



rightroute

2030 vision





Executive summary



I am delighted to introduce this report, which sets out a vision for the Chiltern network that is ambitious for the customers and communities we serve today and want to serve in the future.

There is a huge amount to be proud of in Chiltern's history since it was formed in 1996, from ordering new trains, building new stations, opening new routes, and attracting more customers.

We continue to innovate today, becoming the first passenger train operator to use HVO – a type of vegetable oil – to fuel our trains, in our case the class 68 locomotives that haul our “Silver Set” coaches.

Our first social value report concluded that we provided close to £1.1 billion of economic and social impact in 2022.

But this report, whilst proud of our successes, is all about setting out an ambition for the future.

Our trains are among the oldest in the UK, are all diesel-powered (apart from the use of HVO on a minority of services) and as customer demand rises so does crowding on some services. The challenges of running today's railway are ever-present but we cannot afford to focus only on the months ahead.

That is why we asked customers, stakeholders, and colleagues to tell us what they want Chiltern to offer them by 2030. This report is the result of their feedback, which was informed, enthusiastic and almost unanimous in its desire to modernise this railway again for future generations. That feedback has helped to shape our long-term fleet plan, which is at the heart of this report.

Our right route vision will deliver an easier, greener and better rail services for the future of our communities.

We have initiated and developed the Chiltern fleet plan over the last two years, working in partnership with colleagues in Network Rail, the Department for Transport, and the Great British Railways Transition Team.

As part of that plan we are about to ask for proposals and prices from manufacturers for new trains to replace our 33-year old diesel trains, and then make the business case to Government to support that investment decision.

Delivering on customer, stakeholder and colleague priorities will require us to deliver a new generation of trains to our network. Doing so will unlock essential benefits including more capacity, improved air quality and enhanced customer facilities on board our trains. Our current diesel trains cannot deliver on this, and investment is essential to make these priorities a reality.

Buying and introducing new trains takes a considerable length of time, and we need to work hard now to make that step-change during this decade. Acting now means that the future of easier, greener, and better rail services can be delivered sooner.

Doing so will bring about the future that customers, communities, and businesses want. It will also power our economy now and into the future. New trains fuel our supply chain, create jobs, and support new network infrastructure. They will also help connect people to the tourist hotspots and leisure hubs our route is famous for, from the natural beauty of the Chiltern Hills to Shakespeare's England and historic Oxford. Most of all, it gets our network ready for the exciting, growing future of the towns, villages, and cities across our route so we can connect more customers to the places and people they want and need to go to.

Our vision is the right route for Chiltern, the right route for our communities and the right route for the future we all want.

Richard Allan
Managing Director

Our network now

Chiltern, has operated passenger services from London Marylebone since 1996. We are a member of the Arriva Rail family, which also includes CrossCountry, Arriva Rail London and Grand Central in the UK. Along our route, we serve communities from Aylesbury and Oxford to Stratford-upon-Avon and Stourbridge, calling at a total of 66 stations.

Our work

We are proud to be the trusted operator of commuter and regional services. In 2022, we carried 18.5 million passengers on our services, connecting customers to work, education, healthcare, leisure, family and friends. Before the pandemic, we served a peak of 28.4 million passenger journeys in 2019/20¹ and we are determined to expand our customer network again so we can meet the needs of our growing communities in the future.

This will be driven by our company vision of delivering an easier, greener and better service that works for customers, our environment and the communities that rely on our services.

Since Covid-19, we have been operating with the constraints of an ageing fleet and changing passenger demand to maintain comfortable and reliable journeys that serve the needs of local communities. As a result, customers respond to our service and see us as a cornerstone of the community, which is how we and Arriva measure success.

Chiltern's Social Value Report for 2022 found that our operations generated £1.1 billion of social value benefits. This includes the employment of our loyal staff, our contributions to the supply chain and passenger spend at our stations. We are eager to build on this, by investing in our operations, and growing the economies of towns and cities across our route.

According to the latest release of Transport Focus's National Rail Passenger Survey (NRPS), customers rated our services:

87%

Good or satisfactory for punctuality and reliability

78%

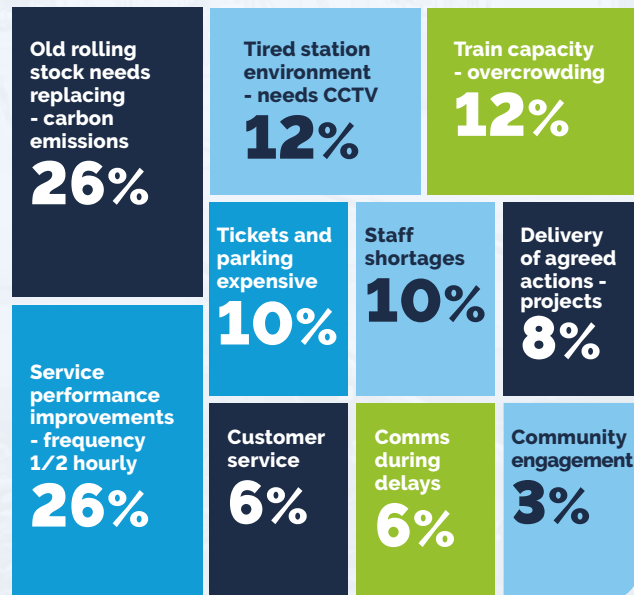
Good or satisfactory for level of crowding

85%

Good or satisfactory for overall satisfaction with the station²

Responding to customer and stakeholder feedback

Stakeholder feedback from our 2022 survey found that 26% of Stakeholders believed investment in new rolling stock was their key priority, 12% of Stakeholders believed train capacity was the key issue and 26% would like to see improved service frequencies which Chiltern Railways will need investment in a new fleet of trains to deliver.



Our fleet

Our drive to be better is supported by the ORR's latest statistical release of rail infrastructure and assets. Chiltern has the third oldest trains by operator³, with an average age of 28.9 years. We were fortunate to have a 20 year Franchise prior to the pandemic where we could invest in our infrastructure. Our current National Rail Contract running from 2021 to 2027 means we are working in partnership with the Department for Transport, including on how we invest in a new fleet of trains. We have worked hard since the pandemic to reduce operating costs and grow revenue, and based on current forecasts are aiming to become financially self-sufficient within the next five years. This demonstrates the current and future growth potential of Chiltern Railways and makes the case for investment to be prioritised on our routes.

We know we need to improve our fleet to enable us to continue delivering the best possible service to our communities. Our fleet is ageing and our communities are growing, meaning we must respond in a strategic and ambitious manner. Delivering a fleet of the future

is essential to respond to the changing needs of our community so we can continue to run a reliable and customer focused service that connects people to where they work, study and enjoy their downtime.

Moreover, our current fleet is not fit for a decarbonised future. We need to make a significant change if we are going to deliver our green ambitions that are shared by our communities. We want to be proud of a clean, modern and effective fleet of trains that people want to use.

We must act now to achieve a more successful, green and prosperous future, with new trains that are able to bring communities and businesses closer together.

30years

Chilterns fleet has an average age of nearly 30 years old, the third oldest in the country.

Our economic contribution

£44.9m

Expenditure on staff

£167.3m

Supply chain spend

£137.9m

Economic multiplier effect

£8.6m

Passenger spend at stations

£630.9m

Chiltern user benefits

£19.6m

Social and environmental benefits

£49m

Wider economic benefits

£1.1bn

Total impact in 2022

Our vision for the future

We are proud of our record of high quality and reliable services, which makes us even more ambitious for the future of our network.

We want to build a future for rail travel that is easier, greener and better for our communities. This purpose, driven by our relentless focus on the needs of our communities now and into the future, is fuelling our vision and plans for the network.

Our vision has been shaped by surveys and consultations with loyal customers, our dedicated colleagues and stakeholders across the route, and is underpinned by five core principles. These are:



The **rihtroute** for people

We must continue to put our customers at the heart of our services by understanding what really matters to them. Our vision will drive forward improvements in punctuality, on board experience, levels of crowding, and seating capacity.



The **rihtroute** for connections

We will embrace the diversified need for our services, taking customers from work to home, or connecting them to the tourism and leisure hubs they love. We want our services to be as easy as possible and bring people and businesses closer together through a stronger network.



The **rightroute** for our environment

We treasure our communities and are aware that our old diesel trains have an impact on the local environment. We want to act now to reduce carbon emissions from our services and enable customers to use their cars less across our route.



The **rightroute** for innovation

Innovation will power our economy through the creation of new jobs, increased spending and greater economic activity across our communities. Modernising our fleet and the infrastructure surrounding it will benefit communities across our route and have a wider benefit across the national supply chain.



The **rightroute** for the future of our communities

Our communities have changed since our inception in 1996. New businesses, leisure activities and homes need a network that can help people to travel with ease and comfort. With household numbers set to boom, increasing capacity and connections will be critical to ensure our communities reach their full potential.

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for people



More train capacity is needed to tailor schedules for major sporting and cultural events along our route

Customers are at the heart of everything we do at Chiltern. We are determined to improve our services to meet their changing needs and increase patronage by appealing to more leisure customers.

18.5m

Passenger journeys served in 2022

We need to build a network that is fit for everyone who wants to travel by train. This means trains that are easier to use, more reliable, and more comfortable for anyone thinking to travel across our network.

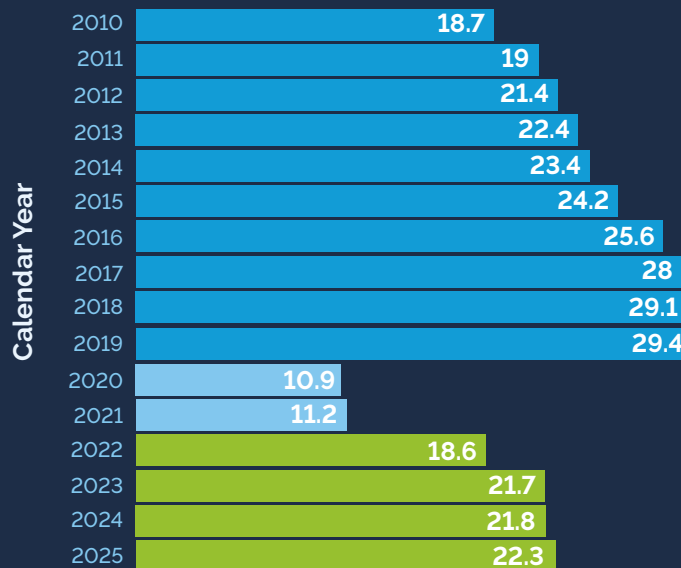
This reflects the priorities of our customers that use Chiltern every day. Customer surveys that shaped our vision told us that customers want punctuality, reduced crowding and guaranteed seat reservations.⁴ Our vision is grounded in these priorities and our new fleet will unlock an enhanced offer for people across our route.

These benefits will make our network easier for all people to travel by train to work, education, healthcare, seeing family and friends and many other activities. It will reduce uncertainty and frustrations and improve accessibility so people can feel confident on their journey.

The top four issues our customers want us to improve on:

- 1.** Punctuality
- 2.** Crowding issues
- 3.** Frequency
- 4.** Guaranteed seat reservations

Operating journeys (million)



■ Covid-19 pandemic
 ■ Post-Covid-19 recovery
 ■ Predicted customer numbers

Source: Earnings Data (Lennon)

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Customers and stakeholders have told us they want to experience the following from a new fleet of trains:

- ⊕ More seats at key times, helping everyone get where they need to go
- ⊕ A more reliable set of trains that are easier to maintain and operate
- ⊕ More train capacity to tailor schedules for major sporting and cultural events
- ⊕ On board information to provide customers with more details on their journey, train connections and seat availability
- ⊕ More comfortable seats for commuting with better facilities such as high speed Wi-Fi and plug sockets
- ⊕ Better journeys for mobility and visually impaired customers
- ⊕ Dedicated bike storage facilities to promote rail/cycle integration



New trains to reflect the growth in leisure journeys across our routes

Chiltern connects people from across the UK and internationally to London, Buckinghamshire, Oxfordshire, Warwickshire and the West Midlands.

Our network connects big cities, tourism centres, tranquil countryside, world leading education and business hubs. It is a vital artery that connects London and the West Midlands to the country with hundreds of thousands of journeys flowing between these communities.

The rail service of the future must be reliable, safe and flexible enough to respond to the changing needs of users. For Chiltern, this means ensuring we can meet the changing travel needs of our communities, as commuting patterns are condensed in our digitalised world.

Whilst our network will always be critical for business, we also must reflect the growth in leisure journeys across our routes. Our network connects people to must-see destinations – including Shakespeare's Stratford, historic Oxford and the vibrant city of Birmingham – and with the right connections our route can power the leisure economy.

£49m a year

Chiltern's wider economic benefit to businesses across the route

Chiltern Railways' most popular routes

January – September 2022 (per person)

1,255,000

Marylebone to High Wycombe

665,000

Marylebone to Gerrards Cross

435,000

Marylebone to Banbury

840,000

Marylebone to Bicester North

575,000

Bicester Village to Oxford

405,000

Solihull to Birmingham

680,000

Marylebone to Beaconsfield

485,000

Marylebone to Amersham

390,000

Marylebone to Leamington Spa

Our services have the power to bring people together more, building on the significant economic contribution our services already deliver. We can only do this by delivering the rail services of the future now.

To drive this economic contribution and better connect our communities, people and places, we need trains that can respond to growing capacity demands. This will make it easier, more comfortable and more flexible for people as they travel for work, education or leisure.

New trains will power faster connections with higher speeds and more frequent services, with technology to enable longer trains into stations with shorter platforms.



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New trains will deliver:

- + More capacity – longer trains and more trains to respond to growing demand
- + Smarter trains – running longer trains that connect small stations to big hubs more easily
- + Tailored trains – trains designed to meet accessibility needs

rightroute for our environment

Delivering the right route for people and for connections will help our communities to reduce their emissions and preserve our much loved chiltern countryside.

We want our services to be greener, with minimal impact on the environment and the communities we live and work in across the network. Key stakeholders and partners told us in early consultation sessions that this was a top priority for them.

Our diesel fleet does not allow us to meet this generational challenge and needs wholesale change to deliver a decarbonised future. We cannot afford to wait for track electrification to continue our decarbonisation journey. By embracing the latest available technology and exploring long term solutions, we can deliver a greener rail service that phases out our current diesel fleet.

Our service already helps to reduce emissions. By connecting our communities by train to their workplace, place of education or leisure destination, we help save over 100,000 tonnes of CO₂ emissions a year, but we can go further.

We are already investing in our communities and trialling new decarbonised trains on the network. This includes introducing 5 hydrotreated vegetable oil locomotive trains from the summer of 2023 that keep our carbon emissions down. These trains are one route to making our network as green as possible as soon as possible.

Our carbon footprint

January – September 2022

103,000tn

of CO₂ avoided

51,270tn

of CO₂ emitted by our trains

90% ↓

reduction in emissions from the use of Hydrotreated Vegetable Oil fuel

Case Study: HybridFLEX trains

In February 2022 Chiltern launched the HybridFLEX, Britain's first capable battery-diesel hybrid train. The new two carriage train has initially been running between Aylesbury and London Marylebone.

The 20 year old diesel train has been fitted with a powerful battery, meaning it will use 25% less fuel, significantly reducing emissions and air pollution. This includes a 70% reduction in nitrogen oxide emissions.

The project has been delivered in collaboration with Porterbrook and Rolls Royce. We are reviewing the success of the project in 2023, and will make a recommendation on whether this technology could be rolled out further or if it would be more economical to invest in a new fleet or purely battery powered trains.

We have also worked with community groups to promote sustainability, including adding green infrastructure to our stations, investing in active travel links such as walking and cycling routes in our communities and have improved the delivery of accessible public transport.

We want to build on this. Delivering new battery powered or hybrid trains for our short distance commuter routes and exploring new technologies so our long distance routes can fully decarbonise by 2035, years before the government's 2040 target for replacing diesel rolling stock and 2050 target for decarbonising rail.

Alongside this, delivering the right route for people and for connections will help our communities to reduce their emissions. Better, easier, more flexible and simpler train services will support more green train journeys over taking the car.

Delivering this vision will create a greener service we and our communities can be proud of, with lower emissions and better air quality for all.

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New trains will deliver:

- ⊕ A net zero train service
- ⊕ Better air quality for our communities
- ⊕ A reduction in particulates at our terminus stations



Chiltern's HybridFLEX train launched in 2022

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for innovation

Investing in our people and our facilities will drive new jobs, greater spending and more industrial economic activity across the country.

Delivering this better, greener and easier rail service of the future must be driven by innovation that powers our economy.

Our commitment to delivering high quality rail services already creates significant investment that touches all parts of the UK. In 2022, we delivered £167 million of spending across our supply chain, with that spending multiplying out across the wider economy.

Investment in new trains that create the rail service of the future will be felt across the UK, not just the communities on our network.



A new fleet will also require investment in modern infrastructure to support batteries or other fuelling methods that Chiltern could use. This includes charging infrastructure and modern repair and maintenance facilities.

The innovation journey

Designing new trains

Manufacturing and building new trains

Installing new technologies and services

Creating infrastructure that can service our trains

Training our colleagues to support new trains



We will also invest in our colleagues to ensure they are trained to the highest standards to work with and maintain new trains.

Investing in our people and our facilities will drive innovation, new jobs, and more industrial economic activity across the country. It will represent £100 million+ of additional spending, building on the tens of millions we already invest.

Addressing an ageing fleet is not just about delivering better services, it is also about investing in the success of the community and our economy.

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New trains will deliver:

- + New trains fuelling industrial activity
- + New, green infrastructure for trains
- + Investments in staff to deliver the rail service of the future

rightroute for the future
of our communities



Investing in our network means we can keep pace with rising household numbers and the jobs, businesses, education and leisure facilities

The communities across our routes are some of the best places to live, work and spend leisure time.

We are proud to be a part of, live in and serve these communities – from London, through Buckinghamshire and Oxfordshire to Warwickshire and The West Midlands.

Serving communities that are so desirable to live and work in means we must look ahead to what the future of the towns, villages and cities holds, including how people plan to live and travel. The pandemic accelerated this. More people want to leave cities and embrace hybrid or home working, with the Chiltern hills and market towns as obvious destinations.

It means that along our route, we are braced for a significant boom in households and people that will want to travel by train.

This forecast – representing some of the largest predicted rises across the country - means we will need to respond to meet demand and ensure these communities have the services they need. From improved capacity to more trains, we can help deliver growth in our communities by assuring potential residents they are connected to the wider country and economy.

Our communities are growing fast:

14.2%

predicted growth in Aylesbury Vale

12.8%

predicted growth in South Northamptonshire

10.3%

predicted growth in Cherwell

8.3%

predicted growth in Solihull

7.2%

predicted growth in Hillingdon

3.4%

predicted growth in Chiltern

1.2%

predicted growth in Wycombe

Reference:
ONS Household projections for England: 2018-based, June 2020, predicted growth from 2018 – 2028.

Investing in our network means we can keep pace with rising household numbers and the jobs, businesses, education and leisure facilities that comes with tens of thousands more people living across our network.

If we don't invest in new trains, our services will become more stretched, overcrowded and unable to help people make the journeys they need to easily and without complications. This would inhibit our economy and push people into cars at a time when we want people to take the greenest travel option.



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New trains will deliver:

- + Responds to growth in our communities
- + Gets ready for new jobs, businesses and needs
- + Avoid services being over-stretched

Voices of the route

A critical element of our vision is ensuring it projects the voices of our communities. In addition to earlier customer surveys, we have also spoken with local champions across the route who understand the varying travel needs, from work and education to leisure and tourism.



“Chiltern are an important presence in Marylebone - their commuter routes are vital to the local office and visitor economy in this vibrant central London neighbourhood and we are delighted at the planned investment in the commuter experience. The reduction in emissions from the fleet is of great importance to local business and the wider Marylebone community.”

Penny Alexander

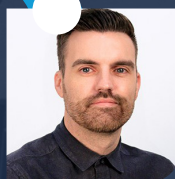
CEO, Baker Street Quarter Partnership



“The fast, frequent service provided by Chiltern between London and Leamington, Warwick, Solihull and Birmingham has been key to supporting our regional recovery from Covid. We also welcome the proposals to further reduce the rail industry’s environmental impact through the introduction of lower-emission trains, which is critical for improving air quality at our town and city centre stations.”

Toby Rackliff

Strategic Lead Rail Policy,
Transport for West Midlands,
WM Rail Executive



“A more efficient Chiltern service is likely to act as a catalyst for increasing visitor numbers, especially if these new trains are better for the environment, which is a key factor that customers are increasingly taking into account when planning a holiday or short break.”

Darren Tosh

Operators and Marketing Director,
Shakespeare's England



“Visitors want to explore more of the iconic locations situated along Chilterns network, providing a huge boost to the local economies. It’s fantastic that Chiltern is continuing to prioritise flexibility, connectivity and high quality customer services.”

Patricia Yates
CEO, VisitBritain



“Chiltern’s current rolling stock is largely diesel-based and of varying ages and generations. We are delighted to hear their ambitions to introduce a low-emission fleet and the direct impact this will bring for air quality in this area of outstanding natural beauty.”

Dr Matt Thomson
Head of Strategy and Planning,
Chilterns Conservation Board



“Enhancements to Chiltern’s services will be very welcome in enabling more visitors to enjoy all that Oxford and Oxfordshire has to offer, in particular boosting access for those travelling from the Capital and West Midlands.”

Hayley Beer-Gamage
CEO, Experience Oxfordshire

The **right**route for Chiltern Railways

Turning this vision into a reality will involve working closely with our communities, colleagues, industry partners and the government.

We believe that with a shared ambition for the future of rail, swift action can be taken to put us on the right route to 2030 and beyond.

Investment in new trains is at the heart of delivering this easier, greener and better network. New trains are integral to decarbonisation, increasing capacity, providing more connections and better frequency. They are also integral to bringing businesses and people closer together and powering our economy.

We can only do this if Government works with us to unlock the necessary investment to make this vision possible.



Summary of rightroute benefits

- ⊕ More seats at key times
- ⊕ A more reliable set of trains
- ⊕ More train capacity to tailor schedules
- ⊕ Onboard information
- ⊕ More comfortable seats with better facilities such as Wi-Fi and plug sockets
- ⊕ More accurate information on train arrivals and delays
- ⊕ Improved connectivity to new and existing locations on our network
- ⊕ More capacity
- ⊕ Tailored trains
- ⊕ A net zero train service
- ⊕ Better air quality for our communities
- ⊕ Greener journeys
- ⊕ New trains fuelling industrial activity
- ⊕ New, green infrastructure for trains
- ⊕ Investments in colleagues to deliver the rail service of the future
- ⊕ Responds to growth in our communities
- ⊕ Gets ready for new jobs, businesses and needs
- ⊕ Avoids services being over-stretched

The rightroute forward

Central to our vision is a long-term strategy for a phased renewal of our fleet. Working closely with the Department for Transport, we are at the early phases of a journey to 2030, which will see a better, greener and easier future for a significant part of our network.

Investment from government and Chiltern will help to fund new battery-hybrid trains on our commuter routes, as well as associated infrastructure upgrades. We anticipate that 45% of our trains will be upgraded as part of the first wave, and if investment is made in 2023/24, we could start bringing benefits from new trains as soon as 2027/28.

We also need a plan for our remaining Chiltern mainline trains. Electrification of our route would create the opportunity to deliver modern trains across the entire

intercity network, but we are committed to exploring other zero emission technologies as well. Hydrogen and other novel solutions could deliver rail services, even for our longest routes. We are committed to working closely with Network Rail to invest in the required infrastructure to enable these solutions to be delivered by 2030.

With government approval, we can begin these discussions and drive forward research and development of innovative clean technologies that deliver a step change in the future of rail services. It takes years to design, procure and deliver new trains, so swift action is essential to meet the needs of our communities.

Our plan is critical to unlock this ambitious future network. We are excited to start this process, putting us on the right route to more capacity, greater connectivity and happier customers. Delayed action will mean missing this opportunity, at the expense of our dedicated customers and colleagues, as well as our treasured environment.

Timeline

2023

Agree the scope and funding with the DfT and other decision makers for Chiltern's new trains between London and Aylesbury.

2024-27

Work with partners to prepare new trains for Chiltern's services.
Launch first wave of new trains to power a easier, greener and better future.

2028-35

Work with government, partners and wider stakeholders to deliver the infrastructure, technology and trains to serve our communities in Oxfordshire, Warwickshire and the West Midlands.

2035

Achieve an easier, greener and better future for all commuter, communities and businesses across our route.

References

1. Office of Road and Rail, Train Operating Company Key Statistics, Chiltern Railways, July 2022, Train Operating Company Key Statistics 2020-21 c2c (orr.gov.uk)
2. Transport Focus, National Rail Passenger Survey (NRPS), July 2020, <https://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2020/07/16180916/Main-Report-Spring-2020.pdf>
3. Office of Rail and Road, Rail Infrastructure and Assets April 2021 to March 2022, October 2022, <https://dataportal.orr.gov.uk/statistics/infrastructure-and-emissions/rail-infrastructure-and-assets/#:~:text=The%20average%20of%20rolling,all%20operators%20of%200.8%20years>
4. Chiltern Railways, Vision 2030 survey, October 2021





Chilternrailways