultation of our plan with the Oxfordshire Citizens' Assembly on Travel and Transport which is available on our website.

Case study #7 - Cotswold Calm Corners

The Cotswold Calm Corners initiative, led by the Oxfordshire Community Rail Partnership (OxCRP), aims to create quiet, sensory-friendly spaces at stations to support neurodivergent, disabled and multifaith passengers. Based on feasibility research and engagement with public health professionals and user co-design workshops, the project responds to the emotional and sensory barriers many travellers face.

It proposes dedicated calm zones at or near stations where individuals can decompress and manage stress, helping to make rail journeys more predictable and manageable. The Calm Spaces Technical Design Brief sets out inclusive design principles, clear wayfinding, step-free access, flexible layouts, decluttered signing and sensory-aware lighting, to ensure spaces are intuitive and welcoming.

The study found that these interventions can significantly boost travel confidence and reduce anxiety, particularly for those who currently travel less due to accessibility challenges.

Inclusive travel education

Accessibility is not only about infrastructure but also about confidence. We will lead in promoting inclusive travel education, especially for young people, older residents and those unfamiliar with public transport. Partnering with schools, colleges, community organisations and health providers, we will develop programmes that build travel confidence, digital journey literacy and personal safety awareness (P1.16). This activity will fulfil recommendation three from the consultation of our plan with the Oxfordshire Citizens' Assembly on Travel and Transport which is available on our website.

"Accessibility is not only about infrastructure but also about confidence."

Safety and personal security

For everyone to feel welcome on the railway, they must first and foremost feel safe. We want the industry to embed design-out-crime principles into every station environment, ensuring that layouts, lighting, visibility and wayfinding deter antisocial behaviour and reduce opportunities for crime. Improvements will be underpinned by Crime Prevention Through Environmental Design (CPTED) best practice, making stations feel open, accessible and secure for all users.

Crucially, we recognise that current standards are often shaped around operational efficiency rather than the needs of the most vulnerable. We will work directly with vulnerable groups and those who experience safety concerns to co-develop standards, ensuring that improvements genuinely reflect the lived experience of passengers. A coordinated, intelligence-led approach with British Transport Police (BTP), Thames Valley Police (TVP) and train operators will strengthen both the visible presence and targeted enforcement where required. This will also support community engagement initiatives to build trust and encourage public reporting of safety concerns. These will be a range of projects which we will manage as part of a Safer Stations Programme (P1.17). This activity will fulfil recommendation four from the consultation of our plan with the Oxfordshire Citizens' Assembly on Travel and Transport which is available on our website.

Oxford, Banbury and Didcot Parkway have been identified as priority locations for enhanced safety interventions, where measures will include a more visible police presence with intelligence-led operations, upgraded CCTV coverage, improved lighting, clearer sightlines and better staff visibility. Our goal is to create a consistent, reassuring safety experience across the network, encouraging greater passenger confidence and use of rail services.

Active travel and first- and last-mile connectivity

To make rail the first choice for everyday journeys in Oxfordshire, active travel and first- and last-mile connectivity will be embedded within the core vision of the Oxfordshire Metro concept, a scalable, integrated transport system that connects

communities to opportunities. This means rethinking how people access the rail network, shifting from car dependency to a seamless, multimodal experience that prioritises walking, cycling, micromobility and inclusive access.

We want every station, urban or rural, existing or new, to function as part of a connected web of local mobility. High-quality, safe and direct walking, cycling and wheeling routes, linked to key destinations and supported by flexible and scalable mobility hub features, are essential to fulfilling the Oxfordshire Metro concept's ambition of putting the user at the centre of public transport decision-making. Active travel must be planned and delivered as a core element of station development, ensuring all hubs are aligned with Local Cycling and Walking Infrastructure Plans (LCWIPs), the Oxfordshire Strategic Active Travel Network (SATN) and the Oxfordshire Greenways.

Where hubs include bus connectivity, signage and wayfinding must be clear and stops located as close as possible to station entrances. Stations should provide space for bus promotion and real-time passenger information to give people confidence in onward journeys.

Examples already under consideration include Radley station, identified in the Abingdon LCWIP for improved walking and cycling access; Culham station, included in the Didcot LCWIP with new active travel connections linked to housing and employment growth; Cholsey station, highlighted in the emerging Wallingford LCWIP; and Henley-on-Thames station, where future LCWIPs will set priorities. Priority connections such as Abingdon–Radley–Culham, Thame–Haddenham and Charlbury–town centre are also identified within the SATN, with LCWIPs providing the delivery detail.

Access to stations must be designed to be safe, direct and inclusive, with continuous footways, safe crossings, seating, rest points, weather protection and high-quality signing. Evidence from the National Centre for Accessible Transport shows that barriers often begin before people reach the station, highlighting the importance of improving the wider environment as well as facilities on site. By improving approaches to stations as part of the Oxfordshire Metro concept, we can make rail a natural part of everyday movement across the County. A key part of driving successful first- and last- mile connectivity will be the creation of an integrated Oxfordshire Metro concept network map combining rail, bus, cycling and wheeling/walking routes (P2.13). This activity will fulfil recommendation one from the consultation of our plan with the Oxfordshire Citizens' Assembly on Travel and Transport which is available on our website.

Supporting rural connectivity

A genuinely inclusive railway must meet the needs of Oxfordshire's rural communities as well as its towns and cities. Many residents in rural areas depend on rail for access to jobs, education, healthcare and leisure, yet face limited options and a heavy reliance on car travel. Improving rail access for these communities is therefore essential to support housing growth, widen opportunity and deliver affordable, sustainable travel choices.

Smaller suburban and rural stations will be a key focus within the mobility hub framework, ensuring they remain relevant, accessible and well connected. This means investing in step-free access, secure cycle parking, including facilities for adapted bikes, weather-protected shelters, lift-sharing points and clear signing. It also means improving safe and direct walking, cycling and wheeling routes to and from stations, embedding them into LCWIPs and the Strategic Active Travel Network (SATN).

Stations such as Hanborough, Radley, Charlbury, Culham, Heyford and Cholsey already play an important role in connecting rural residents to opportunities. The planned growth at Heyford emerging from the recently announced new town at Heyford Park exemplifies how providing rural connectivity is critical to support rural growth. Through OSAP, these and other rural stations will be upgraded to function as local interchanges, offering consistent standards of accessibility, safety and integration.

Rural connectivity goes beyond stations alone. By integrating rail with fast and frequent rural bus services, we will ensure that communities without a station still benefit from the Oxfordshire Metro concept. Better interchange between bus and rail, coordinated timetables and real-time information will help rural residents make seamless journeys and reduce reliance on private cars. In some corridors, this approach may provide the foundation for a strong business case for future mass rapid transit provision, which may include rail, helping to shape long-term growth.

Community ownership and station adoption will also play a vital role in making rural stations visible assets. Local volunteers, supported by the Oxfordshire Community Rail Partnership (OxCRP), can bring distinctive planting, art, storytelling and events to smaller stations, reinforcing their role not only as gateways to opportunity but also as civic and cultural anchors. We will continue to work closely with OxCRP and other community stakeholders to support local volunteering at stations and supporting making stations the heart of local communities (P3.12).

By strengthening rural connectivity, the Plan will ensure that growth is balanced across the County and that opportunities, whether jobs, education or leisure, are accessible to all residents. This approach will cut congestion on rural roads, reduce car dependency and embed sustainable travel choices into the daily lives of Oxfordshire's rural communities.

Case study #8 - Enhancing cycle parking at rural rail hubs

A pilot at Haltwhistle station in Northumberland shows how modern cycle parking can improve user experience and support modal shift. An off-grid, carbon-neutral e-bike charging locker was installed, offering secure, fire-safe storage for e-bikes, e-cargo bikes and mobility scooters, with built-in fire detection and suppression.

Part of a wider rollout with a major rail operator, similar units are being deployed at other regional stations. These facilities go beyond basic Sheffield stands, providing shelter, space for adapted bikes, e-bike charging, secure lockers and potential bike hire options, making active travel safer, more convenient and inclusive.

This example outside of Oxfordshire highlights how thoughtful, scalable solutions can enable cycle-to-rail interchange and support the growth of multi-modal mobility hubs, especially in rural areas.

Sustainable freight and last-mile logistics

Stations also have potential to contribute to Oxfordshire's freight decarbonisation agenda. By acting as local hubs for cleaner logistics, they can support cargo-bike and electric van provision, secure drop-off and pick-up lockers and shared passenger-freight infrastructure where appropriate. This approach reduces delivery emissions, relieves pressure on local roads and gives underutilised station space new purposes, bringing wider economic and environmental benefits. We will work with key industry stakeholders to identify potential opportunities for sustainable local rail freight and last-mile logistics particularly at our major hubs (P3.13).

Community rail and local identity

Rail is more than infrastructure, it is part of Oxfordshire's social, cultural and civic fabric. Community rail enhances this role by connecting people to place and giving local voices influence over how stations are designed, used and cared for. From station gardens to storytelling trails, seasonal events to wellbeing initiatives, community-led rail activity celebrates identity, builds civic pride and makes the railway feel welcoming, inclusive and meaningful.

Our stations are also gateways for thousands of visitors each year. Community rail can strengthen this role by linking stations to cultural itineraries, walking and cycling routes and the visitor economy. This helps ensure that stations reflect and connect to the places they serve, not operate in isolation.

Support for Oxfordshire Community Rail Partnership

The Oxfordshire Community Rail Partnership (OxCRP) plays a central role in reimagining stations as inclusive, community-focused spaces. Community rail has a high social return, generating approximately £17 in value for every £1 invested. Since its launch in 2023, OxCRP has supported twenty-two stations across the County, delivering impactful projects ranging from station adoption and local artworks to travel confidence programmes and wellbeing trails. With a strong focus on underrepresented groups, including disabled people, young people and those from diverse backgrounds, OxCRP works to expand opportunity, reduce isolation and encourage sustainable travel. Our ambition is for OxCRP to have a presence at every station in Oxfordshire and we are committed to helping secure long-term funding and support to enable this (P3.12).

"Community rail has a high social return, generating approximately £17 in value for every £1 invested"

Case study #9 - Getaway – Empowering young people through rail and nature

The Getaway programme, supported by OxCRP, helps young people from underrepresented and urban communities access natural spaces by rail, building travel confidence, independence and wellbeing. Informed by local research into transport poverty and deprivation, the initiative works with grassroots organisations to design inclusive, culturally sensitive trips that expand horizons and support social connection.

Following the success of eight trips involving 115 young people in 2023-2024, the 2025-2026 Getaway – Banbury and Abingdon project will deliver six further rail-based day trips for those aged 25 and under. Activities like canoeing, hiking and outdoor adventures will be paired with tailored travel training to build confidence in journey planning, ticketing and navigating stations.

By combining access to nature with sustainable travel, Getaway is creating lasting, life-enhancing opportunities for young people across the County.

Rail as a storytelling platform

Stations and rail corridors offer a unique platform for celebrating local history, culture and identity. From art installations to historical interpretation, wayfinding and naming conventions, rail infrastructure can serve as a storytelling canvas. This approach helps us foster a sense of belonging, encourages exploration and creates station environments that reflect and respect the communities they serve. Storytelling will be embedded in signing, architectural details, digital platforms and even train services themselves, building continuity between place, people and transport.

Community rail also has the potential to transform stations into civic spaces. By linking with local cultural calendars, stations can host events such as live music, seasonal markets and educational projects, boosting local economies and creating safe, vibrant environments. They can also act as gateways for low-carbon tourism, working with organisations such as the Ramblers, Visit Thames and Cotswold Tourism to promote rail-to-trail journeys, weekend escapes and local visitor information.

We will work with local communities to capture opportunities to embed local identity and cultural heritage at stations as well as their use for wider community activities and charitable purposes. We will create an active register of ideas and schemes to embed these as part of the development of our stations (P3.14). This activity will fulfil recommendation five from the consultation of our plan with the Oxfordshire Citizens' Assembly on Travel and Transport which is available on our website.

Case study #10 - Celebrating community through creative station spaces

In response to clear feedback from local residents and the Connecting Communities consultation (ran by Oxfordshire Community Rail Partnership (OxCRP)), the Oxford Station Improvements project now supported by OxCRP was launched to enhance wayfinding, accessibility and community connection at the existing station.

This represents a model for how wayfinding, accessibility and community connection can be meaningfully embedded in station design. Running from April to December 2025, the project includes three integrated elements:

- leisure trail and map that links the station to green spaces and cultural landmarks;
- new Information Point supporting active travel and local navigation; and
- Railway 200 mural co-created with youth groups to celebrate Oxford's rail heritage and future.

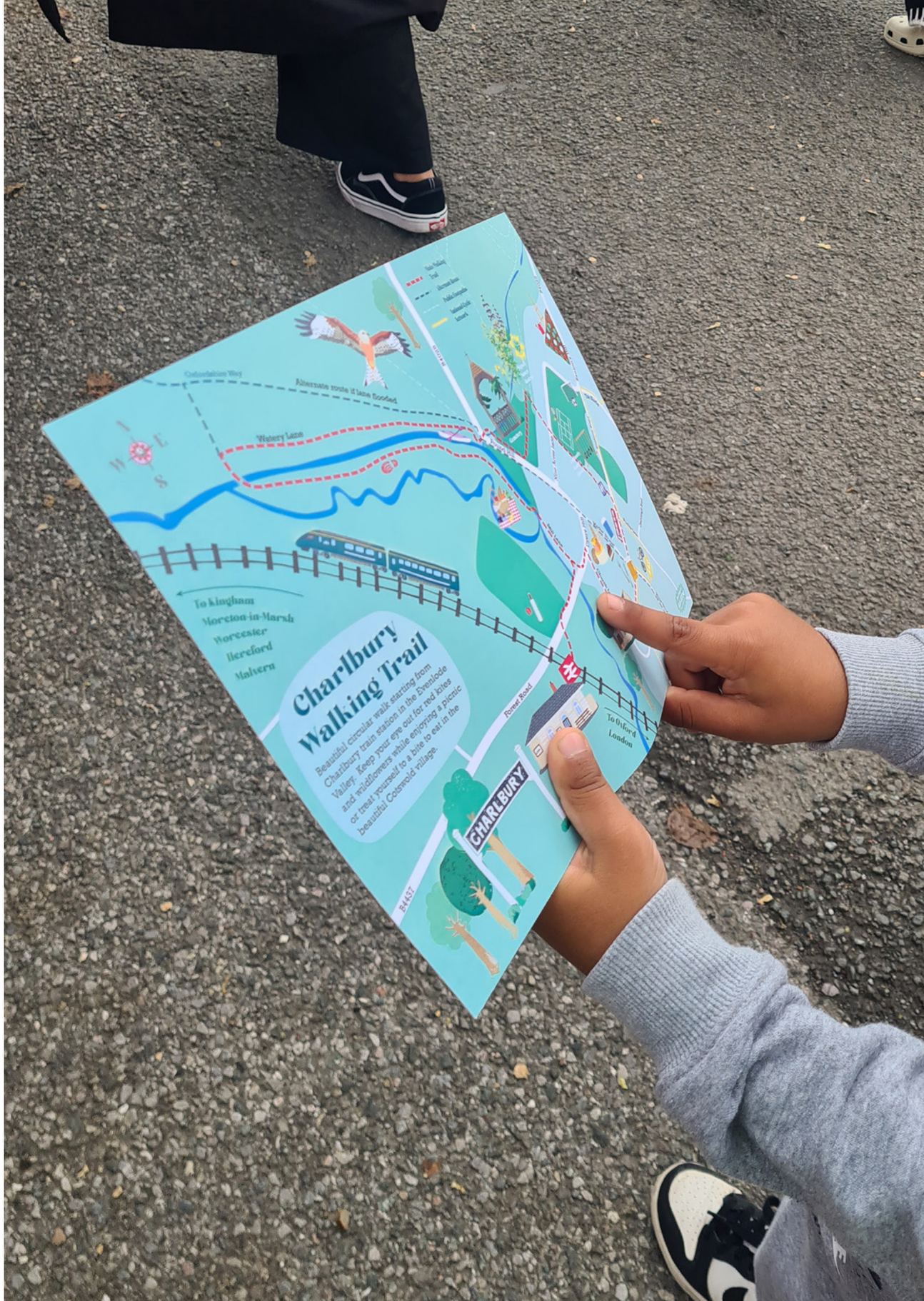
With support from ourselves and our partners, the project will distribute 5,000 maps, engage over 30 young people and involve three community organisations. The initiative delivers lasting benefits, improved accessibility, stronger local identity and a celebration of Oxford's rail heritage, all while promoting active, inclusive and sustainable travel for the next generation.

Under a further initiative Moving Murals, led by OxCRP, transformed Oxford Parkway station into a vibrant space for community storytelling through youth-led art. Across five creative workshops in Banbury and Oxford, sixty-four young people explored themes of identity, pride and place.

The resulting artwork, now permanently displayed at the station, includes portraits of inspirational figures, illustrated travel memories and images of local landmarks.

This served as a visual narrative, turning the station into a canvas for shared community voices and lived experience.

Delivered in partnership with Word Fountain Family Arena and Banbury Madni Masjid and supported by Chiltern Railways and the Community Rail Network, the project demonstrates the power of stations as storytelling platforms, connecting people through creativity, culture and the everyday journeys that shape their lives.



7. Delivering the Vision

This chapter of our plan outlines how we believe the aspects we have explored in the previous three chapters will be delivered. Specifically it focuses on the following key areas:

- The opportunities to leverage future investment and funding
- The opportunities presented by planned future devolution and the creation of a Strategic Authority.
- The opportunities presented by rail reform, including the ability to influence rail-based decisions within our region following local government devolution.
- The need to work collaboratively with the newly formed Great British Railways which will incorporate the existing infrastructure manager and train operating companies into a single group.
- Having a clear and robust phased delivery plan which allows us to move from vision to action and ensure progress is both practical and achievable.

Identifying future funding and investment opportunities

The public purse is under unprecedented pressure but that does not mean we should not be bold about what we need for our County. A number of models are being used to finance infrastructure across the country and it is our ambition to learn and replicate the best of these to ensure we can fund the plan and guarantee it's delivery.

To kick-start investment in the Oxfordshire rail network we have earmarked £10 million from Enterprise Zone funding to fund initial Rail Plan priorities. Many of the schemes we have outlined will require conventional funding from central Government but a large proportion could be financed privately working with partners and investors that benefit from strong connectivity. The Ellison Institute of Technology and the Oxford Science Park have pledged funding towards the delivery of the Cowley Branch Line alongside the County Council and Oxford City Council. Alongside other interested parties, ARC Oxford have contributed to business case development and discussions are ongoing with a range of land owners on further investment.

In parallel, the County Council will use existing levers at our disposal and explore new models to develop a funding and investment pipeline to support the delivery of the Plan.

Governmental devolution

Our Rail Plan is built around three main enablers led by Government support and collaboration:

1. **Effective devolution** that grants Oxfordshire and any new Mayoral Strategic Authority the power to have a meaningful say in shaping its railway, locally controlled devolved funding and the freedom to seek alternative sources of funding and investment
2. **Recognition of the value that Oxfordshire and the surrounding regions deliver** and prioritisation of the resource to enhance rail connectivity which is needed to remove the barriers to further growth
3. **Commitment from Central Government to a programme of works to strengthen and develop Oxfordshire's rail network** to maximise the benefit that it can provide both within and beyond the County.

We will be seeking necessary local powers to support the delivery of our plan as part of the creation of any new Mayoral Strategic Authority. We anticipate such a deal will allow far greater flexibility in how we manage the funding we receive from different government departments as well as providing the ability to raise money locally, not just using existing mechanisms. This would most likely come from business rates and developer contributions but also by involvement of the private sector and realising the value in public assets (such as land). This deal will also support future plans for growth, including those identified in any new Spatial Development Strategy for the area. As part of our ongoing work in local government we will continue to work closely with local and regional businesses, representative organisations such as the Thames Valley Chamber of Commerce and major stakeholders such as Heathrow Airport.

Rail reform

The Government's plan to reintegrate the network and train services under a single unifying umbrella organisation (referred to as Great British Railways) creates significant positive opportunities for change. Rail reform and the creation of a 'single controlling mind' for the network and services is a foundational assumption of our Plan.

"This will bring together National and Local Governments, GBR, wider rail industry stakeholders and suppliers"

Oxfordshire Enhanced Rail Partnership

To deliver OxRail 2040, we believe a model of collaboration that goes beyond traditional project delivery is needed. Just as the Bus Service Improvement Plan (BSIP) has been underpinned by the Enhanced Partnership between Oxfordshire County Council and our bus operators, we propose a similar framework for rail through the formation of an Oxfordshire Enhanced Rail Partnership (P1.18). This will bring together National and Local Governments, GBR, wider rail industry stakeholders and suppliers, local authorities, businesses, universities and communities under one shared programme of work.

This collective model will ensure that decisions are transparent, benefits are shared and delivery is aligned with wider devolution opportunities, including any new Strategic Authority. It will also give Oxfordshire a strong voice in shaping the role of Great British Railways, embedding local priorities within national strategies.

"This collective model will ensure that decisions are transparent"

Phased delivery and our plan on a page

OxRail 2040 sets out a phased pathway for delivery. This ensures that investment, capacity and benefits are built up progressively, creating steady momentum towards the long-term vision. Alongside the four headline priorities, a wide range of other interventions are included in the Plan – from infrastructure upgrades and accessibility measures to freight initiatives, safety improvements, air quality programmes and community-led projects. Together, these ensure the network develops in a balanced way that meets the needs of all users.

The plan on a page as part of this document provides a high-level overview of how our headline priorities and wider interventions fit together across three phases. The numbered deliverables outlined throughout this document are recorded on the plan.

Phase 1 (2025–2030) - The foundations for growth

Works in this phase will see an increase rail capacity at and through Oxford Station, including Platform 5, a new western concourse (P1.07) and the Cowley Branch Line reopening (P1.01), which will unlock subsequent proposals. East West Rail will provide direct connectivity between Oxford and Bletchley/Milton Keynes (P1.03). The Oxfordshire Metro concept (P3.04) will begin to take shape and we will complete feasibility studies for new stations including Oxford Cowley, Oxford Littlemore (P1.02) (linked to the reopening of Cowley Branch Line), Begbroke (P2.01), Wantage & Grove (P2.02) and Ardley (P3.02). New station proposals will be developed in conjunction with key stakeholders including the infrastructure manager, district councils, developers and local communities. As part of our planning stage we will develop Air Quality Improvement Plans for all stations (P1.11) and key areas where air quality is a known problem. All stations will also have a section within the Oxfordshire Stations Action Plan (P1.13).

Air quality monitoring, accessibility improvements and rolling stock replacement programmes will commence progress towards the electrified railway and we will work with train operators and the infrastructure manager to advance remote condition monitoring approaches for all our key railway assets (P1.08). We will also begin exploring the case for a Carterton–Witney–Oxford Mass Rapid Transit system (P3.05), working to identify the most suitable solution to enhance public transport access to the west of our County.

Establishing the Oxfordshire Enhanced Rail Partnership (P1.18) will be key during this initial phase of our programme to ensure all aspects have the input and integration across the rail industry and beyond.

“Together, these ensure the network develops in a balanced way that meets the needs of all users”

Phase 2 (2031–2037) – Enhancing capacity and connectivity

This phase of our plan will focus on major enhancements to capacity and connectivity. Four-tracking between Radley and Oxford (P2.06) and upgrades to the North Cotswold line (P2.07) will be undertaken and we will begin to see the Oxfordshire Metro concept (P3.04) become embedded and developed further including the provision of a network map for all transport modes (P2.13). Oxford station will be transformed into a national gateway (P2.08), East West Rail will expand its reach (P2.03) and renewable energy pilots (P2.12) will support the growth of the electric freight spine (P3.03).

New battery electric rolling stock will be introduced providing high-quality, larger, accessible spaces with more seats across the whole of Oxfordshire (P2.11). Work will see progress on the Air Quality Improvement Plans established under Phase 1 with this monitored and reported on annually (P1.11).

Phase 3 (2038 onwards) – Realising our railway’s full potential

Realising the full vision of OxRail 2040 and our full ITSS (P3.01) will see electrification extend beyond Oxfordshire (P3.03, P3.07 P3.10 and P3.11), supported by resilient, climate-ready infrastructure. The Oxfordshire Metro concept (P3.04) will reach full maturity, with stations evolving into hubs of connectivity, culture and placemaking ensuring they are resilient and welcoming places which are at the heart of the communities they serve. Community partnerships will play a greater role, embedding heritage and identity into station design and expanding the reach of the Oxfordshire Community Rail Partnership (P3.12 and P3.14). Major projects inside and outside our region will further improve connectivity beyond our borders including Didcot Parkway additional capacity (P3.08), Western Access to Heathrow (P3.06) and remodelling of junctions at Coventry (P3.09).

Plan on a Page

The full plan is summarised on our Plan on a Page. This outlines the three core themes of our plan and the core actions and deliverables which will be needed to achieve these. Activities have been identified and numbered throughout the plan and these are all presented on the plan on a page. We will use this plan to form the basis of progress update reporting through publication of assessments which show how we are performing against the contents of this document.

The schemes outlined within our plan are summarised below:

Phase 1 (2025-2030)

P1.01: Restoring passenger services on the Cowley branch line

P1.02: New stations on the Cowley branch line (Oxford Littlemore and Oxford Cowley)

P1.03: East West Rail to Bletchley and Milton Keynes

P1.04: Realising a regular Bristol to Oxford rail service

P1.05: Establish the Oxfordshire Railway Bio-Diversity Net-Gain requirements document

P1.06: Working with the rail freight industry to explore new freight facilities in Oxfordshire

P1.07: Oxford Station Platform 5 and western concourse

P1.08: Embedding remote condition monitoring for railway hot spot locations

P1.09: Establishing the Oxfordshire Railway Climate Change Resilience Plan

P1.10: Expand our local farmer water management engagement Countywide

P1.11: Establish air quality and noise monitoring network

P1.12: Establish the Oxfordshire Railway Solar Energy Opportunities Register

P1.13: Establish the Oxfordshire Stations Action Plan

P1.14: Banbury Station Upgrades

P1.15: Establish Oxfordshire Rail Station Accessibility Requirements Document

P1.16: Establish Travel Confidence and Inclusive Travel Education Programme

P1.17: Establish Safer Stations Programme

P1.18: Establish Oxfordshire Enhanced Rail Partnership

Phase 2 (2031-2037)

P2.01: Begbroke new station

P2.02: Wantage and Grove new station

P2.03: East West Rail to Bedford and Cambridge

P2.04: Pursuing a net-zero emissions value chain

P2.05: Establishing Oxfordshire Railway Sustainable Infrastructure Requirements Document

P2.06: Four-tracking between Radley and Oxford

P2.07: North Cotswold line improvements

P2.08: Oxford Station Masterplan

P2.09: Chiltern Main Line non-continuous electrification

P2.10: Phase 3 of Reading station redevelopment

P2.11: New battery electric rolling stock

P2.12: Renewable locally sourced energy for traction

P2.13: Establish Network map combining rail, bus, cycling and wheeling/walking routes

Phase 3 (2038 onwards)

P3.01: Realising the OxRail 2040 ITSS

P3.02: Ardley new station

P3.03: Oxfordshire electric freight spine

P3.04: Oxfordshire Metro concept

P3.05: West Oxfordshire Mass Rapid Transit

P3.06: Western Rail Access to Heathrow

P3.07: Electrification to Banbury and beyond

P3.08: Additional capacity at Didcot Parkway

P3.09: Remodelling junctions at Coventry

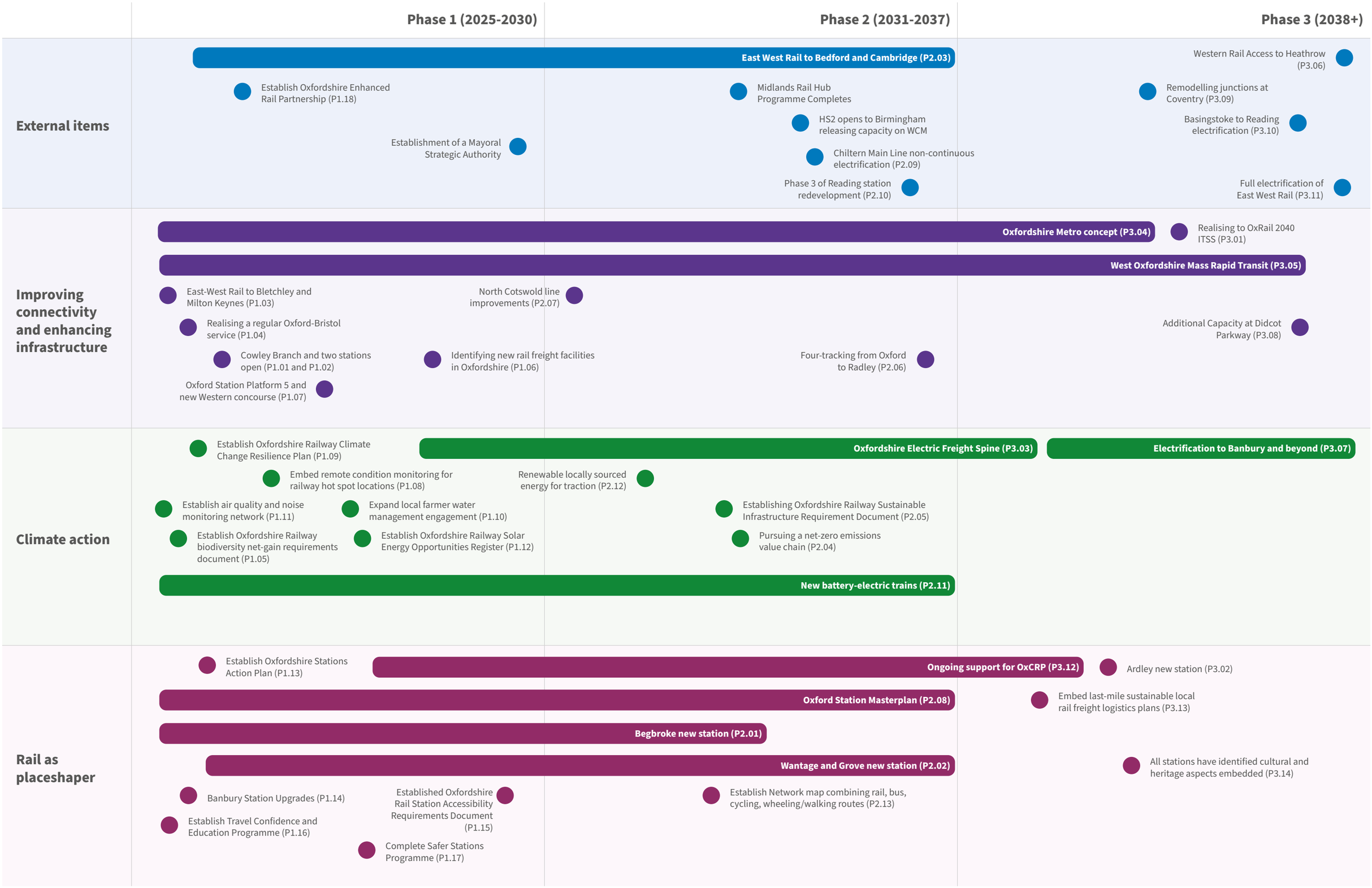
P3.10: Basingstoke to Reading electrification

P3.11: Full electrification of East West Rail

P3.12: Ongoing support for OxCRP

P3.13: Identify potential opportunities for sustainable local rail freight and last mile logistics

P3.14: Local identify and cultural heritage at stations register


Phase 1 (2025-2030)
Phase 2 (2031-2037)
Phase 3 (2038+)
External items
East West Rail to Bedford and Cambridge (P2.03)
Western Rail Access to Heathrow (P3.06)
Establish Oxfordshire Enhanced Rail Partnership (P1.18)
Midlands Rail Hub Programme Completes
Remodelling junctions at Coventry (P3.09)
HS2 opens to Birmingham releasing capacity on WCM
Basingstoke to Reading electrification (P3.10)
Establishment of a Mayoral Strategic Authority
Chiltern Main Line non-continuous electrification (P2.09)
Phase 3 of Reading station redevelopment (P2.10)
Full electrification of East West Rail (P3.11)
Improving connectivity and enhancing infrastructure
Oxfordshire Metro concept (P3.04)
Realising to OxRail 2040 ITSS (P3.01)
West Oxfordshire Mass Rapid Transit (P3.05)
East-West Rail to Bletchley and Milton Keynes (P1.03)
North Cotswold line improvements (P2.07)
Realising a regular Oxford-Bristol service (P1.04)
Additional Capacity at Didcot Parkway (P3.08)
Cowley Branch and two stations open (P1.01 and P1.02)
Identifying new rail freight facilities in Oxfordshire (P1.06)
Four-tracking from Oxford to Radley (P2.06)
Oxford Station Platform 5 and new Western concourse (P1.07)
Climate action
Establish Oxfordshire Railway Climate Change Resilience Plan (P1.09)
Oxfordshire Electric Freight Spine (P3.03)
Electrification to Banbury and beyond (P3.07)
Embed remote condition monitoring for railway hot spot locations (P1.08)
Renewable locally sourced energy for traction (P2.12)
Establish air quality and noise monitoring network (P1.11)
Expand local farmer water management engagement (P1.10)
Establishing Oxfordshire Railway Sustainable Infrastructure Requirement Document (P2.05)
Establish Oxfordshire Railway biodiversity net-gain requirements document (P1.05)
Establish Oxfordshire Railway Solar Energy Opportunities Register (P1.12)
Pursuing a net-zero emissions value chain (P2.04)
New battery-electric trains (P2.11)
Rail as placeshaper
Establish Oxfordshire Stations Action Plan (P1.13)
Ongoing support for OxCRP (P3.12)
Ardley new station (P3.02)
Oxford Station Masterplan (P2.08)
Embed last-mile sustainable local rail freight logistics plans (P3.13)
Begbroke new station (P2.01)
Wantage and Grove new station (P2.02)
All stations have identified cultural and heritage aspects embedded (P3.14)
Banbury Station Upgrades (P1.14)
Established Oxfordshire Rail Station Accessibility Requirements Document (P1.15)
Establish Network map combining rail, bus, cycling, wheeling/walking routes (P2.13)
Establish Travel Confidence and Education Programme (P1.16)
Complete Safer Stations Programme (P1.17)

8. Monitoring and evaluation

Monitoring OxRail 2040 is essential to track progress, demonstrate delivery against our commitments and ensure the Plan remains responsive to changing needs. It will also provide a robust evidence base to guide future decision-making and assess the performance and benefits of schemes.

Following adoption, we intend to publish an annual update supported by a suite of Key Performance Indicators (KPIs). This will ensure transparency and accountability, giving confidence that we are delivering the railway our County deserves.

Our approach will be fully aligned with the LTCP monitoring framework, enabling us to report consistently across all modes and track the contribution of rail to Oxfordshire's wider transport and connectivity objectives. Monitoring will also take into account the impacts of population and employment growth and the need to deliver sustainable travel choices.

Measures of success

We will monitor performance against a set of rail-specific KPIs, linked to the LTCP framework. These will provide a detailed picture of progress while supporting delivery of the LTCP's headline targets. Key measures will include:

- **Rail passenger numbers** – growth in station entries/exits and park & ride rail usage.
- **Service reliability** – punctuality, cancellations and resilience of the network.
- **Customer satisfaction** – drawing on survey data, including Transport Focus, to measure passenger perceptions of service quality, frequency and value.
- **Access to stations** – progress in active travel links, bus integration, accessibility improvements and first/last mile connectivity.
- **Air quality and emissions** – contributions of rail investment to reducing transport-related emissions and improving air quality.
- **Integration with LTCP objectives** – the role of rail in supporting climate action, economic growth, healthy place shaping and mode shift.

We have not set specific targets for every KPI. Instead we will work towards the delivery of the Plan's headline ambitions and the mode-specific targets set out in supporting strategies. The KPIs will provide the detail needed to measure progress, highlight successes and identify areas requiring further work. As part of the review process, we will also assess the effectiveness of the KPIs themselves and consider additional ways of monitoring and evaluating outcomes.

Approach and review

These measures will be developed with Great British Railways and other partners to ensure consistency and comparability. Where possible, we will build on existing datasets and surveys to reduce duplication and align with national methodologies.

The monitoring framework will evolve in line with the Phasing and Delivery of OxRail 2040. In the early years, the focus will be on feasibility work, funding pathways and the delivery of early interventions. As Phase 2 and Phase 3 progress, monitoring will expand to cover outcomes such as increased rail use, improved accessibility, electrification, reduced emissions and wider economic and social benefits.

An OxRail 2040 monitoring report will be published annually as part of the LTCP cycle. It will:

- Report progress against interventions and milestones.
- Track performance against KPIs.
- Show contributions to LTCP-wide targets.
- Identify areas needing further focus or adjustment.
- Share lessons from delivered schemes.

By embedding OxRail 2040 monitoring within the LTCP framework and linking it to the phasing of delivery, we will ensure that monitoring reflects both the immediate progress being made and the long-term outcomes the Plan is designed to achieve.

Annex 1: Glossary

#Numbers

25kV – The line voltage used by overhead line electrification on the mainline railways.

A

Accessibility – Design of transport systems ensuring inclusive use for people of all abilities.

Active Travel – by Active Travel we mean mostly cycling and walking but also other low carbon and low impact forms of travel including e-scooters and wheeling (using wheelchairs and mobility scooters).

Aggregate Depots – Freight facilities handling stone, sand and other materials used for construction.

Air Quality Monitoring Network – Proposed system for monitoring air quality in Oxfordshire, particularly CO_2e, NOx and PM emissions.

Alternating Current (AC) – Type of electricity used in powering electric trains on the mainline railway network.

At-grade Junction – Rail junction where tracks cross at the same level, creating capacity constraints.

B

Battery-Electric Trains – Trains using batteries – either wholly or partially - for propulsion, reducing reliance on diesel as a source of traction power.

Bi-mode Rolling Stock – Train able to operate on both electric and diesel power.

Biodiversity Net Gain (BNG) - is an approach to development that ensures that habitats for wildlife are left in a measurably better state than they were before the development.

BREEAM – Nationally approved building sustainability rating system.

British Transport Police (BTP) – Police force for the British railway network.

Bus Service Improvement Plan (BSIP) – Oxfordshire's programme to improve bus services in line with the National Bus Strategy.

C

Capacity – The maximum number of train movements possible on a line and the carrying capability of passenger rolling stock.

Central Oxfordshire Movement and Place Framework (COMPF) – A strategic framework balancing movement (travel demand) and placemaking in central Oxfordshire, ensuring that transport and urban planning work together. Produced in partnership by Oxfordshire County and Oxford City Councils.

Chiltern Railways – Current passenger rail operator for services from London and the South East to the West Midlands

Circular Economy – A resource-use model prioritising reuse and minimal waste.

Class 88/93/99 Locomotives – Bi-mode and tri-mode locomotives designed mainly for freight use.

CO_2e – Carbon dioxide equivalent, a standard unit of greenhouse gases.

Community Rail Partnership (CRP) – Local partnerships promoting rail and community projects. The Oxfordshire CRP has been in operation since 2023.

Crime Prevention Through Environmental Design (CPTED) – Multi-disciplinary design approach that uses urban and architectural design to prevent and reduce crime.

CrossCountry (XC Trains) – Current passenger rail operator for long-distance and intercity services across Great Britain outside London

CrossTech© – Oxfordshire SME providing Artificial Intelligence-enabled monitoring of rail infrastructure.

D

Decarbonisation –the process of reducing carbon dioxide (CO_2) emissions across energy systems, industries and transport to tackle climate change.

Department for Transport (DfT) – UK Government department with overall responsibility for transport, specifically across England but with some remit in respect of the devolved nations.

Devolution Deal – A formal agreement transferring substantial transport powers and funding from Central Government to new regional bodies.

E

East West Rail (EWR) –a direct rail link connecting Oxford and Cambridge via Bletchley and Bedford.

Electrification – Overhead wires or third rail powering electrically operated trains.

England's Economic Heartland (EEH) –Sub-national Transport Body covering Oxfordshire and neighbouring regions, shaping long-term investment priorities for rail, road and active travel.

Environment Agency (EA) – An executive non-departmental public body which seeks to enhance environment for people and wildlife and support sustainability.

F

First and Last Mile connectivity – Travel between stations and passengers' origins/destinations.

Flood Alleviation – Measures to reduce flooding risk.

Fossil fuel – Carbon based fuel including oil and the burning of which contributes to global warming.

Foundational Economy - the part of the economy that provides goods and services for everyday life such as health and social care, education, utilities, housing, and local retail.

Freight Gauge Requirements – National standards to accommodate larger freight trains.

Freight Terminals – Facilities where freight is transferred to/from rail.

Freight Spine (Oxfordshire Electric Freight Spine) – Continuous electrified freight corridor between Didcot Parkway on the GWML and Bletchley/ Milton Keynes on the West Coast Main Line.

G

Great British Railways (GBR) – Future rail authority integrating rail infrastructure and with passenger rail services across Britain.

Great Western Main Line (GWML) – Main line railway connecting London Paddington and Bristol Temple Meads with important spurs onwards to Plymouth and Penzance, as well as Cardiff and Swansea.

Great Western Railway (GWR) –the current passenger rail operator for services across a wide area of southern/western England and South Wales.

Green Walls/Roofs – Station features that help to improve sustainability and increase biodiversity.

Greenhouse gases – gases in the Earth's atmosphere that trap heat. Carbon dioxide CO2 released into the atmosphere by the burning of fossil fuels - such as diesel - is the most significant greenhouse gas in relation to OxRail 2040.

Gross Value Added (GVA) – the value of the goods and services produced minus the value of the intermediate inputs that were used to produce those goods and services. It can be calculated for firms, industries, local and national economies.

H

Heavy Goods Vehicles (HGVs) – The largest lorries on our road network transporting goods.

Hub Station – Station acting as a major multi-modal interchange.

I

Indicative Train Service Specification (ITSS) – A high-level timetable which shows a typical number of trains across a section of the network. This is a very early stage vision, not a detailed timetable.

Infill Electrification – Localised electrification to link main electrified corridors.

Infrastructure Manager – Body responsible for railway assets (currently Network Rail).

Innovation Economy - an economic system driven by the production, distribution, and consumption of ideas, knowledge, and technological advancements, significantly impacting growth and entrepreneurship.

InterCity Brand (GBR InterCity) – Branding for long-distance rail services under GBR.

InterCity Express Trains (IETs) – High-speed Hitachi-built trains bi-mode units used on the GWML and North Cotswold Line to Worcester and Hereford.

Intermodal Freight – Movement of freight using multiple transport modes.

K

Key Performance Indicators (KPIs) – Metrics used to measure and track performance of projects, operations, or services against defined objectives.

Knowledge Economy - an economic system that relies heavily on intellectual capabilities rather than physical inputs or natural resources.

L

Level Boarding – Step-free boarding from platform to train.

Light Goods Vehicles (LGVs) – smaller lorries on our roads transporting goods on a more local level.

Local Cycling and Walking Infrastructure Plans (LCWIPs) – Oxfordshire's key strategies for identifying priority walking and cycling routes, linked with Greenways and wider active travel planning.

Local Government Reorganisation (LGR) - re-organisation of local government across England by replacing the current two-tier structure of county and district councils, consolidating the services they provide into new, all-purpose single unitary authorities.

Local Transport and Connectivity Plan (LTCP) – Oxfordshire's statutory local transport plan adopted in 2022.

Low Carbon Hub – Community energy organisation supporting renewable generation.

M

Marston Vale line – Route between Bletchley and Bedford which forms part of the East West Rail project.

Mass Rapid Transit – High capacity public transport scheme.

Mark5A trains – A type of modern coaching stock that will be operating on the Chiltern Main Line from 2026, replacing 47-year old Mark3 carriages, designed to provide improved passenger comfort, capacity and performance compared to older train fleets

Mayoral Combined Authority (MCA) – A mayoral combined authority is a legal body formed by joining multiple local councils across England to collaborate and make investment decisions and utilise devolved powers from central Government for transport, skills, and economic growth. It is led by a directly elected Mayor who acts as a single point of accountability for the region.

Minerals and Waste Local Plan – Oxfordshire's forthcoming statutory plan setting out the future aggregates and waste strategy for the County.

Ministry of Defence (MOD) – rail connected sites in our region which are used by our armed forces.

Mobility hub – a place where several transport modes and community facilities are located together for seamless interchange.

Movement and Place Strategies (MAPS) – Oxfordshire's Countywide framework balancing transport flows with placemaking. These are currently in preparation and will be subject to extensive local input.

Multi-Modal Integration – Seamless combination of different transport modes.

N

Nationally Significant Infrastructure Project (NSIP) – is a large-scale major development project in England or Wales in energy, transport, waste, waste water or water that is nationally important, meets a threshold described in the Planning Act 2008, needs a Development Consent Order (DCO) before it can be built and consent for which needs to be given by the government rather than the local planning authority.

Network Rail – Organisation that owns, maintains and develops Britain's rail infrastructure and manages twenty of its largest stations.

Non-continuous electrification - a system of powering trains that combines overhead lines on some sections of track with onboard batteries for power on others.

NOx – Nitrogen oxides, harmful diesel engine emissions.

O

Oxford Greenways – A project to deliver safe, consistent and well-connected walking and cycling routes linking Oxfordshire's towns, villages and development sites with Oxford's centre and key employment, cultural and economic destinations.

Oxfordshire Bus Enhanced Partnership (OBEP) – Oxfordshire scheme improving bus services through close collaboration and delivery of projects by bus operators and Oxfordshire County Council.

Oxfordshire Citizens Assembly – A broadly representative group of Oxfordshire residents who are chosen by democratic lottery to represent Oxfordshire citizens.

Oxfordshire Community Rail Partnership (OxCRP) – A partnership promoting local rail use across Oxfordshire, improving stations and linking rail with a wide-range of community-led projects.

Oxfordshire Connect – a programme of works led by Network Rail to transform the railway across Oxfordshire including upgrade works at Oxford station to provide capacity for more train services for passengers and freight.

Oxfordshire Metro – Proposed frequent regional transport network that will seamlessly integrate rail with bus and active travel modes and include a combined ticketing offer to help make travel across our County easier to understand and use.

Oxfordshire Rail Corridor Study (ORCS) – Study outlining Oxfordshire's rail needs and interventions produced by Network Rail, with substantial input from Oxfordshire County Council during 2021.

Oxfordshire Stations Action Plan (OSAP) – a new framework to be developed by Oxfordshire County Council for improving Oxfordshire's railway stations as transport hubs, with the focus being on accessibility, integration and sustainability.

Oxford United Football Club (OUFC) – Football club bringing forward a new stadium on the outskirts of Kidlington, adjacent to Oxford Parkway railway station, offering excellent access to Chiltern Railways and EWR services.

P

Particulate Matter (PM) – Fine particles that are harmful to health.

Passing loop – rail track that enables slower trains to leave the main rail line allowing faster trains to pass and to subsequently return to the main line of particular use for 775m long, 4,000+ tonne freight services

Photo-Voltaic (PV) Panels – Solar panels for renewable electricity generation.

Place-shaping - Place-shaping is the intentional act of changing a place to improve the quality of life for its residents, to foster community growth and support vibrant, sustainable communities. It involves a holistic, strategic approach that integrates various aspects of a place, including its architecture, urban design, community engagement and cultural assets, to create a shared vision for its future and deliver cohesive, resilient environments.

Plan on a Page – An overarching programme of all items contained within the OxRail 2040 Plan.

Puy du Fou Theme Park – Proposed substantial theme park development located near Bicester.

R

Rail Devolution – Transfer of rail powers from the DfT to the new strategic authorities.

Rail Reform – National policy introducing GBR as the replacement for Network Rail and passenger rail operators. In Oxfordshire's case GWR/Chiltern Railways and CrossCountry trains.

Regatta Line – Branch line running from the GWML at Twyford to Henley-on-Thames, via intermediate stations including Shiplake.

Remote Condition Monitoring – Use of sensors to monitor the state of infrastructure health remotely.

Run-Around Facilities – Tracks allowing locomotives to be used to reverse the direction of travel of freight trains.

S

Strategic Active Travel Network (SATN) – Oxfordshire's long-term plan for delivering a joined-up walking, wheeling and cycling network across the County.

Strategic Rail Freight Interchange (SRFI) – A proposed large freight hub in the Ardley area combining rail and road logistics to support national freight flows and the County's wider freight strategy.

T

Thames Valley Police (TVP) – Police force responsible for law enforcement within the wider Thames Valley area.

Trains per hour (tph) – the number of trains which call at a station within an hour.

Transport hub - A place with a range of different shared and public transport modes. They also include additional facilities and information features to both attract and benefit transport users. For example, a transport hub may combine shared bikes, shared cars, parcel delivery lockers and bus stops in one location. Oxfordshire's existing park and ride sites are already versions of the transport hub concept.

Tri-mode Rolling Stock – Train able to operate on three energy sources – electric, battery and diesel.

W

West Coast Main Line (WCML) – Rail corridor connecting London and Glasgow with branches to Birmingham, Manchester, Liverpool and Edinburgh.

Western Rail Link to Heathrow (WRLtH) – Proposed rail connection branching from the Great Western Mainline (near Reading) to Heathrow Airport Terminal 5.

Annex 2: Acknowledgements

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OxRAIL 2040: Plan for Rail - Executive Summary

- Anthony Kirkwood, *page 8, 19*
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