

Science Vale Movement and Place Plan

Summary Document

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Vision for Science Vale

To be a place that is:

Healthy and pleasant for its communities, that enhances its position as a place for world-leading research, enterprise and innovation and significantly contributes to the economic prosperity of Oxfordshire and the whole of the UK.

To enhance the sense of place, including the mix of rural and urban, by enabling sustainable development, protecting the surrounding natural and historic environment, improving climate resilience, and enhancing biodiversity, whilst also encouraging a shift in travel behaviours.

To have an inclusive, accessible, and integrated transport system, which improves and removes barriers to walking, wheeling and cycling and public transport, whilst reducing traffic congestion and reliance on private vehicles.



Area context

Science Vale is a significant part of Oxfordshire, an area with a concentration of world-class innovative research and enterprise. Spread across the districts of South Oxfordshire (SODC) and Vale of White Horse (VoWHDC), Science Vale covers the towns of Wantage and Didcot, the villages of Culham, East Hendred, West Hendred, Chilton, Ardington, Harwell, Upton, East Hagbourne, West Hagbourne, North Moreton, South Moreton, Sutton Courtenay, Milton, Appleford, Long Wittenham, Little Wittenham, Clifton Hampden, and Berinsfield; as well as the employment sites at Culham Campus, Harwell Campus and Milton Park, as outlined in **Figure SV1**.

It should be noted, the defined area to inform this Movement and Place (MAP) Plan was considered as the most logical approach based on the official boundary for the Science Vale area. Although it is recognised people and communities will move across this boundary and as such, this is recognised throughout this plan. This is particularly recognised between Science Vale and Abingdon-on-Thames and Wallingford, with trips being made into and out of Science Vale for work, school, and leisure.

A significant amount of the northern Science Vale is situated within the Oxford Green Belt, while much of the southern area is situated within the North Wessex Downs National Landscape. The North Wessex Downs is the third largest National Landscape in the UK and covers an area of 1,730 square kilometres.

Science Vale is also home to approximately 73,000 people, primarily centred around Didcot, Wantage, and Grove. These areas are served by a variety of local amenities and services including schools, libraries, community hospitals, shopping centres, and leisure destinations. Between the major employment and residential areas, there is beautiful countryside some of which forms part of the North Wessex Downs National Landscape connected through various cycle routes and pathways.

Science Vale is home to major employment sites with a focus on the sciences, including Culham Campus, Milton Park, and Harwell Science and Innovation Campus, as well as two Enterprise Zones: Science Vale UK and Didcot Growth Accelerator. Additionally, Science Vale benefits from several other employment locations. In 2023, it was estimated that there were more than 41,000 jobs in Science Vale, with this projected to grow to more than 48,000 by 2050.

In between the employment and residential areas in Science Vale there is beautiful countryside for those living, working and visiting the area with some of this area forming a

part of the North Wessex Downs National Landscape. This includes Wittenham Clumps, the largest publicly accessible green space in Oxfordshire. Large parts of the northern part of Science Vale are located within Oxford's Green Belt. The open green space is important for providing recreational opportunities, but also from a health perspective. It is also noted that Science Vale is also located within close proximity to the proposed South East Strategic Reservoir Option (SESRO).

The surrounding countryside outlined above is connected to the towns, village and employment sites in Science Vale through a variety of cycle routes and pathways of varying quality and accessibility, including routes that can be used by equestrians. National Cycle Routes 5 and 544 run through Science Vale, composed of quiet roads, bridleways, byways, and purpose-built paths, the quality of which varies significantly. Further Public Rights of Way provide access to nature, while The Ridgeway, Thames Path National Trails, as well as Vale Way and Oxford Green Belt Way Recreational Routes extend through the area. The Wilts & Berks Canal is a further feature in Science Vale, which is sought to be re-established as a navigable waterway and walking, wheeling, and cycling route along its entire length between Melksham, Wiltshire for the Kennet and Avon Canal and Abingdon-on-Thames for the River Thames.

Geographically, Science Vale is in an advantageous location with good accessibility to a wide range of regional and national destinations by rail, coach, and road, including London, Reading, Swindon, Southampton, Bristol, Cardiff, Heathrow Airport, Birmingham, and Gatwick Airport. Didcot Parkway Rail Station is the busiest station by number of services and the second busiest by passenger numbers in Oxfordshire. It is on the electrified Great Western mainline, connecting Science Vale by rail to London, Bristol, and South Wales, with the Oxford branch running north to Oxford and Banbury. The A34 runs north-south through the Science Vale, providing direct road links to the M4 and M40. The road and rail network are supported by a bus network centred around Didcot, providing connections to Wallingford, Abingdon, Oxford, the John Radcliffe Hospital, Newbury, and Faringdon.

We recognise that Science Vale is a primarily rural area, that has a sparse population, and in some areas, they currently have limited alternatives to using the car as their primary mode of transport. Furthermore, there are areas with a high percentage of elderly people (15% of population are over 65) who also may not be able to access the alternative modes available.

Given its accessible location and the increasing number of employment opportunities, more people are choosing to call this area their home. It is anticipated that Science Vale will grow significantly in the future, with approximately 18,000 new houses planned by 2041 and the population projected to increase to more than 170,000 by 2050, equivalent to the population of Oxford in 2021.

Map of Science Vale

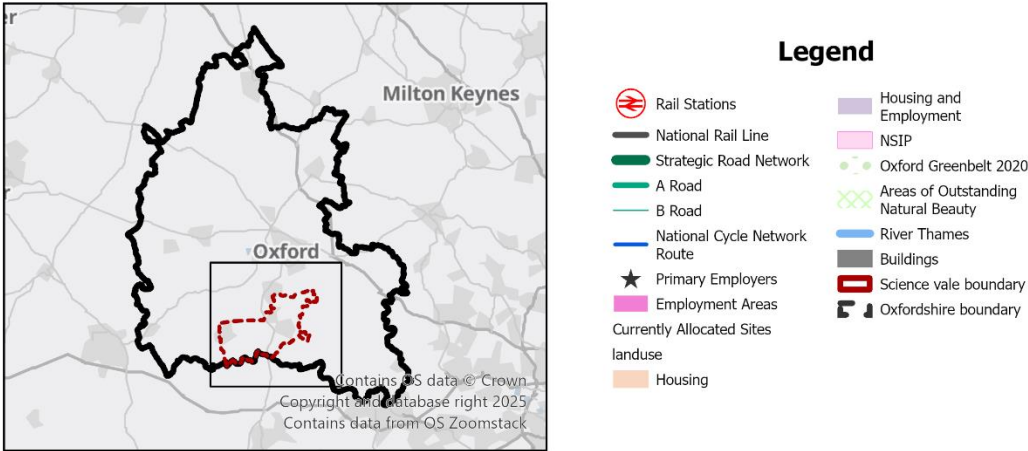
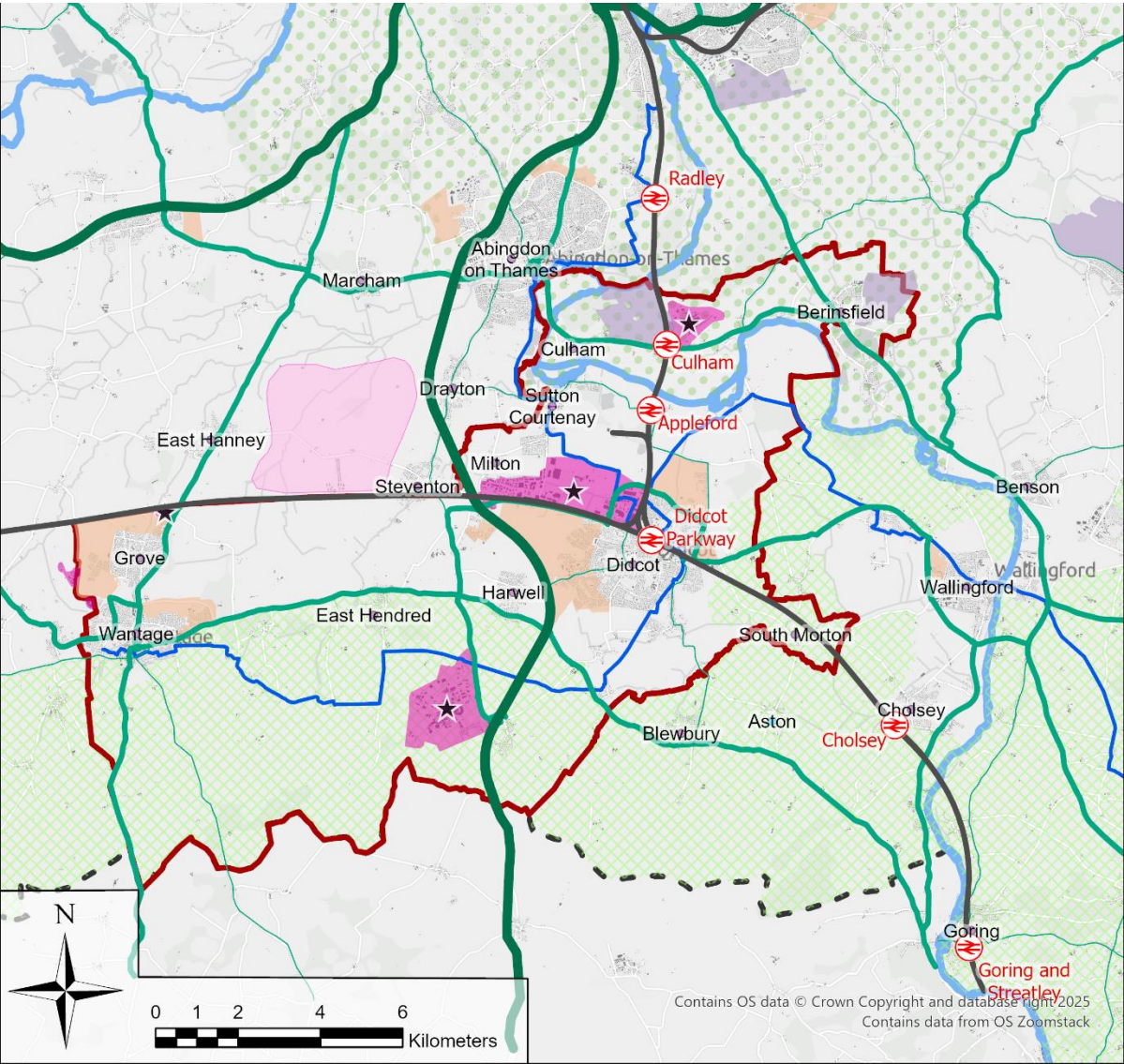


Figure SV1: Map of Science Vale

Key facts and figures

3 Major employment areas with a focus on technology



Milton Park

H^ARWELL

CULHAM CAMPUS

73,000 residents

41,000 workers

170,000 residents in 2050

18,000 new homes by 2041



Other key employers

WILLIAMS RACING

TESCO

ASDA

200 hectares of new employment land by 2041



2 Enterprise Zones

7,000 new jobs by 2050

37 schools

7 medical centres

5 leisure centres

5 libraries

3 museums

2 community hospitals

1 cinema

1 National Landscape



21 bus routes



3 railway stations

Didcot Parkway Station is **second busiest** in Oxfordshire and gets the most services

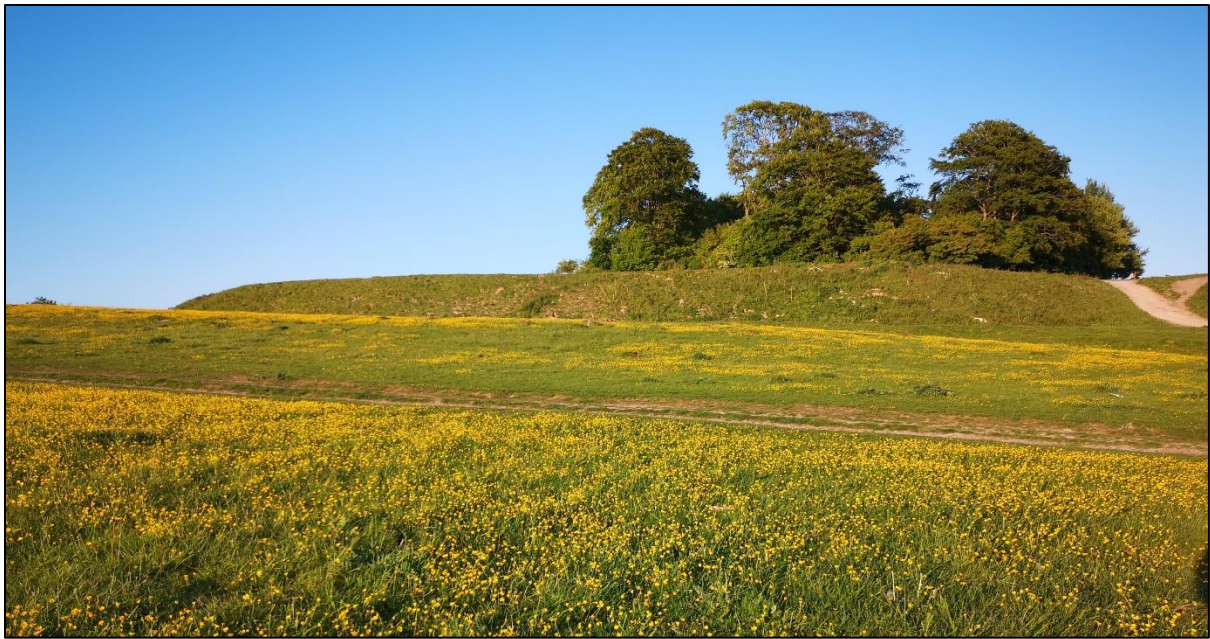
68% of residents travel to work by driving



39% of residents in Didcot commute to work for less than five kilometres

89% of households in South and Vale own a car or van





Challenges and opportunities

Addressing the current challenges in Science Vale will improve the quality of life for residents. The area faces issues such as population and employment growth, traffic congestion, poor air quality, road safety concerns, public transport limitations, climate and environmental risks, and deprivation. The objectives and actions for Science Vale must consider the diverse impacts on different groups, especially given the rural nature of Science Vale, where some residents will continue to rely on private vehicles.

Population and employment growth

Science Vale's population is projected to rise from 73,000 in 2023 to around 170,000 by 2050, an annual increase of about 3,500 people. Without changes in travel habits, this growth will make traffic congestion unsustainable. Major residential and employment developments are planned with 18,000 homes to be delivered, including garden communities in Didcot and Berinsfield, as well as more than 200 hectares of employment land. These developments, both within and outside Science Vale, will drive further demand for housing and employment, making Science Vale a key destination for people.

Economic growth

Science Vale is a major economic hub, accounting for about 4% of England's R&D employment and 13% of the South East's. The area's growth is anchored by three major science and technology sites: Milton Park, Culham Campus, and Harwell Campus. These

sites attract significant investment and are central to the UK's life sciences, fusion research, and space sectors. Williams F1 is also a notable employer, contributing to the area's economic vitality.

Spatial context and population density

Covering approximately 150 square kilometres, Science Vale includes a mix of towns, villages, and employment sites, often separated by rural land. Its population density is lower than nearby urban centres, complicating efforts to provide efficient public transport and active travel options. Biodiversity sites also further limit infrastructure improvements. The area's geography and settlement patterns make car travel common, especially for longer journeys.

Modal share and traffic congestion

Motor vehicle traffic is a longstanding concern, particularly where settlements and employment sites are isolated. Key roads such as the A34 and A4130 experience significant congestion, especially during peak hours. Car dependence is high, with 72% of residents driving to work in 2011. Many commutes are short, offering potential for increased walking, cycling, and public transport use, but currently, most short trips are still made by car.

Air quality

Poor air quality is the largest environmental risk to public health in the UK. Transport is responsible for a significant amount of greenhouse gas emissions in the UK, and we can tackle this by changing the way we travel. In 2023, NO₂ and PM_{2.5} levels exceeded World Health Organisation guidelines. We must reduce the use of polluting forms of transport and provide transport choice. Reducing pollution could yield substantial health and economic benefits, including fewer early deaths and lower NHS and social care costs. Expanding EV charging infrastructure and promoting cleaner transport are key strategies.

Road safety

Road safety remains a concern, with 78 killed or seriously injured incidents recorded in the past five years. Most serious collisions involve motor vehicles, with vulnerable users such as pedestrians and cyclists also affected. The Vision Zero approach aims to eliminate road fatalities and serious injuries by 2050. Minimising road danger is fundamental in creating a safe environment for those walking, wheeling, riding a bike and using public transport.

Public transport

Science Vale's bus network connects the area to nearby towns and cities, but service frequency varies across different locations, with no high-frequency services in the area. Additionally, the quality of the bus infrastructure varies significantly across the area partially in the rural communities. The area is served by three rail stations, with Didcot Parkway being the busiest. Plans for a new station at Wantage and Grove, as well as improving service frequency and station facilities at the existing stations are being developed. Improving public transport is an effective way to address the transport challenges faced in Science Vale. More dependable and more frequent services, as well more inclusive and better infrastructure, is essential for providing transport choice for our communities.

Flooding, climate resilience, and the environment

Some parts of Science Vale are at high risk of flooding, particularly from the River Thames and surface water. Flooding can disrupt transport links and isolate communities. The area contains important habitats that support biodiversity, which helps mitigate climate change and improve health outcomes. Local plans emphasize climate resilience and environmental protection.

Deprivation

While overall Science Vale is among the least deprived area in the country, pockets of deprivation exist, particularly in Berinsfield and parts of Didcot. Deprivation is linked to poorer health outcomes and greater reliance on public transport, which can be problematic if services are unaffordable or inadequate.

Summary of challenges and opportunities

The outlined challenges and opportunities set the context for future objectives and actions. The objectives and actions will help deliver an inclusive transport system within the Science Vale. This will make our streets safer and better for walking, cycling and public transport, enhancing access to schools, workplaces, town centres, villages and district centres

The Science Vale MAP Plan aims for sustainable and inclusive growth, balancing economic development with community needs. Priorities include improving the natural environment, enhancing transport options, making streets safer, and connecting communities. The overarching goal is to create a greener, fairer, and healthier county.

Planned infrastructure delivery

Work has already started to improve transport in Science Vale. There are a number of significant transport infrastructure projects that are either currently in progress or planned. The significant schemes include:

- [Didcot and surrounding area infrastructure improvements \(HIF1\)](#)
- [Wantage Eastern Link Road \(WELR\)](#)
- [Steventon Lights Integrated Transport Scheme](#)
- **Milton Heights Walking, wheeling and cycling bridge**
- **Didcot Northern Perimeter Road 3 (NPR3)**
- [Didcot Central Corridor \(DCC\)](#)
- **Grove Northern Link Road (GNLR)**
- [Strategic Active Travel Network \(SATN\)](#)
- [Frilford and Marcham Improvements](#)
- **Rowstock Integrated Transport Study**
- [Didcot Local Cycling and Walking Improvement Plan \(LCWIP\)](#)
- **Wantage Local Cycling and Walking Improvement Plan (LCWIP)**
- **Local Plan Safeguarded land**
- **Oxfordshire's LEVI Programme**





Objectives and Actions




Objective SV1: Enhance public realm in settlement centres.

- 1.1 Investigate options for the development of schemes for improved public realm, walking, wheeling, cycling, and public transport in:
 - a. Market Place, Wantage
 - b. Central Didcot
 - c. Villages
 - d. Local centres
- 1.2 Work with partners to support the delivery of the improved public realm, walking, wheeling, cycling, and public transport identified in Action 1.1.

Objective SV2: Create a sense of togetherness, place, inclusiveness, and community in new and existing places.

- 2.1 Work with partners to develop and implement schemes that will enhance spaces for people walking, wheeling, and cycling and that create liveable neighbourhoods across Science Vale.
- 2.2 Collaborate with partners to support accessible new or enhanced wayfinding, and introduce murals, artwork, rest places, pocket parks, green spaces, and community parks.
- 2.3 Work with partners to develop themed art installations.
- 2.4 Work with partners to enhance and upgrade timetables (for buses, activities and events) and local guides/ maps for recreational routes (Thames Path, The Ridgeway, Oxford Green Belt Way, and Vale Way) which showcase the local area and its history.
- 2.5 Support the district councils when they update their Joint Design Guide.
- 2.6 Seek opportunities to address sub-standard crossing points (including dropped kerbs and tactile paving) to support accessibility and inclusivity.
- 2.7 Work with partners to remove or improve access control barriers to support accessibility and inclusivity in accordance with our Access Control Barrier Policy.
- 2.8 Investigate opportunities to develop OCC's '[Oxfordshire Way](#)' scheme. The Oxfordshire Way is about providing our communities with support networks that assist with their health and wellbeing.
- 2.9 Work with partners with a view to provide more community hubs and mixed-use hubs.
- 2.10 Work with partners with a view to provide more local work/ hot desk hubs.
- 2.11 Support opportunities to provide multi-use leisure destinations (e.g. bars/café's with a range of leisure facilities), in sustainable locations.
- 2.12 Liaison with workplaces, stakeholders, and partners to join different employment groups together to share ideas and best practice.
- 2.13 Work with schools, developers, and businesses to ensure that Travel Plans contain initiatives to support healthy journeys and assist with delivering and monitoring them.



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- 2.14 Work with partners in the community to remove social and economic factors that prevent people from cycling by providing education, training, and access to free or reduced-price equipment.
 - 2.15 Ensure the continued protection of the areas historic character including in conservation areas as part of new or improved transport projects and infrastructure schemes involving or near to heritage assets or conservation areas.

Objective SV3: Deliver a comprehensive, comfortable, direct, safe, coherent and inclusive walking, wheeling and cycling network.

- 3.1. Work with partners to deliver the walking, wheeling and cycling schemes contained within adopted documents (such as the Didcot LCWIP and Wantage and Grove LCWIP).
- 3.2. Work with partners to deliver the high-quality Strategic Active Travel Network (SATN) routes in the local area, including but not limited to between:
 - Didcot and Milton Park;
 - Didcot and Harwell village & Harwell Science and Innovation Campus;
 - Didcot and Harwell Science and Innovation Campus via Upton;
 - Didcot and Wallingford;
 - Didcot and Culham Campus;
 - Wantage & Grove and Harwell Science and Innovation Campus;
 - Wantage & Grove and Abingdon-on-Thames;
 - Grove & Wantage and Milton Park;
 - Abingdon-on-Thames and Berinsfield via Culham Campus;
 - Milton Park and Abingdon-on-Thames.
- 3.3. Liaise with partners to develop new walking, wheeling and cycling schemes (including SATN routes) to improve the network so that it is easy to navigate, cohesive and safe.
- 3.4. Liaise with partners to improve walking, wheeling and cycling routes to mobility hubs, bus stops and rail stations.
- 3.5. Investigate changes to the PRow network to enable use by a wider range of Non-Motorised Users (NMUs) for different journey purposes.
- 3.6. Work with the community and partners to deliver behaviour change programmes and initiatives to support the delivery of walking, wheeling and cycling schemes, provide the skills and confidence to walk, wheel and cycle and to influence modal patterns away from car usage.





Objectives and Actions



Objective SV4: Ensure developments deliver comprehensive on-site and off-site walking, wheeling and cycling provision.

- 4.1** Ensure developments deliver walking, wheeling and cycling provision identified in LCWIPs and SATN.
- 4.2** Ensure developments address any gaps in the provision of walking, wheeling and cycling routes, including connections to existing networks, public transport stops, routes identified in LCWIPs and SATN and between developments.
- 4.3** Ensure developments prioritise walking and cycling within developments and ensure that provision integrates with off-site routes.

Objective SV5: Improve accessibility for Non-Motorised Users (NMUs) travelling via waterways and greenways.

- 5.1** Identify opportunities for improvements along and access to waterways and greenways (including the River Thames, disused Wilts & Berks Canal and the Ridgeway).
- 5.2** Support the delivery of improvements along and access to waterways and greenways (including the River Thames, disused Wilts & Berks Canal and the Ridgeway).
- 5.3** Collaborate with partners including the Walk Wheel Cycle Trust and Canal and Riverside Trust to develop wayfinding and signage, help-points, and mapping along waterways and greenways (including the River Thames, disused Wilts & Berks Canal and the Ridgeway), through extending the scope of the Didcot Wayfinding Strategy.
- 5.4** Explore options with partners to provide place shaping (e.g. pocket parks, outdoor gyms, and other green spaces) along waterways and greenways (including the River Thames, disused Wilts & Berks Canal and the Ridgeway) working in line with the Didcot Green Infrastructure Strategy.

Objective SV6: Reduce walking, wheeling and cycling severance caused by physical barriers.

- 6.1** Explore the reallocation of highway space at the Culham and Clifton Hampden River crossings to improve provision for walking, wheeling and cycling and public transport - subject to the delivery of the Didcot to Culham River Crossing.
- 6.2** Work with partners to remove walking, wheeling and cycling barriers across the Great Western Mainline, Science Line (Cherwell Valley Line) and the Local Road Network.
- 6.3** Work with partners and stakeholders to create new links over the River Thames and Science Line (Cherwell Valley Line) serving Culham rail station, Culham Campus and strategic sites.
- 6.4** Work with National Highways to continue developing plans for the Milton Heights walking, wheeling and cycling Bridge.





Objectives and Actions



- 6.5 Work with partners to deliver the Milton Heights walking, wheeling and cycling Bridge.
- 6.6 Explore the opportunities to improve walking, wheeling and cycling across the A34, including connections with Didcot.

Objective SV7: Introduce shared micromobility schemes, subject to central government legislation.

- 7.1 Work with partners to create a shared e-scooter and e-bike network, at locations such as mobility hubs, district and community centres, bus stops, leisure, and employment facilities (such as in Didcot and at Harwell Science and Innovation Campus, Milton Park, and Culham Campus).
- 7.2 Support shared e-scooter and e-bike schemes that link employment sites with residential sites and public transport interchanges.

Objective SV8: Develop a network of cycle parking, hubs, and hangars.

- 8.1 Review and define the locations for cycle parking, hubs, and hangars including auditing existing locations.
- 8.2 Work with partners to deliver new, and improve existing, cycle parking. To include the provision for non-standard cycles (e.g. tricycles, cargo bikes, tandems, mobility scooters and adapted bicycles), cycle repair/ maintenance hubs and charging for e-bikes, at appropriate locations, including key transport interchanges. We will also seek to ensure all cycle parking is designed to a high quality so where appropriate, green walls, green roofs, solar panels and landscaping will be provided on and around the cycle parking.
- 8.3 Support the development of a cycle hub at Culham Station.
- 8.4 Develop a cycle parking map showing capacity and levels of use at cycle parking, hubs, and hangars.

Objective SV9: Create a network of mobility hubs.

- 9.1 Explore opportunities to provide or improve mobility hubs at major interchanges and along key movement corridors:
 - a. Didcot Parkway Rail Station.
 - b. Culham Station Rail Station.
 - c. Proposed Wantage and Grove Rail Station.
 - d. A34 Corridor.
 - e. A4074 Corridor.
- 9.2 Support the implementation of the Mobility Hub Strategy, including linkage hubs, suburban and rural hubs, and mini hubs.





Objectives and Actions



Objective SV10: Enhance bus services.

- 10.1 Work with partners to provide faster bus services, with consideration given to increasing frequencies (including "turn up and go" services) and the introduction of express or 'limited' stop services and the optimisation of existing services.
- 10.2 Work with partners to provide new bus services in Science Vale including to places outside Science Vale, to locations that are currently underserved and to new developments.
- 10.3 Work with bus operators to ensure improved reliability, attractiveness and resilience of services.
- 10.4 Work with bus operators to improve the service level in the early morning, and late evenings to support employment and the night time economy.
- 10.5 Work with bus operators to improve the service level on weekends, in particular on Sundays.
- 10.6 Work with operators to provide long-distance coach services connecting to Science Vale.
- 10.7 Work with partners to support communities with education and training to remove barriers to public transport use and increase confidence to enable greater use of buses.

Objective SV11: Enhance bus infrastructure.

- 11.1 Work with partners to develop a strategy for the redesign of Didcot Parkway Bus Interchange and Didcot Town Centre, including reviewing routing through the town centre.
- 11.2 Identify opportunities for the improvement of bus infrastructure (e.g. waiting facilities, crossing facilities, location for new bus stops, Real Time Information, application of AI, raised kerbs, lighting, shelters, CCTV, onward travel maps).
- 11.3 Work with partners to develop a strategy for consistent bus branding and route identification across Science Vale.
- 11.4 Identify opportunities for bus priority and improvement measures including bus lanes, removal of parking and traffic signal priority within Science Vale.
- 11.5 Work with partners to introduce the bus priority and improvement measures identified in Action 11.4.
- 11.6 Work with partners to promote and improve personal safety by:
 - a. Advertising personal safety apps/ tools for use by users; and
 - b. Improving routes to and from bus stops, including improved lighting, removal of overgrown vegetation and CCTV.
- 11.7 Work alongside partners to deliver a zero-emission bus network across Science Vale.





Objectives and Actions



Objective SV12: Support improvements to the rail network in the short term.

- 12.1 Work with Network Rail to ensure the electrification of the rail line between Didcot Parkway and Oxford.
- 12.2 Work with Network Rail and East West Rail to achieve the extension of East West Rail services to Didcot Parkway and in the future Wantage and Grove, to provide services between Science Vale and Milton Keynes and onwards towards Cambridge.
- 12.3 Collaborate with partners to improve the accessibility and infrastructure at Culham Rail Station.
- 12.4 Work with partners to lobby for additional services and capacity improvements along the Science Line (Cherwell Valley Line) at Didcot Parkway, Culham and Appleford.
- 12.5 Collaborate with partners to deliver the Strategic Outline Business Case for Wantage and Grove Station.

Objective SV13: Support improvements to the rail network in the medium to long term.

- 13.1 Work with partners to improve capacity, accessibility, passenger facilities and direct services at Culham.
- 13.2 Support partners to provide the further enhancement of services on the Science Line (Cherwell Valley Line) from Didcot Parkway, Culham and Appleford.
- 13.3 Develop a strategy with Network Rail to support increased freight capacity through Didcot Parkway.
- 13.4 Work with partners to develop a framework to enable the opening of Wantage and Grove Station.
- 13.5 Work with partners to open a station at Wantage and Grove, subject to the Outline Business Case.

Objective SV14: Support the development of a car club network and car share schemes.

- 14.1 Collaborate with partners to provide a comprehensive network of car clubs, including the prioritisation of parking for car clubs.
- 14.2 Ensure car clubs use zero emission vehicles, where possible.
- 14.3 Work with developers and business to provide EV charging and parking to support car clubs/ car share and to encourage/ promote car sharing to their employees.
- 14.4 Develop a car share awareness/ expansion programme through collaboration with partners.
- 14.5 Encourage businesses to use Liftshare & Mobilityways.





Objectives and Actions



Objective SV15: Implement demand management measures in areas which are well served by sustainable transport.

- 15.1** Identify locations for potential demand management measures in suitable locations including restricting car parking availability.
- 15.2** Work with partners to develop a strategy for the implementation of demand management measures.
- 15.3** Support the removal of on-street parking along routes with high footfall or cyclist users, including those identified in LWCIPs, DCC, SATN and priority bus routes, to support the delivery of cycleways, where appropriate.
- 15.4** Consideration of the provision of new or extended Controlled Parking Zones.
- 15.5** Continue to work with our partners to reduce the number of existing parking spaces at existing employment locations, including but not limited to Milton Park, Harwell Science and Innovation Campus, Culham Campus and Williams F1.

Objective SV16: Deliver movement infrastructure schemes.

- 16.1** Support the delivery of:
 - a. HIF1 (Widening of the A4130, Didcot Science Bridge, Didcot to Culham River Crossing and Clifton Hampden Bypass).
 - b. Steventon Lights Integrated Transport Scheme.
 - c. Milton Heights walking, wheeling and cycling Bridge.
 - d. Northern Perimeter Road Phase 3.
 - e. Grove Northern Link Road.

Objective SV17: Develop future movement infrastructure schemes.

- 17.1 Consider** exploring previously identified potential:
 - a. A4074 Corridor Study (including Golden Balls).
 - b. Didcot Central Corridor.
 - c. Frilford and Marcham Improvements
 - d. Rowstock Area Travel Study.
- 17.2 Explore** options for the walking, wheeling and cycling transport schemes safeguarded in the South and Vale JLP:
 - a. Historic canal route safeguarded for active travel (Wilts & Berks Canal).
 - b. Abingdon-on-Thames - Drayton via B4017 (SATN).
 - c. Abingdon-on-Thames - Marcham via A415 (SATN).
 - d. Abingdon-on-Thames - Berinsfield via A415 (SATN).
 - e. Peep-O-Day Lane - Sutton Courtenay (Active Travel).





- f. Berinsfield - Oxford via A4074 (SATN).
- g. Berinsfield - Oxford via Marsh Baldon (SATN).
- h. Milton Park - Stevenon via Cinder Track (SATN).
- i. Harwell Science and Innovation Campus - Wantage via Ardington (SATN).
- j. Harwell Science and Innovation Campus - Milton Park via Hungerford Road, Milton Hill, and Milton Heights Active Travel Bridge (SATN).
- k. Harwell Science and Innovation Campus - Harwell village via Winaway (SATN).

17.3 Consider exploring previously identified potential:

- a. Southern Didcot Movement Corridor.
- b. South Abingdon-on-Thames Movement Corridor.
- c. Wantage Western Movement Corridor.
- d. Improvements to Featherbed Lane / Stevenon Junction, Relief to Rowstock and Harwell to Didcot Busway.
- e. A4130 Road Safety Improvements.
- f. Improved Access to A34 near Milton Park.

Objective SV18: Develop Corridor Movement and Place Strategies for existing key routes.

- 18.1** Develop Corridor Movement and Place Strategies on corridors identified in LTCP Part 1: a) A4074 b) A34.
- 18.2** Implement the measures and strategies in the Corridor Movement and Place Strategies.
- 18.3** Consider locations for other Corridor Movement and Place Strategies with this potentially including along the A417, A415, A338 or A4130.

Objective SV19: Support the safeguarding of land for movement schemes.

- 19.1** Continue to collaborate with the district councils to safeguard land within Local Plans for movement schemes.
- 19.2** Review whether the safeguarding of land for movement schemes needs to be retained in future Local Plans.
- 19.3** Work to identify new areas where the safeguarding of land would be required for future movement schemes.
- 19.4** Collaborate with partners to explore and identify locations for bus depots, stops and interchanges to support the growth in public transport and walking, wheeling and cycling.





Objectives and Actions



Objective SV20: Improve freight, deliveries, and servicing.

- 20.1 Work with the district councils to continue the electrification of food-waste collection vehicles and encourage all fleet vehicles to be zero-emission (e.g. refuse vehicles, vans).
- 20.2 Explore opportunities to introduce HGV restrictions, for through vehicle trips, in Didcot and Wantage, in areas with high walking, wheeling and cycling movements (e.g. upon delivery of HIF1 and NPR3).
- 20.3 Explore opportunities for a zonal network (different requirements for different areas) of zero emission parcel deliveries in Didcot, including opportunities for future expansion, to help improve air quality and reduce HGV traffic in high footfall areas.
- 20.4 Implement a zonal network of zero emission parcel deliveries in Didcot.
- 20.5 Collaborate with partners to introduce opportunities for first and last mile deliveries hubs using cargo bikes and e-cargo bikes at employment sites in Science Vale.
- 20.6 Collaborate with partners to explore opportunities to provide micro consolidation hubs at the Science Parks and other multi-operator employment sites.
- 20.7 Support the rollout of parcel/ grocery lockers at key transport locations such as Didcot Parkway, Culham, Wantage and Grove, Mobility Hubs, and local and district centres to support integrated travel.
- 20.8 Explore the opportunities to deliver rail freight hubs in Science Vale.
- 20.9 Investigate the opportunities for a trial of autonomous HGVs and truck platooning in Science Vale, in line with Objective SV22.

Objective SV21: Develop a Climate Resilience Strategy for Science Vale.

- 21.1 Investigate opportunities to improve flood resilience in areas with the highest risk. As per Appendix A.
- 21.2 Support wider use of blue infrastructure for movement schemes, where applicable.
- 21.3 Support wider use of Sustainable Drainage Systems (SuDS) and at new developments, where applicable.
- 21.4 Develop a strategy to provide the greening or putting solar panels on of bus stops, train stations, signage, mobility hubs, etc.
- 21.5 Support schemes that achieve greening and re-wilding of places.
- 21.6 Support schemes and help to implement proposals to reduce air pollution.
- 21.7 Support the implementation of projects in the Didcot Green Infrastructure Strategy.





Objectives and Actions



Objective SV22: Continue to develop Science Vale as a local, regional, national, and global hub for testing new and innovative technologies.

22.1 We will seek to explore the following (but not limited to):

- a. Zero-emission self-driving vehicle network.
- b. Zero-emission public transport network
- c. Electric charging hubs for e-bikes, buses, commercial vehicles, and cars, etc.
- d. 5G/ 6G and further generation networks along key travel corridors, such as the A34, Science Line (Cherwell Valley Line) and Great Western mainline.
- e. Explore potential deployment of Artificial Intelligence to improve local transport (e.g. improving efficiency or environmental performance).
- f. Unmanned Aerial Vehicles (UAVs) (e.g. drone) deliveries at Harwell Science and Innovation Campus, Milton Park, and Culham Campus, including trials.
- g. SMART infrastructure (combining physical and digital infrastructure).

22.2 In turn we will:

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



Our 9 defined outcomes:

2

A place with a transport network that clearly reflects the priorities of the transport user hierarchy



1

A place that works towards delivering on net-zero carbon transport network



3

Improved safety realised through the Vision Zero approach to transport safety across Oxfordshire



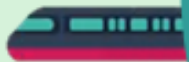
4

A comprehensive, safe, inclusive walking, wheeling and cycling network through the implementation of the LCWIP and Strategic Active Travel Network



5

A connected and inclusive public and shared transport network including the development of mobility hubs



6

A place where freight movements are appropriate and safe



7

A place where EV charging, and other low-carbon technologies help to reduce the impact of motorised vehicles



8

Improve air quality to safe levels, to remove the need for Air Quality Management Areas on transport grounds



9

A place where people are more receptive to active travel, sustainable modes and want to promote travel changes.



Objectives and related outcomes

The table below sets out the objectives identified for Science Vale and their connection to the nine MAP Plan outcomes.

Objective		Outcome								
		1	2	3	4	5	6	7	8	9
SV1	Enhance public realm in settlement centres.	✓	✓	✓						✓
SV2	Create a sense of togetherness, place, inclusiveness, and community in new and existing places.	✓	✓	✓	✓					✓
SV3	Deliver a comprehensive, comfortable, direct, safe, coherent and inclusive walking, wheeling and cycling network.	✓	✓	✓	✓	✓			✓	✓
SV4	Ensure developments deliver comprehensive on-site and off-site walking, wheeling and cycling provision.	✓	✓		✓	✓	✓	✓	✓	✓
SV5	Improve accessibility for Non-Motorised Users travelling via waterways and greenways.	✓	✓		✓					✓
SV6	Reduce walking, wheeling and cycling severance caused by physical barriers.	✓	✓		✓				✓	✓
SV7	Introduce shared micromobility schemes, subject to central government legislation.	✓			✓	✓			✓	✓
SV8	Develop a network of cycle parking, hubs, and hangars.	✓	✓		✓	✓			✓	✓
SV9	Create a network of mobility hubs.	✓				✓		✓		✓
SV10	Enhance bus services.	✓	✓			✓			✓	✓
SV11	Enhance bus infrastructure.	✓	✓			✓			✓	✓
SV12	Support improvements to the rail network in the short term.	✓	✓			✓			✓	✓
SV13	Support improvements to the rail network in the medium to long term.	✓	✓			✓			✓	✓
SV14	Support the development of a car club network and car share schemes.	✓				✓		✓		✓
SV15	Implement demand management measures in areas which are well served by sustainable transport.	✓	✓		✓	✓		✓	✓	✓
SV16	Deliver movement infrastructure schemes.	✓	✓	✓			✓		✓	✓
SV17	Develop future movement infrastructure schemes.	✓	✓	✓			✓		✓	✓
SV18	Develop Corridor Movement and Place Strategies for existing key routes.	✓	✓	✓			✓		✓	✓
SV19	Support the safeguarding of land for movement schemes.	✓	✓	✓			✓		✓	✓
SV20	Improve freight, deliveries, and servicing.	✓		✓			✓	✓	✓	✓
SV21	Develop a Climate Resilience Strategy for Science Vale.	✓						✓	✓	
SV22	Continue to develop Science Vale as a local, regional, national, and global hub for testing new and innovative technologies.	✓	✓	✓		✓	✓	✓	✓	✓