

Central Oxfordshire Travel Plan

AUGUST 2022 CONSULTATION DRAFT





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Foreword

We share a clear vision in Oxfordshire to deliver a net-zero transport system that enables the county to thrive, protects the environment and makes the county a better place to live for all residents.

To achieve this bold vision, the council recently published a Local Transport and Connectivity Plan (LTCP). This provides a set of key transport targets including the development of area travel plans to cover all aspects of travel from private car journeys, cycling, freight, bus, and rail journeys.

The LTCP includes ambitious targets, such as reducing car trips by a quarter by 2030, delivering a net-zero transport network by 2040 and having zero, or as close as possible, road fatalities or life-changing injuries by 2050.

To achieve this, we are now developing area travel plans across Oxfordshire. The first to be developed is the Central Oxfordshire Travel Plan covering the urban area of Oxford, the immediate movement and connectivity corridors to and from the city, as well as the villages that lie on these corridors (i.e., Kidlington, Eynsham, Botley, Cumnor, Kennington and Wheatley).

The draft Central Oxfordshire Travel Plan sets out our vision to develop a world-leading, innovative, inclusive and carbon neutral transport system with a focus on how people move quickly and safely around the area.

In particular, we need to look at options that re-allocate the limited road space we have to create a place where buses are fast, affordable, and reliable; where people can walk and cycle in pleasant and safe environments; and where high polluting, unnecessary, individual car journeys take a back seat.

We have set out 22 actions to help achieve a sustainable and reliable transport system providing the people of central Oxfordshire with:

- A flagship, zero-emission bus network with new and improved routes, able to travel at the speed limit 24 hours a day, 7 days a week
- A comprehensive and safe cycle and footpath network for pedestrians and cyclists.
- A significant reduction in congestion on our roads, to enable those who need to make essential trips by car or van to do so.
- Beautifully designed streets and public spaces, with clean air.
- 20-minute neighbourhoods: wellconnected and compact areas around the city of Oxford where everything people need for their daily lives can be found within a 20-minute walk.

The draft plan also outlines three major transport proposals for Oxford: traffic filters, a workplace parking levy, and an expanded zero emission zone, all of which will be consulted on in more detail and separately to this area travel plan.

We have provided the vision; we now want your feedback to help shape the final travel plan for central Oxfordshire.

Let's start the conversation. Help us create a cleaner, greener, safer central Oxfordshire in which everyone can thrive.

Councillor Duncan Enright
Cabinet Member for Travel and
Development Strategy



About this Plan

The Central Oxfordshire Travel Plan (COTP) sets out the transport strategy for the central Oxfordshire area from 2023 to 2040, with a focus over the period to 2032. It is part of a suite documents that sit under the Local Transport and Connectivity Plan (LTCP), which was adopted by Oxfordshire County Council in July 2022. COTP builds upon and replaces the current Oxford Transport Strategy (OTS), adopted in 2015.

Overview of Local Transport and Connectivity Plan documents

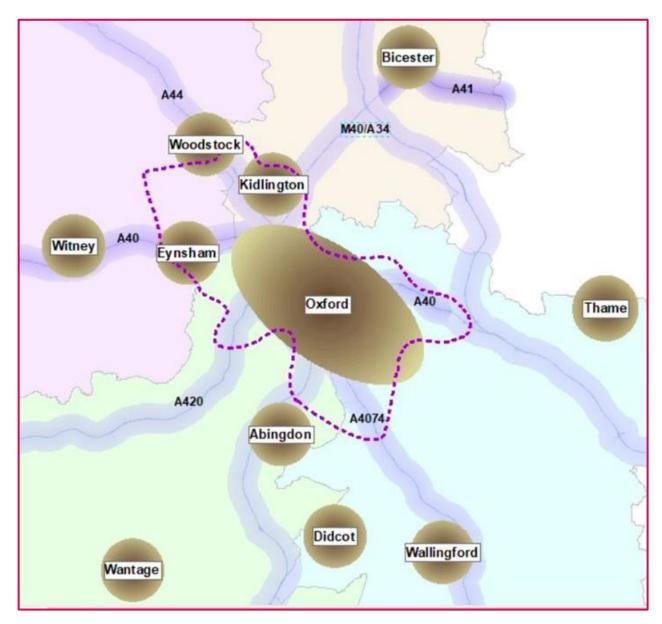
Local Transport and Connectivity Plan (Part 1 Policy Document) County Wide Plans Area Plans **Corridor Plans** (6)(19)(6)Central Oxfordshire Travel Plan A40 Corridor Travel Plan Active Travel Plan A41 Corridor Travel Plan Public Transport Plan Cherwell Travel Plan Banbury Area Travel Plan Bicester Area Travel Plan Kidlington Area Travel Plan A44 Corridor Travel Plan Freight and Logistics Plan South and Vale Travel Plan A420 Corridor Travel Plan Abingdon Area Travel Plan Digital Plan Didcot Area Travel Plan Faringdon Area Travel Plan Henley-on-Thames Area A4074 Corridor Travel Plan Innovation Framework Travel Plan Thame Area Travel Plan Wallingford Area Travel Plan M40 and A34 Strategic Route Wantage & Grove Area Travel Plan Network Travel Plan Review Sustainability Appraisal West Oxfordshire Travel Plan Carterton Area Travel Plan Chipping Norton Area Travel Plan Eynsham Area Travel Plan Witney Area Travel Plan Woodstock Area Travel Plan

The plan identifies a series of actions to address current and future transport challenges facing the central Oxfordshire area, whilst developing a world-leading, innovative, inclusive and carbon neutral transport system.

The central Oxfordshire area covers the urban area of Oxford, the immediate movement and connectivity corridors to and from the city, as well as the villages that lie on these corridors (i.e., Kidlington, Eynsham, Botley, Cumnor, Kennington and Wheatley).



Central Oxfordshire Travel Plan geographic area







Implications of COVID-19 pandemic

The way we travel changed during the COVID-19 pandemic. Whether these changes are temporary or permanent is still uncertain and the full evidenced picture remains unclear. Where there is a sustained change, we will adjust our travel plan accordingly through regular review points.

Travel data indicates that motorised traffic flows have only recently (in 2022), returned to pre-pandemic levels in Oxfordshire overall.¹ However, traffic flow in Oxford City does not reflect this, with motorised traffic levels remaining approximately 10% below pre-pandemic levels.² Bus patronage in the area is also currently at around 80% of pre-covid levels.

The COVID-19 pandemic has presented opportunities to encourage use of a broader range of transport modes than before, and importantly to reduce the overall need to travel as many people continue to work from home more regularly. Reducing the need to travel and more vitally changing how we travel, will allow us to accelerate progress towards achieving our net-zero carbon goals. This will also support our wider goals, including public health ambitions to reduce obesity and improve the health of our local population.

² Oxfordshire County Council Traffic Monitoring team, average 5-day (Monday-Friday) flows from 5 Oxford City inner cordon counters between 2020-2022





¹ Oxfordshire County Council Traffic Monitoring team, average data between 2020-2022

Priorities and the Case for Change

Oxfordshire County Council's nine corporate priorities set the guiding objectives of the strategy.



COTP indirectly addresses all the priority areas, with a strong direct alignment to five priority areas:

- Tackling the climate emergency through rapid decarbonisation, proper accounting of carbon emissions and ambitious targets, as well as supporting climate resilience
- Tackling inequalities and providing opportunities for everyone in Oxfordshire to achieve their full potential
- Increasing investment in an inclusive, integrated, county-wide active, and sustainable travel network fit for the 21st century to improve choice and reduce car journeys across the county
- Improving access to nature and green spaces for all communities, and landscape-scale nature recovery across the county
- Responding to the needs of young people who have identified 'investing in an inclusive, integrated, and sustainable transport network' as their number one priority.³

³ Outcome from OCC engagement during development of the Oxfordshire Strategic Plan 2022-2025.



These priorities reflect a number of the wider key challenges facing the COTP area including:



Climate and emissions: Exceedance of legal emission levels and the need to rapidly reduce carbon emissions from all transport related activities.



Housing, jobs, and regeneration: Over the period 2011 to 2031, 100,000 new homes will be built in Oxfordshire, with at least 15,000 required to meet Oxford City's unmet housing need.^{4,5} Whilst population growth within Oxford itself over the period 2020-2030 is expected to be modest (+8%), areas on the city's immediate periphery are expected to see significant growth.⁶



Sustainable travel: Levels of congestion across the COTP area cause unreliable journey times for many people. Based on current trends, increased demand for movement in the area will exacerbate congestion in future years. This has a significant detrimental effect on quality of life for residents and the attractiveness as a place to live and work. Space efficient travel options like public transport and active travel, can help significantly towards addressing this challenge. Currently, sustainable travel modes in the area face issues including:

- Time and reliability Average bus speeds in Oxford have been declining on key routes to and from the city centre and employment sites, with only 8mph achieved between the JR hospital and city centre via Cowley Centre during weekday peaks.⁷
- Safety The Oxfordshire Cycle Survey 2019 identified 'Traffic Safety' as the single biggest issue for people cycling in Oxford.⁸



Equality: The COTP area includes some of the most deprived areas in the county. Inequalities in life expectancy at birth from least to most deprived across Oxford are estimated at 13.8 years for men, and 11.2 years for women.⁹



Health: Whilst the Oxford area has one of the lowest percentages of overweight or obese adults compared to nationally (49% vs 62%), physical inactivity and obesity remains one of the area's most significant and growing health issues.¹⁰

¹⁰ Oxford City Council, *Indicators of health and well-being*, Public Health England, 2020



⁴ GL Hearn Limited, Oxfordshire Strategic Housing Market Assessment, 2014

⁵ Oxfordshire Growth Board, Oxfordshire Growth Board Post SHMA Strategic Work Programme, 2016

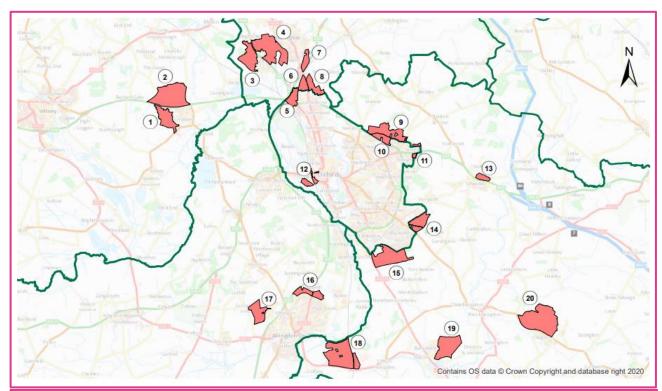
⁶ Oxfordshire County Council, Oxfordshire Housing-led Projections 2020-2030 interactive dashboard, 2022

⁷ Oxfordshire County Council, *Oxfordshire Bus Service Improvement Plan*, 2021, <u>Bus Service Improvement Plan</u>, 2021, <u>Bus Service Improvement P</u>

⁸ Oxfordshire County Council, Oxfordshire Cycle Survey 2019 Summary Report, 2019, Oxfordshire CYCLE SURVEY SUMMARY REPORT

⁹ Oxford City Council, *Indicators of health and well-being*, Public Health England, 2020, https://www.oxford.gov.uk/info/20127/health/457/oxfords_health#:~:text=Overall%2C%20adults%20in%20Oxford%20are,(49%25%20vs%2062%25)

Identified strategic development sites across central Oxfordshire



Legend

- 1. West Eynsham, 1,000
- 2. Oxfordshire Cotswolds Garden Village. 2,200
- 3. Land West of Yarnton (PR9), 540
- 4. Land East of the A44 (PR8), 1,950
- 5. Oxford North, 500
- 6. Land West of Oxford Road (PR6b), 670
- 7. Land South East of Kidlington (PR7a), 430
- 8. Land East of Oxford Road (PR6a), 690
- 9. Land North of Bayswater Brook, 1,100

- 10. Barton Park, 885
- 11. Thornhill Park, 534
- 12. West End and Osney Mead, 981
- 13.Land at Wheatley Campus, 500
- 14. Land at Northfield, 1,800
- 15. Land South of Grenoble Road, 3,000
- 16. North Abingdon-on-Thames, 800
- 17. Dalton Barracks, 1,200
- 18. Land adj to Culham Science Centre, 3,500
- 19. Berinsfield Garden Village, 1,700
- 20. Land at Chalgrove Airfield, 3,000

1:150,000

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Vision and Targets

The adopted Oxfordshire Local Transport and Connectivity Plan (LTCP) sets the vision and targets for Oxfordshire, including the central Oxfordshire area

Local Transport and Connectivity Plan – **Vision**

"Our Local Transport and Connectivity Plan vision is for an inclusive and safe net-zero Oxfordshire transport system that enables all parts of the county to thrive.

It will tackle inequality and be better for health, wellbeing, and social inclusivity and have zero road fatalities or life-changing injuries. It will also enhance our natural and historic environment and enable the county to be one of the world's leading innovation economies.

Our plan sets out to achieve this by reducing the need to travel and private car use through making walking, cycling, public and shared transport the natural first choice."

Local Transport and Connectivity Plan – Headline targets

By 2030 our target is to:

- Replace or remove 1 out of every 4 current car trips in Oxfordshire
- Increase the number of cycle trips in Oxfordshire from 600,000 to 1 million cycle trips per week.
- Reduce road fatalities or life changing injuries by 50%.

By 2040 our targets are to:

- Deliver a net-zero transport network.
- Replace or remove an additional 1 out of 3 car trips in Oxfordshire.

By 2050 our targets are to:

- Deliver a transport network that contributes to a climate positive future.
- Have zero, or as close as possible, road fatalities or life-changing injuries

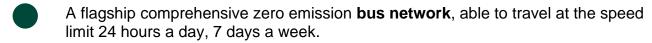




Outcomes and Actions

This strategy is shaped by a number of defined outcomes. These outcomes represent a set of guiding transport and movement principles, which inform and run throughout the strategy.

The outcomes are:



- A comprehensive, safe, inclusive **cycle network**, to rival the best in Europe.
- Beautifully designed **streets and public spaces**, with clean air.
- A reduced impact of private vehicles, where roads are congestion-free for residents, visitors, and businesses to make **essential journeys** in zero emission vehicles.
- **Carbon neutral transport** for a carbon neutral city. Prioritising measures and approaches that utilise minimal resources.
- A travel hierarchy prioritising sustainable travel and promoting **20-minute neighbourhoods**, where everything people need for their daily lives can be found within a 20-minute walk.
- Improved **safety** realised through a Vision Zero approach to transport safety across the area.
- An inclusive transport network that improves accessibility for all of our residents.

To deliver these outcomes, we need to make transport movements more efficient and achieving target ambitions for a net-zero transport network, requires us to:

- Look at ways to avoid unnecessary travel. For example, through supporting
 working at home using the internet and through embracing other and new
 technologies.
- **Shift** travel use towards shorter sustainable travel trip options (i.e., through active travel and public transport) and supporting freight consolidation.
- **Improve** our travel network. For example, through providing infrastructure to support a switch to electric technology; embed inclusivity into the development and design process of transport schemes.



There are a number of reasons we are proposing this approach:

- Transport emissions have left parts of Oxford with high levels of air pollution, which is shortening people's lives. Urgent action is also needed to reduce our carbon emissions to help tackle climate change.
- Many cyclists don't feel safe using the city's roads and we want to prevent accidents.
- Roads are clogged with traffic, which means buses are slow, unreliable and cannot adequately serve all parts of the city. Without action, more bus services will be scaled back or disappear.
- Chronic congestion in the city costs individuals and businesses time and money.
- Pedestrians are too often squeezed into narrow, cluttered pavements.

Traffic noise blights some of the city's communities and streets. A set of 22 actions set out the measures we will take to achieve the plan outcomes and support the achievement of LTCP targets. The table below shows how the COTP actions relate back to the LTCP policies. The plan identifies the measurements we will use and the data we will collect, to establish a baseline and report on how well we are delivering against our targets.

LTCP policy	Supporting COTP actions
Policy 1 – Transport user hierarchy	Action 19 - Alongside partners, deliver a City Centre Movement Framework for Oxford
Policy 2 – Cycle and walking networks	Action 9 – Deliver a wayfinding scheme across central Oxfordshire's active travel network
	Action 10 - Deliver junction improvements to support active travel users where there is: a) a poor safety record for those who are walking or cycling b) significant severance for those walking and
	cycling
Policy 3 – Local Cycling and Walking Infrastructure Plans	Action 8 – Deliver a central Oxfordshire cycle network, consistent with the Oxfordshire Strategic Active Travel Network and the latest LCWIP plans
Policy 8 – Healthy streets approach	Action 18 - Develop and support implementation of a local toolkit of transport interventions that support the 20-minute neighbourhood approach and work to the principles of the healthy streets approach
Policy 13 – 20-minute neighbourhoods	Action 18 - Develop and support implementation of a local toolkit of transport interventions that support the 20-minute neighbourhood approach and work to the principles of the healthy streets approach
Policy 15 – Vision Zero	Action 10 – To help meet Vision Zero, deliver junction improvements to support active travel users where there is:



LTCP policy	Supporting COTP actions
LIGI policy	a) insufficient dedicated infrastructure for those walking or cycling b) a poor safety record for those who are
	walking or cycling b) significant severance for those walking and cycling
	Action 12 – Deliver bus priority measures along key inter-urban bus routes and on key orbital routes in the Oxford area.
Policy 18 – Bus strategy	Action 13 – Alongside partners, deliver a zero emission local bus fleet across Oxford by 2024/25 and a fully zero emission bus fleet by 2030
Policy 21 – Rail strategy	Action 14 – Alongside partners, deliver: a) Oxford Station enhancements b) a passenger rail service and two new passenger stations on the Cowley Branch Line c) local rail capacity and service frequency enhancements
Policy 23 – Mobility hubs	Action 15 – Deliver a transport hub strategy for a network of transport hubs across Oxfordshire
Policy 29 – Zero emission vehicles	Action 22 - Deliver publicly accessible electric vehicle charging points across central Oxfordshire
	Action 4 – Develop proposals for further Controlled Parking Zones (CPZ) across the city and to review eligibility and quantity of permits in existing CPZ areas
Policy 33 – Parking management	Action 5 – Support a case-by-case review of public parking provision across the area and a consolidation and/ or a reduction in public parking provision where appropriate
	Action 6 – Remove on-street public parking where necessary on corridors identified in the strategy as either being active travel Primary Routes (Quickways) or situated on core bus routes
	Action 7 - Regularly review parking pricing to favour sustainable travel
	Action 11 – Deliver: a) increased cycle parking at key destinations including for non-standard bikes



LTCP policy	Supporting COTP actions
	b) a public hire cycle scheme including e-bikes, and which could also include e-scooter provision
	Action 20 - Deliver attractive tourist coach drop off and pick up facilities in the city centre and convenient lay over facilities, consistent with proposals in a City Centre Movement Framework
Policy 35 – Demand management	Action 1 – Expanding upon the pilot scheme, develop proposals for a Zero Emission Zone (ZEZ) for Oxford city centre
	Action 2 – Develop proposals for a set of strategic traffic filters for locations across Oxford
	Action 3 – A Workplace Parking Levy to cover businesses with 11 or more staff parking spaces in Oxford City Council's administrative area, within the Oxford ring road
Policy 38 – Passenger micromobility	Action 11 – Deliver: a) increased cycle parking at key destinations b) a public hire cycle scheme including e-bikes, and which could also include e-scooter provision
	Action 21 – Deliver an e-scooter hire scheme across central Oxfordshire, subject to ongoing trial performance and national legislation
Policy 49 – Local movement	Action 17 – Deliver a safer lorry scheme pilot across central Oxfordshire
Policy 50 – Last mile movement	Action 16 - Deliver a freight transfer / consolidation feasibility study and first / last mile delivery pilot





Theme One: An efficient connected zero emission city

Oxford is the only local authority area in the county where the number of inbound commutes is greater than outbound.¹¹ The significant level of traffic that travels into and through Oxford and the central Oxfordshire area daily for employment and other purposes, is a notable contributor to congestion throughout the area.

Two thirds of commuters travel into Oxford by car (66.8%).¹² As a space inefficient mode of travel, heavy dependence on the car means that across the area the transport network can often be at, or above, capacity during peak hours. Left unchecked, increases in housing and jobs across the area will exacerbate this issue.

As well as taking up more space per person on our already congested road network, car travel also represents a significant source of emissions. In Oxford, transport emissions account for 17% of greenhouse gas emissions. In addition, the city regularly exceeds legal air pollution limits with poor air quality hotspots across the city concentrated around key transit corridors and key junctions on the city's ring road. If Poor air quality has a detrimental impact on human health. By contrast, active travel (walking, cycling, scooting etc) and public transport journey options are typically much more space efficient and have a much lower emissions output.

An integrated approach is therefore required to readdress a balance in favour of space efficient, low emission transport modes across the area. We will implement a strategic package of measures focused on:

- 1. Managing travel demand to reduce emissions and congestion. This will involve implementing measures to improve the accessibility and convenience of sustainable travel modes over private vehicle use. This approach recognises that for some, alternatives to driving may be unrealistic for some journeys.
- 2. Making space for and improving priority and safety of sustainable modes.
- 3. Delivering efficient movement of goods and services.

¹⁴ Oxford City Council, 2020 Air Quality Annual Status Report (ASR), 2021, page ix



¹¹ Oxfordshire County Council Research and Intelligence Team, The District Data Analysis Service and Oxford City Council, *Travelling to work: Commuting patterns in Oxfordshire*, 2011 Census, 2014

¹² Oxfordshire County Council Research and Intelligence Team, The District Data Analysis Service and Oxford City Council; *Commuting by mode of travel, 2011;* 2011 Census; 2014

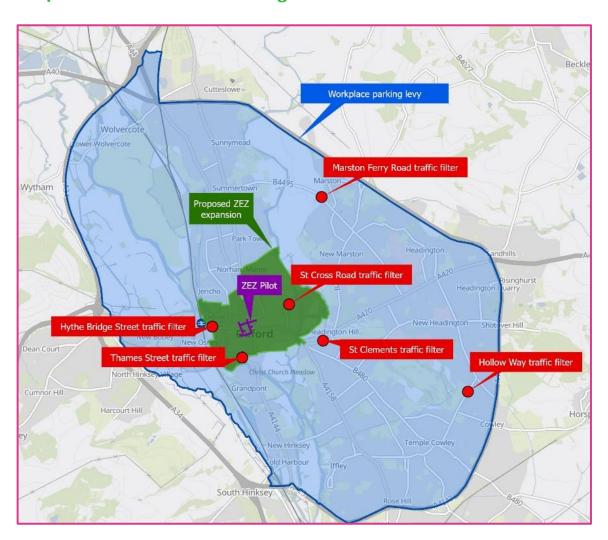
¹³ Oxfordshire County Council, *Councils announce ambitious updated proposals to support a zero carbon transport network*, 2022, https://news.oxfordshire.gov.uk/councils-announce-ambitious-updated-proposals-to-support-a-zero-carbon-transport-network/

Managing travel demand to reduce emissions and congestion

Managing travel demand is not a new approach for Oxford and has been developed across the city over many years, for example, through implementation of the High Street traffic restrictions and bus only 'gate' measures in 1999. Notwithstanding steps already taken, it is estimated that 32% of internal commuting trips within Oxford are still by private car. This is despite the city being relatively compact, with no two points within the ring road being more than 11km apart.

Working with local authority partners, we propose a package of complementary measures to manage the demand of vehicles on the transport network. The details and delivery of these measures will be developed through wider public consultation and in some cases subject to external approval, for example from the Department for Transport.

Proposed Travel Demand Management Measures



¹⁵Oxfordshire County Council Research and Intelligence Team, the District Data Analysis Service and Oxford City Council; *Commuting by mode of travel 2011;* Census 2011; 2014



Implement a Zero Emission Zone



Action 1 – Expanding upon the pilot scheme, develop proposals for a Zero Emission Zone for Oxford city centre.

Oxford is subject to poor air quality particularly in areas with high levels of road traffic. The entire Oxford City area has been designated an Air Quality Management Area (AQMA) due to exceedances of nitrogen dioxide (NO₂) since 2010. The transport sector continues to be, by far, the largest contributor at 68% to total emissions of nitrogen oxides (NO_x) across Oxford. Pollution hotspots are typically located where congestion and a dense urban form exists.

To address these local challenges, the county council in partnership with Oxford City Council proposes a Zero Emission Zone (ZEZ). Through a charging-based system, the zone will incentivise the use of low emission vehicles over higher polluting vehicle types. Implementation of an expanded ZEZ will build on the findings and learnings of a pilot ZEZ, which was implemented on a select number of city centre streets in February 2022. The ZEZ pilot itself builds upon a bus based Low Emission Zone (LEZ) that has been in place in central Oxford since 2014.

The expanded Zero Emission Zone will focus on Oxford city centre, where there is a concentration of continued exceedances of air quality legal limits.

Delivering a ZEZ is anticipated to improve air quality within areas implemented; however, to reduce congestion and emissions across the wider COTP area, a review of access and parking arrangements is also proposed.

Implement a set of strategic city-wide traffic filters



Action 2 – Develop proposals for a set of strategic traffic filters for locations across Oxford.

We need to change and revive our streets, to make journeys by walking, cycling and bus, safe, direct, and with attractive journey times compared to car use.

To readdress the balance of directness and journey times in favour of sustainable travel, a review of existing access arrangements for car use is proposed. This will be realised through a set of strategic traffic filters. Traffic filters are points on roads through which only certain types of vehicles (e.g., buses, taxis, and cycles) may pass. Traffic filters would in principle operate similar to the existing bus gate on Oxford High Street.

¹⁶ Oxford City Council, Oxford City Council Air Quality Action Plan 2021-2025, 2021



Traffic filters will reduce traffic and congestion, which will make bus journeys quicker and more reliable. They will also make cycling and walking much more attractive options for people making journeys within the city.

Car access will still be possible to all areas; however, journeys by car may take longer and be less direct. Internal car trips within the city will likely be required to use the Oxford ring road. By contrast, journeys by active travel and public transport will be able to move directly between areas passing through the traffic filters.

In total six traffic filters across the city are proposed to help realise this approach. Three of these are proposed in the city centre on:

- St Cross Road
- Thames Street
- Hythe Bridge Street.

The remaining three filters are proposed for:

- St Clements
- Marston Ferry Road
- Hollow Way.

The locations have been strategically chosen to reduce traffic in certain parts of Oxford. Some of the filters are on roads with relatively few people cycling and buses, but the filters will work together as a system to reduce traffic on roads that do have high volumes of buses and people cycling.

The location of traffic filters will be finalised following further engagement, public consultation, and detailed work. As part of this process, additional traffic filters may be proposed.

A number of Low Traffic Neighbourhoods (LTN's) have also been implemented across Oxford. The LTN's in Cowley have been made permanent (July 2022), with some modifications, whilst other LTN's across other parts of East Oxford are currently being trialled through Experimental Traffic Regulation Orders (ETRO). The strategic traffic filters proposed in this plan have been designed to work with the East Oxford LTN traffic filters at Divinity Road, Southfield Road, Rectory Road, and Princes Street in place. If these four LTN filters are not made permanent following the ETRO LTN trial, the traffic filter proposals would need to be amended to include them to prevent wider unacceptable traffic increases on these four roads.





Implement a Workplace Parking Levy and Localised Parking Measures



Action 3 – A Workplace Parking Levy to cover businesses with 11 or more staff parking spaces in Oxford City Council's administrative area, within the Oxford ring road.



Action 4 – Develop proposals for further Controlled Parking Zones (CPZ) across the city and to review eligibility and quantity of permits in existing CPZ areas.

Workplace parking

There are approximately 18,000 workplace parking spaces (measured pre-covid) across the city, the majority of which (88%) lie outside of the city centre. The abundance of this provision – the majority of which is free, makes driving to work in the Oxford area very attractive.



Car Parking Provision in Oxford*



*Data collected pre-Covid

A Workplace Parking Levy (WPL) would be an annual charge to businesses for staff parking spaces at their premises.

It would have a number of distinct benefits including:

- An encouragement for employers to reduce the supply of workplace parking. In Nottingham immediately following implementation of a WPL, the number of liable spaces dropped by 6% from 26,916 (2012/13 baseline) to 25,840 (2019/20 Covid-19).¹⁷
- By law, the funds generated by the WPL must be used to improve transport in and around the city.
- A WPL will encourage commuters to use an alternative, less polluting means to get to work, rather than travelling in private cars. This could include walking, cycling or the use of public transport.
- A WPL can help reduce traffic and generate funds to improve alternatives to car travel, including more bus services and better cycle lanes.

To ensure that commuter parking is not displaced locally, further Controlled Parking Zones (CPZ) across the COTP area may be required. Where implemented, CPZs have been extremely successful in managing on-street parking and removing commuter parking. Currently there are 43 CPZs across Oxford, four of which are part time and are specific to activity related to the Kassam stadium. The county council plans to implement a further 13 CPZs, including a re-designating of the four part time CPZs. We also propose a review of eligibility and quantity of permits issued per property to ensure parking pressure is effectively managed.

¹⁷ Leicester City Council, *Leicester Workplace Parking Levy Business Case*, 2021, page 28, <u>Leicester Workplace Parking Levy</u> – Business Case



Public Parking



Action 5 – Support a case-by-case review of public parking provision across the area and a consolidation and/or a reduction in public parking provision where appropriate.



Action 6 – Remove on-street public parking where necessary on corridors identified in the strategy as either being active travel Primary Routes (Quickways) or situated on core bus routes.



Action 7 – Regularly review parking pricing to favour sustainable travel.

In comparison to other cities, Oxford's level of public parking provision is low. Across the city (pre-covid), there were an estimated 4,714 public parking spaces, the majority of these located within the city centre area (3,000). The demand to access parking contributes significantly to increasing congestion across the City, especially on main public transport and cycling routes.

A significant proportion of public parking is off-street parking provision, which is typically owned and managed by other local authorities or public/private bodies. We will work with others to reduce the impact of this parking and encourage other ways to travel.

In Oxford city centre, a number of the off-street public car parks are identified for closure or a significant reduction in spaces, including Gloucester Green (105 spaces), Worcester Street (200 spaces), Oxpens (179 spaces) and Oxford Station (556 spaces). An increase in parking provision will in general not be supported. For existing public parking provision across central Oxfordshire, we will support a case-by-case review of provision. In some instances, it may be that there is a negligible congestion or emissions impact related to a particular public parking site. In other instances, there may be significant congestion and/or emissions related challenges for a particular site. In some cases, we may support an alternative land use for a particular site. In reviewing public parking provision, we recognise that across district centres and town/village centres, parking can play a locally important role in supporting local vitality and is essential for access for Blue Badge Holders/disabled parking permit holders.

An attractive public parking offer, embedded as part of a network of transport hubs across the area and combined with effective sustainable travel links, represents an important component for reducing parking demand, particularly in the city centre.

We will support independent public car park operators across the area in a review of their parking charging rates to ensure that where sustainable travel options are available, these represent the most cost-effective mode of travel.

¹⁸ Oxford City Council, City Centre Car Parks, https://www.oxford.gov.uk/directory/8/car parks in oxford/category/53/categoryInfo/10



On-street public parking across the COTP area is typically the responsibility of the county council. On-street parking can often be a source of delay and restrict opportunities to reallocate road space in favour of sustainable travel. On those routes identified as either being on active travel Primary Routes (Quickways) or on a core bus route (see 'Proposed central Oxfordshire active travel network' and 'Proposed central Oxfordshire public transport and transport hub network' figures) across the area, the council will review and remove on-street parking provision where it compromises the functioning of these streets. Motorcycle parking will also be considered. A shift to electric motorcycles contributes to our targets and in some locations, it may be appropriate to increase space for motorcycle parking, such as at transport hubs. Where this is appropriate, facilities such as electric motorcycle charging and ground anchor points will be considered.

We will regularly review the pricing of on-street parking across the area based upon a zonal charging system, to ensure that where sustainable travel options are available, these represent the most cost-effective mode of travel.

Collectively the travel demand management measures of zero emission zone, traffic filters, workplace parking levy, and parking management represent a significant step towards achieving our targets for reducing car use and delivering a net-zero transport network. Across the COTP area, we will regularly monitor levels of congestion, car use and air quality against strategy targets. This will help to determine whether further travel demand management measures are necessary across the area.



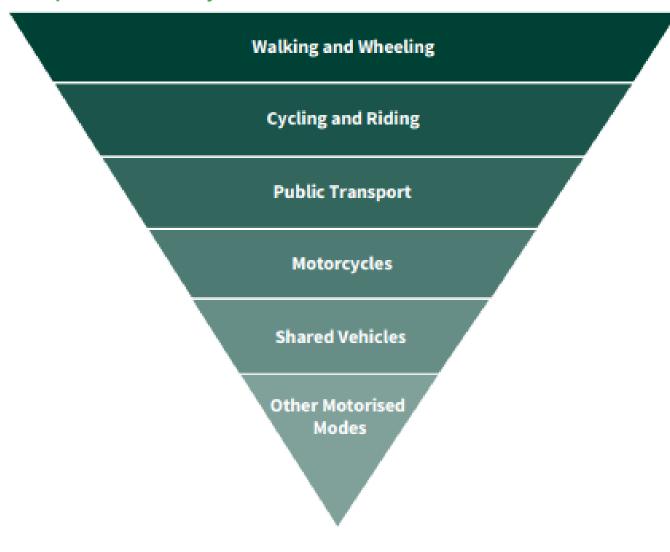


Making space for, and improving priority and safety of sustainable modes

Reducing the attractiveness of driving, through implementing travel demand management measures, requires that we also invest in improving the sustainable transport offer to simultaneously provide choice and make this more attractive. This would improve the quality and extent of the public transport and active travel offer across central Oxfordshire.

Our plan implements a travel hierarchy that prioritises sustainable travel with walking at the top. Our plan also delivers a comprehensive, quick, reliable, zero emission, high quality public transport offer, that safely moves large volumes of people around the transport network in a safe and efficient manner.

Transport user hierarchy





Active Travel

The central Oxfordshire area is internationally renowned for its high levels of active travel. A compact urban city, Oxford has the second highest rate of cycle use in the UK after Cambridge, whilst the city also has the fourth highest level of walking (at least once a week) of all UK local authorities. 19 20 However, a strong and growing active travel base in the area is in spite of conditions, provision and routes that often have very poor outcomes for users. Strong and growing active travel use is not universal across the central Oxfordshire area.²¹ In the Oxford area, 91% of cycle trips are made by people who frequently cycle. 22 Most of the city's adult population - around 60% - do not cycling at all.²³ More remote locations across the area and residential areas located outside of the city's ring road typically have lower levels of active travel. These are locations where there are often fewer local services and where roads and railways create severance, obstructing access to amenities.

With a significant number of new homes planned for delivery outside the city's ring road, where active travel proportions are historically lower, improving active travel provision and increasing the number of active travel users is essential to meet our target for a reduction in car use of one third by 2040.

The county council's adopted Local Cycling and Walking Infrastructure Plans (LCWIPs) for Oxford and Kidlington, together with the Oxfordshire Strategic Active Travel Network, provide the basis for the active travel improvements that are planned across the central Oxfordshire area.²⁴

Central Oxfordshire Cycle Network



Action 8 – Deliver a central Oxfordshire cycle network, consistent with the Oxfordshire Strategic Active Travel Network and the latest LCWIP plans

A comprehensive network of cycle routes linking residential and employment areas is proposed. The routes comprise a mixture of Primary Routes (Quickways), Secondary Routes (Quietways), and Connector Routes. Together these form a network of over 70 routes across central Oxfordshire.

²⁴ Oxfordshire County Council, LTP4 – Active and healthy travel – Approved LCWIPS, https://www.oxfordshire.gov.uk/residents/roads-and-transport/connecting-oxfordshire/active-and-healthytravel





¹⁹Department for Transport, Walking and Cycling Statistics, England: 2019; 2020; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906698/w

alking-and-cycling-statistics-england-2019.pdf ²⁰ Department for Transport, Walking and cycling statistics, 2021, https://www.gov.uk/government/statistical-

data-sets/walking-and-cycling-statistics-cw

²¹ Environmental Change Institute University of Oxford & Bioregional, Pathways to a zero carbon Oxfordshire, 2021, https://www.eci.ox.ac.uk/publications/downloads/PazCo-final.pdf

²² ALS 2015-17

²³ ALS 2015-17

Active Travel Route Classification

Intervention	Detail
Primary Routes (Quickways)	Form the core of the network and extend along main radial/ arterial transit corridors
Secondary Routes (Quietways)	Routes which offer a lower trafficked alternative route choice between key trip attractors and residential areas
Connector Routes	Shorter distance cycle routes that connect urban edges

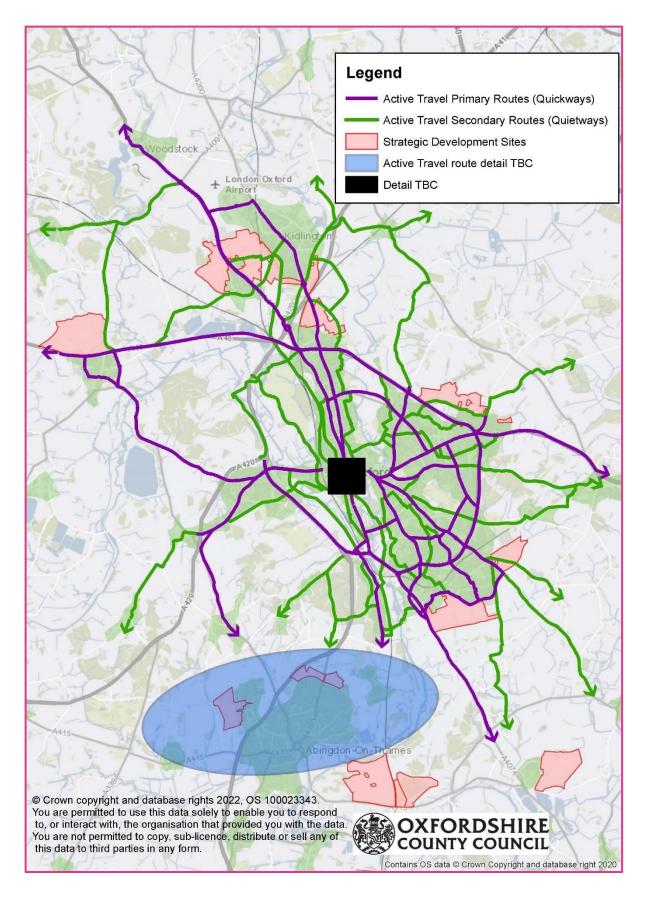
The prioritisation of active travel routes where improvements will be delivered will be based on:

- Routes which provide connectivity between planned large growth sites and local amenities.
- Routes with the greatest propensity to see increases in cycling (including radial routes and routes linking to/from the city centre).
- Routes required to complement wider traffic measures, for example orbital routes across east Oxford.
- Routes highlighted with poor or no provision, for example B4044 Botley Eynsham route.

Where dedicated cycle priority is delivered, every effort will be made to deliver consistency and continuity in route treatment, whilst acknowledging that street widths, mature trees and street furniture can often be constraining factors. Ensuring cycle infrastructure can be used by all types of cycles (adapted bikes, recumbent bikes, trikes, tandems, cargo bikes etc) will be part of the design process to ensure an inclusive active travel network is developed. we will work to the design standards for cycle provision set out in the LCWIP and national design guidance notes like LTN 1/20.²⁵

²⁵ Department for Transport, *Cycle Infrastructure Design Local Transport Note 1/20,* 2020, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf

Proposed central Oxfordshire active travel network







Signage and wayfinding



Action 9 – Deliver a wayfinding scheme across central Oxfordshire's active travel network

Clear and comprehensive wayfinding directional signage is beneficial for all active travel users. It has several functions:

- Helps residents and users understand and interpret the local geography based on active travel routes rather than conventional road numbering
- Helps people find their way along a cycle or walking route
- · Helps people interpret maps or apps on the ground
- Reassures people of the destination and time needed to reach the destination
- Legitimising the use of the road by people cycling, both to people cycling and private vehicle users
- Altering driver behaviour to recognise people cycling's use of roads
- Increasing safety and comfort by guiding people cycling through junctions

Provision of wayfinding signage is currently inconsistent across central Oxfordshire.

A focus on junctions



Action 10 – To help meet Vision Zero, deliver junction improvements for active travel users where there:

- a) is a poor road safety record for those who are walking or cycling
- b) is insufficient dedicated infrastructure for those walking or cycling
- c) is significant severance for those walking and cycling

Collisions at junctions make up 65% of all reported incidents across the central Oxfordshire area. Of those who were either seriously or fatally injured, people cycling and walking comprise a large proportion (62%).²⁶

Addressing junction design is critical to increasing active travel use across the area by making it safer to walk and cycle and changing the perception around the safety of walking and cycling.

Funding will be prioritised into junctions with a poor road safety record for those walking and cycling, junctions where there is insufficient dedicated infrastructure for those walking or cycling, and junctions that are used by people to cross roads that are causing severance (such as the Oxford ring road, A34, A40 and A44). Proposed measures could include:



²⁶ Oxfordshire County Council analysis of traffic collision data

- Active travel crossings, provided both at street-level and/or via bridges/ underpasses
- Shorter waiting times, for example at signal crossings, for people walking and cycling to cross busy roads.
- Reducing the speed limit on the Oxford ring road to 50mph throughout. A number of stretches of the route are currently already 50mph including through Botley (A34) and along the eastern bypass.

In addition, a focus on localised junctions and side roads is equally important for improving safety, reinforcing hierarchy of user priority, and reinforcing the continuity of active travel routes. We will continue to deliver side road entry treatments, continuous footway design treatments (Copenhagen Crossings) and raised tables across central Oxfordshire.

Cycle parking and cycle hire



Action 11 - Deliver:

- a) increased cycle parking at key destinations including for non-standard bikes
- b) a public hire cycle scheme including e-bikes, and which could also include e-scooter provision

Secure cycle parking is essential to increasing cycling by ensuring people can safely park their bike close to their destination. A key issue is where the demand for cycle parking, such as in the city centre and district centres, exceeds the formal provision.

The opportunity to redesign key transport interchanges, such as Oxford Station, Gloucester Green Bus and Coach Station, and the Park and Ride sites, as transport hubs presents an opportunity to significantly expand the quality and quantity of cycle parking facilities available.

The design and layout of cycle parking will be inclusive to accommodate a wider range of bike types. Existing cycle parking usually accommodates only a standard design of bike. To meet our targets to increase cycling, safe, secure, and accessible cycle parking to accommodate a wider range of bikes (longtails, bikes with trailers, adapted bikes, recumbent bikes, trikes, tandems, cargo bikes etc) will be provided.

Transport hubs and interchange facilities present an opportunity to have a public cycle hire scheme. Public hire cycle schemes have previously and in some cases continue to operate across the central Oxfordshire area. With a high transient population of students and tourists, a scalable cycle hire scheme has significant potential, and is likely to attract interest from a number of operators.



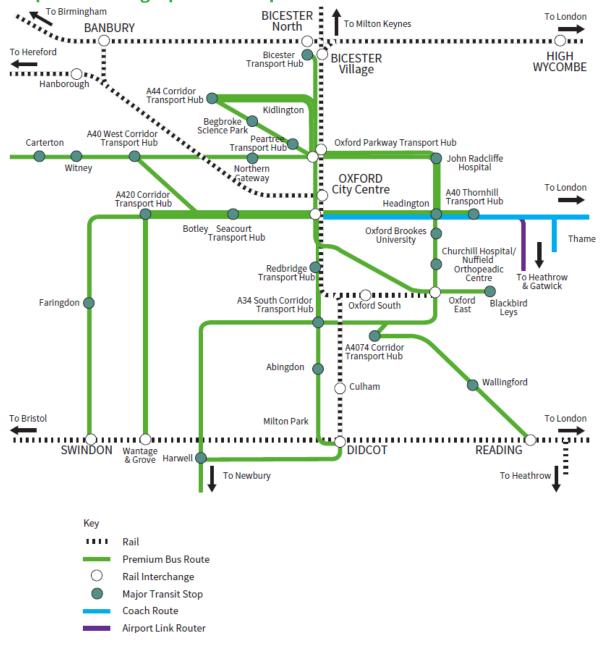


Public Transport

The public transport network across central Oxfordshire combines high frequency interurban bus corridors, with local rail connections on main lines.

We propose a strategic public transport network for the central Oxfordshire area (see Proposed strategic public transport network, below), which continues to operate with Oxford as the area's central hub. The wider network shows how enhanced and attractive inter-urban bus routes will continue to play a vital part of the public transport network, by connecting both existing areas and those where development is planned. The bus network will sit alongside an expanded local rail network, which complements and provides strategic interchange between the two.

Proposed strategic public transport network





Bus

Central Oxfordshire's bus network has traditionally been very successful, with exceptionally high levels of demand and frequency. As a consequence, there are more than 20 buses per hour on some radial routes in Oxford with early and late-night services. Complementing local urban services are an established network of inter-urban bus services radiating from Oxford and extending out to market towns including Abingdon, Banbury, Bicester, Thame, Wallingford, and Witney. These inter-urban routes are a distinctive feature of Oxfordshire's bus network. Their levels of service are arguably not matched anywhere else in the UK.

Projecting forward, significant planned growth means that the role of public transport across the central Oxfordshire area will become increasingly important as a facilitator in moving large numbers of people efficiently around the transport network.

Despite a potential strong future basis for bus patronage, over the years leading up to the COVID-19 pandemic, bus patronage had been falling across Oxfordshire. This has been due to increasing levels of traffic congestion, delays to bus services and poor journey reliability. Across the wider county in 2019, 82% of bus passengers indicated that they were satisfied with 'on-bus journey times.²⁷ This level of satisfaction is below levels of many other transport authority areas, with 'congestion/ traffic jams', the most frequently cited reason affecting journey times.

In addition, the COVID-19 pandemic resulted in a significant further fall in bus patronage. This was felt particularly strongly across the central Oxfordshire area. As a result, bus patronage in the Oxford area is currently (June 2022) at around 75% of equivalent pre-COVID-19 pandemic levels.²⁸

Promptly reversing the downward trend in bus patronage is essential to meeting our targets of reducing car travel and delivering a zero emission transport network. Achieving this requires a co-ordinated package across Oxfordshire, as outlined in the Oxfordshire Bus Service Improvement Plan ²⁹. Through the Enhanced Partnership (EP) with local bus operators, we propose the following measures within central Oxfordshire:

- Invest in bus priority measures including traffic filters, priority at signals and bus lanes
- Invest in environmentally friendly vehicles, initially through the Zero Emission Bus Regional Areas (ZEBRA) grant.

Delivering these measures will make it possible to restore and increase bus frequencies on existing routes as well as restore and create new direct bus routes across central Oxfordshire for example, between the county towns and Oxford's eastern arc area. Over time, investment in newer bus fleets and improved user experience are also likely.

²⁹ Oxfordshire Bus Service Improvement Plan



²⁷ Transport Focus, *Bus passenger survey Autumn 2019*, 2020, <u>Bus-passenger-survey-autumn-2019-main-report.pdf (d3cez36w5wymxj.cloudfront.net)</u>

²⁸ Oxfordshire County Council Bus patronage data

Investing in bus priority measures



Action 12 – Deliver bus priority measures along key inter-urban bus routes and on key orbital routes in the Oxford area.

Within Oxford, delivery of the proposed travel demand management measures represents the single most impactful measure to improve and provide for bus priority.

Whilst traffic filters provide bus journey time improvements within the city ring road, it is equally important improvements to bus journey times relative to the car are made both on the ring road and along key inter-urban bus routes. Significant existing commuting into Oxford largely by car, combined with planned development sites on the edge of the area, increases the need for further bus priority measures on these corridors.

A number of bus priority measures on the Oxford ring road or along inter-urban routes are already committed, including:

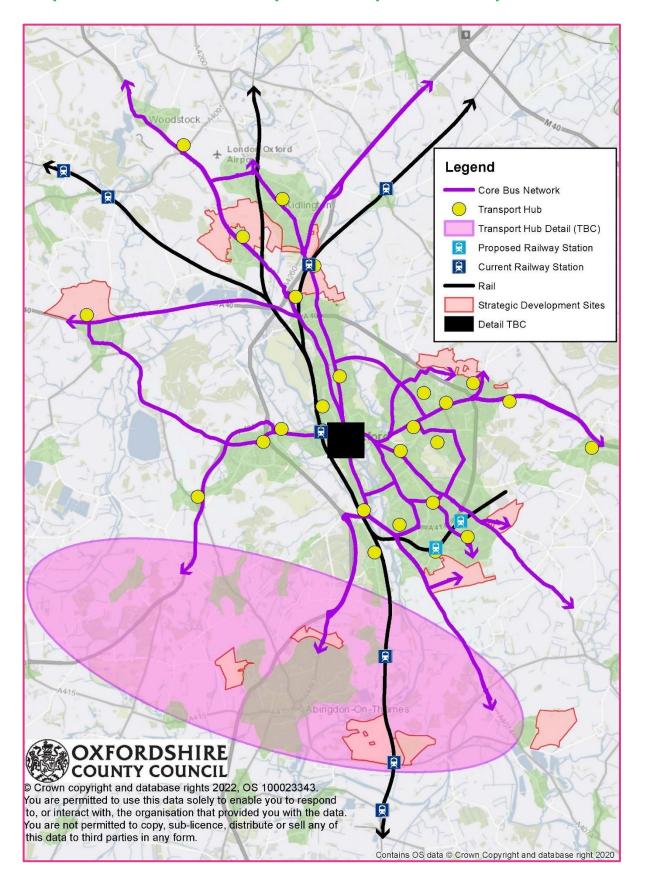
- A40 eastbound bus lane between Eynsham park and ride and A40/A44
 Wolvercote roundabout. To be delivered by 2025.
- A40 westbound bus lane between A40 Dukes Cut and Eynsham park and ride. To be delivered by 2025.
- A44 southbound bus lane between Cassington Road and Peartree Interchange to be delivered by 2024.

These committed bus priority measures are likely to lead to further bus priority being considered on other key bus corridors such as the A34, B480, A420, A4074 and the Oxford Eastern bypass. Together these form the basis of a core bus network across the central Oxfordshire area. Features of a core bus network are:

- a regular frequency of service (at least every 10-15 minutes) throughout the day and week
- high levels of dedicated bus priority throughout their routes
- strict kerbside controls
- link directly between and across the areas network of transport hubs.



Proposed central Oxfordshire public transport and transport hub network







Investing in environmentally friendly vehicles



Action 13 – Alongside partners, deliver a zero emission local bus fleet across Oxford by 2024/25 and a fully zero emission bus fleet by 2030.

A significant proportion of the central Oxfordshire area, including the whole of Oxford, is covered by an Air Quality Management Area where the annual mean nitrogen dioxide (NO₂) threshold levels are regularly exceeded. Road transport is the main source of emissions (68% in Oxford) causing air quality exceedance. Up to 70% of emissions accountable to transport come directly from buses in locations like St Clements Street / The Plain where there are high bus flows.^{30 31}

Working with local bus operators, we will roll out a fleet of zero emission buses across the area. Funding awarded through the Zero Emission Bus Regional Areas (ZEBRA) scheme together with council and bus operator funding, will see the first phase of this ambition realised through the delivery of 159 electric local buses. Covering a large proportion of the COTP area, these buses will be used on routes in Oxford by 2024.

Using alternative fuel sources on longer inter-urban bus routes represents a bigger challenge; however, there are aspirations that hydrogen fuelled vehicles may play a role, to ensure that the local bus fleet of urban and inter-urban services will be zero emission by 2030.

Demand Responsive Travel

In addition to conventional fixed route bus services, we remain open to options for Demand Responsive Travel (DRT) bus services where they may fulfil a role in meeting local transport need. This could include a service to areas which are traditionally challenging to serve through conventional fixed bus services. The 'Pick Me Up' service run by Oxford Bus Company across the Oxford area in 2018 represented an example of how such a service could be formed, although operating conditions would need to be radically improved to enable commercial operation.

https://www.oxford.gov.uk/downloads/file/8003/air_quality_annual_status_report_2021



Ricardo, Oxford Source Apportionment Study, 2020, page 30,
 https://www.oxford.gov.uk/downloads/file/7320/oxford_source_apportionment_study
 Oxford City Council, Air Quality Annual Status Report, 2021, page iv,

Rail



Action 14 – Alongside partners, deliver:

- a) Oxford Station enhancements
- b) a passenger rail service and two new passenger stations on the Cowley Branch Line
- c) local rail capacity and service frequency enhancements

As set out in the Oxfordshire Rail Corridor Study³², across the central Oxfordshire area there are opportunities to increase the frequency and capacity of local rail services at locations of planned significant growth such as Culham, Cowley, Hanborough and Oxford Parkway. An enhanced local rail offer, complementing the bus network, provides greater opportunity for sustainable local travel.

A subsequent rail strategy for the county will set out the county council's wider aspirations and details for rail improvements across the county.

Developing the local rail network across the COTP area requires delivery on a number of key interventions, most notably Oxford Station enhancements and Cowley branch line. Other rail investment priorities for the central Oxfordshire area include:

- Didcot-Oxford capacity enhancements requirement for additional track capacity to accommodate demand, enable new/extended services and fully realise rail potential as an alternative to the A34 corridor
- Increased connectivity and frequency of services between:
 - Bicester and Didcot
 - Oxford and Hanborough
 - Oxford and Culham

Oxford Station Enhancements

Rail infrastructure at Oxford Station is close to full capacity and requires capacity enhancements to accommodate an increase in services planned for 2024. Delivering capacity enhancements for passengers and trains at Oxford station is therefore a fundamental first step to delivering wider rail improvements in the area.

Delivery of a new western entrance and additional line capacity at the station to be delivered by Network Rail has already been approved. These works will be completed by 2024 and will include a widening of A420 Botley Road under the railway bridge. This will provide wider pavements for people walking and segregated cycle lanes.

Working alongside Oxford City Council and Network Rail, we support the proposal for an updated Oxford Station masterplan reflecting the requirements for:

- major rail capacity and passenger improvements including accommodation of East-West rail services
- significantly enhanced sustainable transport interchange facilities i.e., bus and taxi provision

³² Oxfordshire Rail Corridor Study (networkrail.co.uk)





 significantly enhanced and accessible cycle parking facilities and pedestrian focussed environment.

Joint work on the Oxford Station masterplan is expected to commence in later in 2022.

Cowley Branch Line

It is proposed the existing rail line, currently used for freight to and from BMW Group Plant Oxford in Cowley, is reopened for passenger services for the first time since 1963. Two new stations are proposed on the route:

- 1. Oxford East At Blackbird Leys servicing the local community, Oxford Business Park and the strategic housing site at Northfield
- 2. Oxford South –At Littlemore servicing the local community, Oxford Science Park and the strategic housing site at Grenoble Road

Active travel and public transport links will be prioritised for connections to and from the new stations.

Upgraded rail services are expected to act as an extension of the London Marylebone services in the first instance, with up to two passenger services an hour, in addition to freight services. Subject to funding being secured, the earliest a service is considered deliverable is 2026.

The route will be delivered by Network Rail and will need significant line upgrades. Subject to funding being secured, the earliest a service is considered deliverable is 2026.

Transport hubs



Action 15 – Deliver a transport hub strategy for a network of transport hubs across Oxfordshire

We are focusing on the transport hub concept (also known as mobility hub) as a way to create new and improve existing transport interchanges. A transport hub is a recognisable place where people can interchange between modes of transport and access a range of shared and public transport services for part or all of their journey. Transport hubs can also include additional facilities such as shops or kiosks and provide up to date travel information to both attract and benefit users. For example, transport hubs may combine shared bikes (including electric bike or motorcycle), 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.

Transport hubs are critical to reaching our targets to replace or remove a quarter of current car trips in Oxfordshire and deliver a net-zero transport network by providing places that people can access public transport, shared transport, and bike hire.



³³ CoMoUK, Transport hubs Guidance, What - CoMoUK

Further studies will bring forward the concept of transport hubs across Oxfordshire and look at existing facilities and how to adapt and expand them where necessary. As plans develop, a focus on how to improve interchange for disabled people at transport hub sites will be essential to ensuring practical access for all to our transport networks.

To date, the Park & Ride sites have fulfilled some of the roles transport hubs could offer. Traditionally, they been very successful at reducing congestion and supporting a shift to sustainable travel modes. Since the COVID-19 pandemic; however, these sites have become underutilised as travel habits and patterns have shifted.

Intercepting car journeys closer to source where attractive sustainable travel options are available is a desired principle. It might therefore be the case that on some transit corridors, multiple transport hubs of varying scales are an appropriate response.

Examples of transport hubs in Bremen³⁴ (left) and Vienna (right)³⁵



Taxis and Private Hire

Taxis and private hire vehicles will continue to be an important part of a balanced central Oxfordshire travel network. We will work to ensure a high level of accessibility for taxis and private hire services is afforded at transport hubs and transport interchanges across the COTP area.

Consistent with the council's proposals to deliver an expanded ZEZ in Oxford, we will work with taxi and private hire operators to encourage an investment in electric vehicles for their fleets.

https://www.bildstrecke.at/picture.php?/22964





³⁴ https://commons.wikimedia.org/wiki/File:Mobil.punkt_in_Bremen.jpg

Delivering efficient movement of goods and services



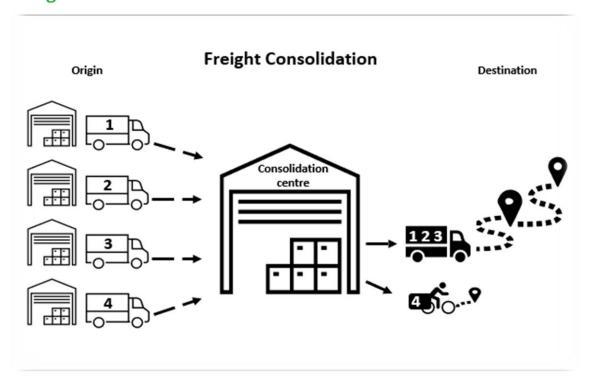
Action 16 - Deliver a freight consolidation feasibility study and first / last mile delivery pilot.

Deliveries and servicing are an essential part of a thriving economy. Delivering a net-zero transport network by 2040 cannot be achieved without considering how freight operates.

The amount of goods being moved has been steadily increasing over the last 10 years (2009-2019).³⁶ As trends in how goods are moved and received and customer expectations change, it is necessary to review freight and delivery processes, to ensure that they are being undertaken in a manner which is efficient for the transit network and works towards our targets to reduce vehicle use, emissions and improve road safety.

Reducing the number of freight vehicles on the network could be achieved through a transfer and consolidation of freight and delivery activity, through establishing freight transfer and consolidation centres. Further studies are required to fully explore practicalities, networks and how this could operate across the central Oxfordshire area. A study will also need to consider how an additional stage of micro-consolidation sites, which for example could promote onward freight movements by e-van and cargo bike for first/last mile deliveries, could work in combination with larger strategic consolidation sites. Geographically the study will consider if there is benefit in consolidation centres being colocated with transport hubs.

How freight consolidation works



³⁶ Department for Transport, *Domestic road freight statistics 2019*, 2020, <u>domestic-road-freight-statistics-2019.pdf</u> (<u>publishing.service.gov.uk</u>)

Whilst cycling first/last mile freight options can complement road freight it will not replace it entirely. Measures like the ZEZ are therefore key interventions to encouraging the uptake of electric vehicles for freight delivery where larger vehicles are needed.

Reducing Heavy Goods Vehicle (HGV) movements



Action 17 – Deliver a safer lorry scheme pilot across central Oxfordshire.

Whilst Oxford has an extensive 7.5 tonne weight restriction, many heavy goods vehicles (HGVs) still enter the city in order to service businesses, properties, and development sites. Their presence on local streets is often a significant safety concern for those who might consider active travel options like cycling or walking. ³⁷

Where HGVs and larger vehicles require access to the city's streets, it is important that they operate safely. The council has adopted a county Vision Zero approach, which seeks to eliminate all fatalities and severe injuries on Oxfordshire's roads and streets. As part of this wider county initiative, we will investigate the implementation of a Safer Lorry Scheme.

An example of a Safer Lorry Scheme is operated by Transport for London where vehicles over 3.5 tonnes are required to meet specific safety requirements such as:

- Be fitted with Class V and Class VI mirrors giving the driver a better view of cyclists and pedestrians around their vehicles
- Be fitted with side guards to protect cyclists from being dragged under the wheels in the event of a collision.

It is proposed that a safer lorry scheme pilot be run in all or part of central Oxfordshire before being rolled out across the whole of Oxfordshire.

³⁷ Oxfordshire County Council, *Oxfordshire Cycle Survey 2019 Summary Report*, <u>Oxfordshire CYCLE SURVEY SUMMARY REPORT</u>





Theme Two: Healthy, fair, and liveable communities

Enabling and encouraging people to 'live local' is essential to meeting our targets to reduce car trips, increase cycle trips, and deliver a net-zero transport network. Living locally is about people having the range of amenities, facilities, and services they need for everyday life available within their neighbourhood. Having what we need local to us reduces travel demand and increases the opportunity to travel by walking, cycling or public transport instead of using the car. This in turn has a range of positive physical health, mental health, and social inclusion benefits.

Demand for travel is generated by a number of different factors. National data shows that leisure related trips (26%) represent the most common trip purpose.³⁸

Trip Purpose Data³⁹

Trip purpose	% of Trips	Average Distance	Travel Mode
Leisure	26%	10.9 miles	70% car, 16% walk, 2% cycle
Shopping	19%	3.9 miles	65% car, 25% walk, 1% cycle
Commuting	15%	9.1 miles	61% car, 12% walk, 4% cycle

There is significant opportunity for more trips to be made locally within distances that are easily walkable or cyclable for a significant proportion of the population. In urban environments, for distances less than 3-5 miles cycling is typically the quickest form of travel; walking is also the most time efficient travel mode for very local trips.

Enabling people to feel confident about walking and cycling for local trips is central to our Vision Zero approach, which seeks to eliminate all fatalities and severe injuries on Oxfordshire's roads and streets. To realise this vision; however, requires a change of approach from the current situation where at a national level people walking are 17% more likely to be killed or seriously injured on minor roads for every mile a vehicle travels than on major roads.⁴⁰

Living locally

The 20-minute neighbourhood concept encapsulates the living local principle and is based on enabling everyday facilities to be within a short return walk or cycle trip from home.

Large proportions of the area's urban population are already within a short walking distance of a range of everyday facilities; however, this accessibility is not universal across the area.

⁴⁰ https://www.icevirtuallibrary.com/doi/full/10.1680/jmuen.16.00068



³⁸ Department for Transport, *National Travel Survey: England 2019*, 2020, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906276/n ational-travel-survey-2019.pdf

³⁹Department for Transport, *National Travel Survey: England 2019*, 2020, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906276/national-travel-survey-2019.pdf

With significant housing growth planned for the urban edge of Oxford, it is essential that improvements to the existing transport networks, including walking and cycling routes, based on the existing or proposed location of facilities, services and amenities, and living locally principles are embedded as part of new developments. Key to this is providing walking, cycling and public transport routes to and through district centres, and co-locating core facilities in close proximity.

Toolkit of transport measures for liveable streets



Action 18 - Develop and support implementation of a local toolkit of transport interventions that support the 20-minute neighbourhood approach and work to the principles of the healthy streets approach.

Developing liveable communities across the COTP area is embedded with wider planning and land use decisions. This will require close working with Local Planning Authority partners and with local communities to understand their needs.

In developing district centres and liveable communities, the county council has a role to play in providing safe streets and attractive active travel options. We will work with local communities to develop and deliver a toolkit of potential transport interventions. These will collectively work towards creating attractive, inclusive, liveable, safe streets for communities. Transport interventions in the toolkit could include:

- A package of co-ordinated local traffic filters and/or vehicle movement restrictions
- Timed vehicle restriction measures around schools and on neighbourhood streets to encourage child play and active travel
- Traffic calming measures. (i.e., reduced speed limits to 20mph, speed cushions/ chicanes, raised tables etc)
- Local active travel infrastructure (i.e., crossings, bridges, cycle parking, cycle hangers etc)
- Public realm measures such as parklets where on-street car parking space is repurposed as a social space with seating and planting
- Community activation measures to ensure that those with greatest need benefit from these improvements e.g., Ready Set Go by Oxford Hub⁴¹; You Move.⁴²

⁴² GO Active, You Move, You Move | GO Active (getoxfordshireactive.org)





⁴¹ Oxford Hub, Ready Set Go, Ready Set Go — Oxford Hub

Artist's impression of urban centre healthy place shaping principles⁴³



Within local communities and district centres, there is also an opportunity to develop the services and facilities local transport hubs may be able to offer beyond those of transit and interchange. This could include facilities for virtual working and enhanced broadband connectivity, or other health, education, and leisure services.



⁴³England's Economic Heartland

Theme Three: A dynamic and innovative place

We want the central Oxfordshire area to be recognised as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise, and research excellence.⁴⁴ Transport and connectivity will play a significant role in helping achieve this aim, which will be guided by a strategy focussed on delivering places that put people first.

A people focussed plan for Oxford city centre



Action 19 – Alongside partners, deliver a City Centre Movement Framework for Oxford.

Oxford city centre and the development sites at Oxpens and Osney Mead are significant areas of focus for existing and future innovation. The city centre and West End have the county's largest concentration of retail, cultural and social assets and on a daily basis cater for a significant number of people and their travel movements, including approximately 7 million tourists visit per year. Pre-COVID-19 pandemic, on average 150,000 people journeyed into and out of the centre each day.

The city's historic core and narrow medieval streets create competition between uses. To move people more efficiently in this context requires a reallocation of existing road space from cars to public transport, walking and cycling. Currently, areas like St Giles and Broad Street disproportionately provide large sections of streetscape to motorised vehicles, compared to the significantly greater number of active travel users in these areas who comparatively have very limited formal space.

The proposed travel demand management measures, including traffic filters and a ZEZ, are expected to play a significant role in helping to improve the priority for people focussed place in the city centre.

Locations like St Giles and Broad Street have significant potential to become active civic spaces and places for people to spend time. At the moment, opportunities for markets and other regular organised activities in the city centre are broadly limited to Bonn Square, Gloucester Green and Leiden Square in the Westgate. Measures like those implemented at Frideswide Square and through the Broad Meadow trial at Broad Street give an example of what could be achievable across these large civic spaces.

⁴⁶ Oxfordshire County Council, Oxford LCWIP, 2020





⁴⁴ Oxfordshire's Strategic Economic Plan, 2016

⁴⁵ Oxford City Council, Quick facts, https://www.oxford.gov.uk/info/20124/economy/454/economic_statistics

Artist's impression of potential reallocated space at St Giles and Oxford High Street



Case Study - Broad Meadow, Broad Street, Oxford

In 2021, the western part of Broad Street in Oxford was transformed into "Broad Meadow" – a temporary outdoor space containing wildflower meadows, lawns and seating on land normally occupied by car parking and road space. During its installation, the space was used for a range of civic activities including café seating, street performers and market stalls. Following the success of the scheme, further proposals to alter the layout of Broad Street are being progressed by the county council for implementation in later 2022.





The COVID-19 pandemic also provided an opportunity to reimagine how spaces across the city centre could be transformed to a more people focussed environment. With support of the city council more than 50 city centre businesses were provided with support for outside tables and chairs, including the part-pedestrianisation of St Michael's Street and George Street (temporarily).⁴⁷ As the city develops to support more housing provision, night-time and leisure uses as part of a successful, 24-hour city centre offering, it will be increasingly important to readdress this balance to develop a human scale, people focussed city centre, we plan to do this through developing, with partners, a City Centre Movement Framework.

We will seek to balance a people focused city centre which provides:

- attractive cross city connectivity and interchange facilities for people using cycles and public transport
- access for people with disabilities
- access for deliveries.

Tourist Coaches in the City Centre



Action 20 - Deliver attractive tourist coach drop off and pick up facilities in the city centre and convenient lay over facilities, consistent with proposals in a City Centre Movement Framework

Each year circa £1 billion is generated by Oxford's visitor economy. Tourist coaches dropping visitors in the city centre are often an efficient and sustainable way of transporting people in and out of the centre. The aim is therefore not to prevent coaches coming into the city centre, rather it is to prevent them from parking for long periods in unsuitable places.

Developing a plan for tourist coaches needs to be embedded as part the City Centre Movement Framework noting a desirability to:

- Look for tourist coach drop off / pick up facilities proximal to Westgate/New Road/Castle Street/Thames Street/Speedwell Street/southern St Aldates.
- Identify convenient layover facilities for tourist coaches outside of the city centre.

⁴⁷ Oxford City Council, Oxford City Centre Action Plan 2021-2030, 2021, HYPERLINK https://consultation.oxford.gov.uk/regeneration-economy/oxford-city-centre-action-plan/supporting_documents/211115_Oxford_CCAP_Report_FINAL_CONSULTATION%20DRAFT_LR.pdf Oxford City Centre Action Plan 2021 - 2030: Consultation Draft



Emerging Innovations

Carefully managed, innovative, and emerging technologies present opportunities to shape transport links and develop people focused places. Across central Oxfordshire we will prioritise new technology that supports the strategic transport directions of this strategy. We will be technology-neutral in our approach to achieving our transport outcomes by seeking the best available solution to a given problem.

E-scooters/E-Bikes



Action 21 – Deliver an e-scooter hire scheme across central Oxfordshire, subject to ongoing trial performance and national legislation

Over recent years, central Oxfordshire has hosted trials of a number of micromobility initiatives. These have included the privately operated dockless bike hire schemes and more recently, the county council has overseen an e-scooter public hire trial operated by Voi.

Alongside a developed active travel and public transport offer, a high-quality micromobility offering can play a significant role in improving connectivity and accessibility. The county council will carefully review where this is proposed to ensure that such service provision does not undermine public transport offerings or active travel benefits.

Initial learnings from the e-scooter trials indicate that a regulated approach to matters including parking is highly desirable, for example to prevent footpath obstruction.

Where initiatives are legislated for and supported by Central Government, we will look at opportunities to trial schemes across central Oxfordshire. This could include phased expansion of the Oxford e-scooter trial beyond the immediate Oxford city area.

Case Study - Oxford E-scooter trial

As part of a wider government led initiative, a public hire e-scooter trial was launched in Oxford in February 2021 in partnership with Swedish e-scooter operator Voi Technology.

A mixture of over 750 on-street hire e-scooters, together with a long-term rental offer are made available as part of the ongoing trial which is due to conclude in November 2022. As of June 2022, over 300,000 rides have been completed as part of the trial by over 30,000 different individuals



Increasing the use of Car Share

Car share schemes reduce car ownership whilst recognising that car travel will continue to be necessary for some trips. Car sharing enables people to walk, cycle and use public transport for the bulk of their trips while having access to a car for infrequent trips where that is the most suitable mode.

In the Oxford area, there is already an established commercial car share market. One of the challenges for car share providers is securing dedicated parking space. We will support:

- measures to accelerate growth of the car share fleet
- providing more on-street parking for car share vehicles
- opportunities to leverage supply of off-street parking for car share.

Case Study - ShareOurCars

Launched in September 2021 in east Oxford as a collaboration between Hiyacar and Oxford-based ShareOurCars, the initiative allows those that wish to share or borrow cars on their street between themselves. Only those that are a part of the trial can search for and book the cars available in their closed loop through the Hiyacar app.

There are currently 8 cars and 20 users as part of the initial trial closed loop in east Oxford, with plans for at least another 10 groups across Oxfordshire including across the central Oxfordshire areas of Woodstock, Cumnor, Kennington, Oatlands, Hinksey and North Oxford.

Electric vehicle charging and alternative fuel sources



Action 22 - Deliver publicly accessible electric vehicle charging points across central Oxfordshire.

Our ambition is to reduce the number of trips made by car; however, we recognise that cars have a role to play for some journeys where realistic alternatives are not suitable. To manage the air quality impacts of car use and deliver a net-zero transport network by 2040, we will encourage the use of cleaner fuels, including electric vehicles (EV), noting the importance for energy sources to be from low or zero carbon sources. As a space inefficient mode of travel, electric cars continue to add to congestion. As such they sit in the lowest priority group of our Transport Users Hierarchy.

Across central Oxfordshire, a number EV charging facilities are being installed. In Oxford there are 50 on-street chargers as part of GULO and an Energy Superhub at Redbridge Park & Ride has 42 ultra-rapid EV charging points. However, more locations are needed to meet the strategy targets. Future electric vehicle charging infrastructure should also consider a mix of charging provision, e.g. at Transport Hubs and motorcycle parking requirements such as the need for a secure ground anchor.



Locations for new charging facilities will be identified through engagement with local communities and alongside local authority partners. This includes a target to reach or exceed converting 7.5% of local authority managed public car park spaces to fast EV charging by 2025. Increasing on-street EV charging facilities on often narrow historic urban streets; however, is not without challenge.

Consistent with the Oxfordshire Electric Vehicle Infrastructure strategy (OEVIS), we will prioritise investment in EV charging in off-street locations. Provision of publicly accessible EV charging facilities will be especially important for areas within the proposed Zero Emission Zone and across North Oxford, which is anticipated to have the largest proportion of EV take up across COTP area. ⁴⁸

^{%20}DRAFT%20Oxfordshire%20Electric%20Vehicle%20Infrastructure%20Strategy%2020210225.pdf



⁴⁸ Oxfordshire County Council, *Oxfordshire Electric Vehicle Infrastructure Strategy*, 2020, https://mycouncil.oxfordshire.gov.uk/(S(0qslfpunjtwzla330vllet55))/documents/s55283/CA_MAR1621R11%20Annex%203%20-

Funding, Implementation and Monitoring

The Central Oxfordshire Travel Plan covers the period up to 2040. There are measures that can be funded and implemented in the short term and others that will require longer term planning. It can sometimes be the case that the most effective measures towards achieving an aim, can also be the cheapest to implement. The introduction of CPZs across Oxford in restraining some commuter flows within the city represent one example of this. We will look to prioritise the implementation of those measures which represent the best value for money in delivering against the plan's targets.

Funding

Scheme funding comes from a range of sources including:

- Major scheme bids to the Department for Transport (DfT) and other national bidding opportunities
- Council resources including parking income
- Bids for grants from Local Enterprise Partnership such as Revolving Infrastructure Fund and Local Growth Fund
- Community Infrastructure Levy and s106 developer funding contributions
- Devolution gain share
- Other bids and funding sources such as innovation funding such as Horizon Europe and Innovate UK.
- Private investment

We will work to identify funding sources to enable delivery of the LTCP. Key potential funding sources are outlined below:

Developer contributions

Developers either contribute towards improvements to mitigate their transport impacts through direct legal agreements or carry out works themselves under S278 Agreements with the council. In some situations, a Community Infrastructure Levy is also payable to the district or city council, and the county council may be able to agree with the relevant authority to use some of those funds for transport schemes. National policy regarding developer contributions is being reviewed and this strategy will take account of any changes to the ways funding can be sought.

Travel Demand Management Measures

The COTP proposes the travel demand management measures of:

- A Workplace Parking Levy (WPL) to cover areas of Oxford inside the city ring-road.
- A Zero Emission Zone (ZEZ) to cover Oxford City Centre.

As well as a potential to reduce car trips, both a WPL and ZEZ has the potential to generate ringfenced funding which can be directly re-invested into transport measures





within the COTP area. A WPL alone is estimated to generate £40 million funding over a 10-year period.⁴⁹

Funding bids

From time to time, there are opportunities to submit bids to specific grant funding or borrowing opportunities. These come from a range of sources including central government, the Department for Transport and Active Travel England.

Implementation

Whilst delivering change to our streets can take time, responses to the COVID-19 pandemic showed how temporary and experimental measures could be used to quickly deliver fundamental changes to our streets and allow people to begin enjoying the benefits of change as we work towards full delivery.

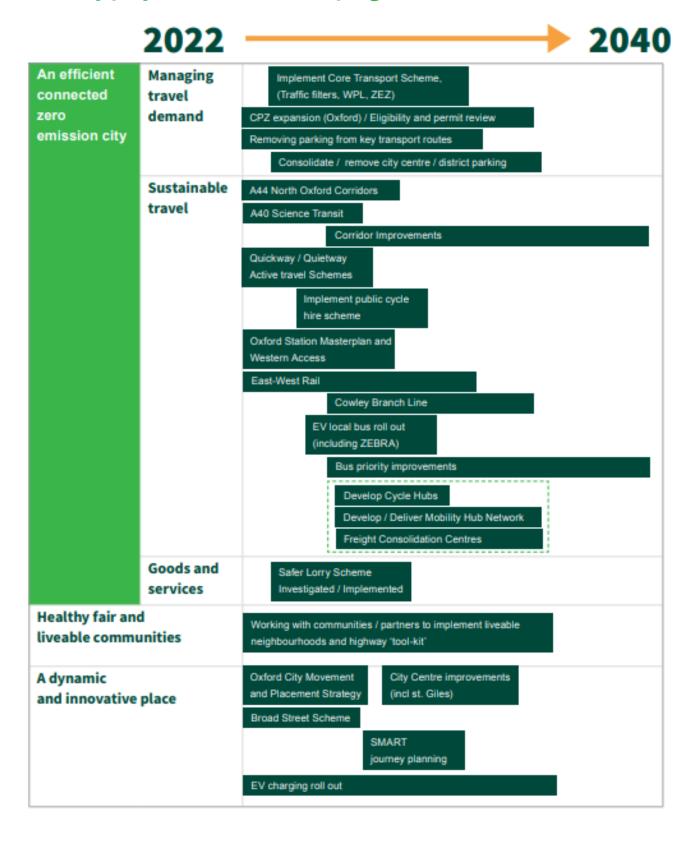
Where appropriate, we will use temporary interventions to 'live trial' major change, allowing proposals to be tested and, where necessary, refined. This is already being implemented on schemes like the Zero Emission Zone trial in Oxford city centre. Where improvement or maintenance schemes are likely to cause significant impact to the transport network, this can also provide an opportunity to trial initiatives to ensure their outcomes are consistent with the strategy. We will consult on any changes made to our streets in this way prior to any trials becoming permanent. We will also work closely with other local authorities to ensure the impacts of our trials are understood both within and beyond the central Oxfordshire area. This approach will allow people to better understand the nature of proposed changes and provide feedback based on real experience

Phasing and Delivery

The major projects and programmes that will be delivered by the Central Oxfordshire Travel Plan are summarised below. Across the plan period, there are expected to be a number of other schemes which emerge across our transit networks, including developer led schemes which are not identified. The delivery and timing of this programme will be subject to further consultation for individual projects and programmes. It will need to also consider project interdependencies and wider network co-ordination of works.

⁴⁹ Oxfordshire County Council, *Workplace parking levy*, https://www.oxfordshire.gov.uk/residents/roads-and-transport/connecting-oxfordshire/workplace-parking-levy

COTP key projects and indicative programmes







How we will measure success

The strategy has set out the actions we intend to deliver, in order to meet the targets and aspirations of the Central Oxfordshire Travel Plan and the wider Oxfordshire Local Transport and Connectivity Plan.

We will need to establish a baseline from which to begin measuring our success. This will be within the first year of adoption of the strategy. From then on, monitoring of the Central Oxfordshire Travel Plan will be reported on a regular basis. We will work closely with colleagues in academic institutions and other relevant organisations to identify methods to measure success for those interventions that do not have clear data sources.

Progress on delivering the strategy will be undertaken through the monitoring of a set of key performance indicators (KPIs) which will take into account the impacts of population growth.

We have not identified specific targets for all of the KPIs. Instead, all policies and schemes are working towards delivery of our headline targets. The KPIs will help to provide more detail and identify potential areas for further work. As part of the review process, we will assess the effectiveness of the KPIs and look at other ways of monitoring progress.



Key Performance Indicators

Focus area	KPI	
Transport emissions	Road transport emissions (Mt CO2)	
	Percentage of residents walking / cycling	
Walking and cycling	Number of walking / cycling trips	
Physical activity	Percentage of adults / children meeting physical activity recommendations	
	Healthy Streets score improvements	
Healthy Place Shaping	20-minute neighbourhood index improvements	
	Total number of KSI	
Road safety	Number of KSI per mode	
	Number of bus passenger journeys	
	Bus journey times	
Public transport	Number of rail passenger journeys (rail station entries and exits)	
	Number of park and ride passenger journeys	
	Percentage of premises with superfast broadband	
Digital connectivity	Percentage of premises with full fibre broadband	
	Transport emissions in Oxfordshire	
Air quality	Years of healthy life lost due to air pollution	
	Car vehicle miles in Oxfordshire	
	Number of car trips	
Private car	Number of registered battery electric vehicles	
	Car ownership	
	Percentage of roads in good/fair/poor condition	
Road highways maintenance condition	Percentage of pavements and cycleways in good/fair/poor condition.	





Working in Partnership

We recognise that we cannot deliver this strategy on our own and will work with a range of partners to achieve the vision, aims and actions for central Oxfordshire. This will include working in partnership with:

- City residents and residents' associations
- City businesses and institutions
- City and District authorities and local councils
- Local public transport operators
- Emergency Services
- Property developers and the construction industry
- Transport industry and representative bodies
- Campaign organisations and special interest groups
- Developers of new transport technologies

Updating the Central Oxfordshire Travel Plan

This plan is a living document and will be reviewed and updated within 5 years of adoption. This process will ensure the plan is responsive to a changing context including developments in transport technology, that it is on track to deliver on identified targets and that it reflects the priorities of the local population. Updates will be informed by in depth engagement and analysis of economic, social and transport trends, and will be subject to engagement prior to adoption.



Glossary

Active travel: 'making journeys in physically active ways – like walking, wheeling (using a wheelchair or mobility aid), cycling, or scooting'.⁵⁰

Air Quality Management Area (AQMA): areas where air pollution levels exceed the accepted national air quality objectives.

Blue Badge Holders: Permit issued to those meeting specific health criteria to allow them to park in a disabled bay or on double yellow lines.

Bus priority measures: interventions that give priority to buses on roads, with the aim of reducing bus journey time and increasing service reliability. These measures can include segregation and traffic signal control in favour of buses.

Car sharing: a type of car rental from a central pool of cars.

Carbon accounting: a process organisations engage in to quantify their greenhouse gas emissions and consequently identify steps to limit these emissions and thus reduce their climate impact.

Climate emergency: the serious consequences of changes in the world's weather and the urgent action required to reduce or prevent these impacts of climate change.

Community activation: methods to engage and empower the community to facilitate change.

Connector route: cycle routes that cover shorter distances and connect urban edges.

Controlled Parking Zone (CPZ): 'an area where parking is only permitted in designated parking bays and for specified times'.⁵¹

Copenhagen crossing – crossings that give priority to people walking who wish to cross side roads.

Demand responsive transport (DRT): a flexible mode of transportation that adapts to the demands of its user groups.

Enhanced Partnership: Formal partnership between bus operators and local authority to plan the future provision of bus services and wider matters impacting bus service provision.

Equality: providing everyone with the same opportunities.

⁵¹ Oxfordshire County Council, *Controlled parking zones (CPZs)*, https://www.oxfordshire.gov.uk/residents/roads-and-transport/parking/parking-permits/controlled-parking-zones



⁵⁰ Paths for all, About Active Travel, https://www.pathsforall.org.uk/about-active-travel

Freight consolidation: where several deliveries from different sources that have the same destination are collected at a specified location and sent by a single mode of transport to the destination.

Key performance indicator (KPI): a quantifiable measure of performance over time for a specific objective.

Living locally – people having the range of amenities, facilities, and services they need for everyday life available within their neighbourhood. This then reduces the need to travel and increases the opportunity to travel by walking, cycling or public transport instead of using the car.

Local Cycling and Walking Infrastructure Plan (LCWIP): strategic policy document that identifies improvements to active travel infrastructure at the local level.

Local Transport and Connectivity Plan (LTCP): Oxfordshire County Council's new Local Transport Plan.

Micromobility: small, lightweight vehicles that operate below 16mph and include people propelled and electric modes such as bicycles, e-bikes, shared scooters, e-scooters, skateboards that take people short distances.

Net-zero: 'the balance between the amount of greenhouse gas (e.g., carbon dioxide) produced and the amount removed from the atmosphere. Net-zero is reached when the amount of greenhouse gas added is no more than the amount taken away'. ⁵² Different methods can be used to achieve this, including not releasing emissions to begin with and removing emissions from the atmosphere.

Placemaking: multi-faceted approach to creating public places that support health, well-being and happiness and increase people's connection to the place, thereby maximising the shared value of public places.

Public realm: any space that is open to everyone and free.

Primary Routes (Quickways): cycle routes that form the core of the cycle network and extend along main radial/ arterial transit routes

Secondary Routes (Quietways): cycle routes which offer a lower trafficked alternative route choice between key trip attractors and residential areas

Segregated cycle lanes: a lane solely for people cycling that is separate from people walking and motor vehicles. Segregation can be provided in many forms, including road markings, raised kerbs and bollards.

Severance: the lack of connectivity between two places that makes accessibility challenging; this can be caused by a busy road for example separating an origin and destination.

⁵² National Grid, *What is net zero?* https://www.nationalgrid.com/stories/energy-explained/what-is-net-zero

Technology-neutral approach: choosing the most appropriate technology to meet needs rather than being influenced by pre-determined requirements.

Traffic filters: points on roads through which only certain vehicles may pass.

Transport hub: a recognisable place where there is a range of different shared and public transport modes. They also include additional facilities and information features to both attract and benefit transport users.

Travel demand management: strategies and policies designed to reduce the need to travel or change travel patterns e.g., away from peak times.

Vision Zero (road safety): no death or injury on roads is accepted and an approach to road safety is taken to ensure this.

Wayfinding: directional signage for people walking and cycling. This can show distance and time to key destinations.

Workplace Parking Levy (WPL): an annual charge to businesses for staff parking spaces at their premises'. ⁵³

Zero Emission Vehicles (ZEV): A vehicle which emits 0g of carbon dioxide from the tailpipe per kilometre travelled.

Zero Emission Zone (ZEZ): An area where all vehicles except those with zero tailpipe emissions are restricted from entering or charged to enter.

20-Minute Neighbourhood: the creation of liveable neighbourhoods where everyday facilities and amenities are within a short walk or cycle trip from home; thus, neighbourhoods should be compact and connected places.

⁵³ Oxfordshire County council, *Workplace parking levy*, <u>https://www.oxfordshire.gov.uk/residents/roads-and-transport/connecting-oxfordshire/workplace-parking-levy</u>



