

Connecting Oxfordshire: Local Transport Plan 2015-2031

Area Strategies: Science Vale, Bicester, Banbury, Witney, Carterton and A420 Corridor

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Science Vale Area Strategy

Local Context

1. The Science Vale area strategy is focused around the UK's leading centres for science, technology and innovation at Harwell Oxford, Milton Park and Culham Science Centre and includes the fast growing settlements of Didcot, Wantage and Grove. Figure 1 shows the Science Vale area.
2. Although Science Vale does not include Abingdon-on-Thames and Wallingford, this strategy does contain some schemes to recognise the interaction of Science Vale with these towns, with many trips being made into Science Vale for work and leisure.
3. Science Vale is already one of the most successful areas of science-based industry in the country. The area has a high concentration of employment in industries such as research and development, publishing, education and hi-tech manufacturing activities such as motor vehicles and IT, reflecting the presence of some large and prestigious employers in these industries.

Employment and Housing Growth

4. South Oxfordshire Core Strategy 2027 (adopted December 2012) and the Vale of White Horse Local Plan 2031 Part 1: Strategic Sites and Policies (published November 2014) outline the need to deliver up to 20,000 new jobs, principally at the main employment centres of Harwell Oxford, Culham Science Centre and Milton Park.
5. Employment growth is also supported by the Oxfordshire Local Enterprise Partnership Strategic Economic Plan, which recognises Science Vale as being part of the 'Oxfordshire knowledge spine.' In particular it notes that the area provides high value research infrastructure, particularly at Harwell Oxford and Culham Science Centre, supporting high-tech and science related job growth. This growth is facilitated by the Science Vale Enterprise Zone covering 64 hectares (ha) within Harwell Oxford and 28ha within Milton Park. Development within the Enterprise Zone will generate income for the Local Enterprise Partnership (LEP) for investment in infrastructure to support wider economic growth in Oxfordshire. We are working with partners to implement the projects and work streams identified to support the enterprise zone. Our role is predominately leading projects around transport, skills, inward investment, and broadband.
6. There is also significant potential for employment growth in Didcot on the site of the decommissioned Didcot A Power Station. The Vale of White Horse

District Council supports the redevelopment of the site to provide a high quality mixed use development, supported by improved transport infrastructure. Around 47ha of land at Didcot A is available for redevelopment and up to 29ha of the site has been reserved for employment uses.

7. Concerning future housing growth, the Oxfordshire Strategic Housing Market Assessment (SHMA) was published in April 2014. The aim of the SHMA is to help local planning authorities understand how many homes will be needed in the period 2011 – 2031. It identified that between 725 and 825 homes are needed per year in South Oxfordshire and 1028 homes per year are needed in the Vale of White Horse District. Each District Council is planning for the provision of additional homes as part of updating their Local Plans.
8. Our main focus is to create the conditions to facilitate residential and employment growth, ensure that the transport network can continue to operate efficiently, promote sustainable travel and create a thriving, attractive place in which to live and work. Expansion of the science and technology business and creation of attractive town centres that offer good local services and amenities are key to achieving this.
9. Effective partnership working with the public and private sector including the Highways Agency, Bus Operators, Network Rail, North Wessex Downs Area of Outstanding Natural Beauty, District, Town and Parish Councils, and businesses, will be essential to deliver the vision and transport aims for the area.
10. In particular, we are working closely with the District Councils to agree a shared vision for growth set out in their Local Plans and supporting documents such as the Science Vale Area Action Plan and supplementary planning documents. This includes working with them to evaluate the transport impacts of the additional housing growth identified by the SHMA. A number of transport infrastructure improvements are likely to be needed to support additional housing allocations.

Connecting Science Vale to wider Oxfordshire and beyond

11. To support planned growth it is vital that new and improved transport infrastructure is provided as well as measures to encourage and facilitate sustainable travel. Movement within Science Vale and connections with the rest of Oxfordshire's transport network also need to be efficient and reliable. High quality, efficient transport links along what is known as the 'Knowledge Economy Spine' which connects Oxford, Science Vale and Bicester are also essential. This is where existing science and technology industries are focussed and where there is the greatest development potential for both

employment and housing growth. Connectivity along this corridor will also be supported through development of technology and innovation, with new measures supported by the Science Transit Strategy.

12. Excellent access to international gateways is also vital. Fast, reliable access to Heathrow Airport and international rail at London St Pancras is a critical factor in attracting investment and growing the knowledge sector business in Science Vale. Didcot Station, as the main transport hub for the area, has a key role in achieving this.

Transport Aims

13. The transport priorities for Science Vale are to improve access to the Enterprise Zone sites at Milton Park and Harwell Oxford for international, national and local travel, to enable economic growth at other key employment sites in the area, to plan ahead to manage the impact of future housing growth on the transport network, and to improve connectivity between employment, services and areas of housing growth.
14. To achieve this we will improve:
 - access to strategic road and rail networks;
 - opportunities for sustainable travel, on foot, by bike and using public transport to help to deliver a real step-change in the provision of alternative modes of travel to the car;
 - journeys across Science Vale;
 - the capacity, resilience and reliability of the transport network for all modes of travel
 - connectivity between employment, services and housing;
 - journeys between Didcot and the Enterprise Zone;trips within Didcot to town centre facilities and amenities;
15. The proposals described in this chapter will be implemented at different stages of the Local Transport Plan period 2015 – 2031. These timescales are influenced by a number of different factors and may be subject to change.

Strategic Transport

The Highway Network

- 16.. Reliable access to and along key routes such as the A34 is crucial to support the global nature of businesses within Science Vale. The A34 provides essential access to Birmingham, Heathrow, and the ports at Southampton. We are working closely with the Highways Agency in the development of their

route-based strategy covering the full length of the A34, to ensure that it provides the capacity improvements needed to deliver growth in Oxfordshire.

17. In Science Vale, significant investment to improve key junctions of the A34 to enhance access to the area and connect businesses to the trunk road network includes schemes at Milton Interchange and Chilton Interchange.
18. In addition, a scheme to provide south-facing slip roads at Lodge Hill in Abingdon-on-Thames is being progressed through feasibility. The Vale of White Horse District Council's emerging Local Plan 2031 proposes new homes to the north of Abingdon-on-Thames. The transformation of Lodge Hill into a full movement interchange will help to accommodate additional traffic generated through housing growth, improve accessibility and connections to the trunk road network, and help to alleviate congestion in Abingdon town centre.
19. We are also evaluating the feasibility of providing new Park and Ride sites on routes leading to Oxford, to enable more people to travel into the city by bus and reduce congestion on key routes. Lodge Hill Interchange is a potential location for a new Park and Ride site. Measures to improve public transport access to Oxford are described in more detail in the Oxford Transport Strategy chapter of LTP4.
20. With economic growth, particularly in and around Didcot, there will also be increased freight traffic on certain roads. We will seek to ensure that freight uses the most appropriate routes as outlined in Oxfordshire's Inter-urban Freight Strategy and Oxfordshire Lorry Routes guidance, and that development plans leading to increased freight movements are appropriately mitigated. We will also ensure that recommended freight routes are clearly sign posted.

Public Transport

21. Strengthening the public transport networks between Science Vale, Oxford and other important centres of employment is essential to enable the vision for Science Vale to be achieved.
22. At Didcot Station a new transport interchange has created a modern transport hub for Didcot and Science Vale. The new interchange has additional pedestrian space, a larger bus station, two-tier cycle parking, Brompton Dock cycle hire, a taxi rank, drop-off zone and disabled parking.
23. Our ambition is for Didcot Station to be further transformed into a 'state of the art' multi-modal interchange and gateway to the area, fronted by a new public square. The masterplan for the station envisages a new pedestrian / cycle

entrance north of the railway, additional platforms, a larger station building, and increased car parking, including a multi-storey car park. This will support the plans for regeneration of Didcot town centre, including the adjacent gateway site.

24. Improved rail services will also enable journeys to connect to rail services from London and airports at Heathrow, Birmingham and Gatwick as well as the growth areas of Oxford, Milton Keynes and Reading.
25. Partners in Science Vale are also keen to improve the first impression that people have of Didcot when arriving by train. There are plans to redevelop the area opposite Didcot station so that a welcoming gateway to Didcot and Science Vale is created. Proposals include a public square, traffic calming, and a mixed use development including a hotel, serviced apartments, office, retail, restaurant, a nursery and residential units.
26. Culham Science Centre benefits from Culham Station being close to the site. Full utilisation of this by Culham Science Centre and the rail operators is key to support and enable economic growth. Improved services with better station integration will achieve this.
27. As part of our Science Vale and Science Transit strategies, our ambition is to provide a new railway station / interchange at Grove. This will help to serve and meet the needs of new development across western Vale area, and ensure the future ambition of connecting Wantage and Grove with Didcot, Swindon and beyond.

Proposal SV 1 – We will work with partners to improve access to the strategic road, rail and bus network by:

Timescale	Proposal
2015 - 2020	SV 1.1 Delivering access and journey reliability improvements at Milton Interchange. To improve capacity, relieve congestion and accommodate additional traffic from planned development.
	SV 1.2 Delivering north-facing slips at Chilton Interchange to provide a full movement junction. To enable more direct access to and from Harwell Oxford from the A34, helping to attract investment.
	SV 1.3 Promoting south-facing slips and investigating the provision of a new Park & Ride and bus priority measures at Lodge Hill Interchange, Abingdon-on-Thames. The provision of a full movement interchange will improve capacity and accommodate additional traffic from potential future development. A new Park &

		Ride will enable more trips into Oxford to be made by bus and alleviate congestion on Oxford's approach roads.
	SV 1.4	Developing Didcot Station into a 'state-of-the-art' multi-modal interchange , to meet demand from new development and improved rail services. This includes a multi-storey car park, station access from the north, and a new station building.
	SV 1.5	Working with Network Rail and other partners to support the overhead electrification of the Great Western Mainline.
Beyond 2020	SV 1.6	Promoting the provision of a station at Grove , working with partners as part of a wider proposal to improve rail connectivity with Didcot and neighbouring areas, such as Swindon and Bristol, and in the longer term with East-West Rail to Milton Keynes.
On-going throughout the plan period 2015 – 2031	SV 1.7	Promoting an improved level of rail service at Didcot , seeking a minimum of four trains per hour to Oxford and Bicester, and securing future direct services to Birmingham International and Heathrow airports as new rail infrastructure comes forward.
	SV 1.8	Promoting greater presence, accessibility and an improved level of rail service at Culham Station. To improve accessibility for the local area and Culham Science Centre and to encourage further business investment.
	SV 1.9	Promoting an improved and fully integrated public transport system with bus priority measures , linking Science Vale with innovation hubs and research locations in Oxford, in accordance with Science Transit and the Oxfordshire Bus Strategy.
	SV 1.10	Promoting the efficient transport of freight , using the most suitable routes as outlined in Oxfordshire's Inter-urban Freight Strategy and Oxfordshire Lorry Routes guidance.
	SV 1.11	Providing clear signage across Science Vale and establishing a clear hierarchy of routes to assist with way finding for all modes of transport.

Supporting growth across the Science Vale area

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28. People need to be given a real choice about how they travel, so that additional travel demand associated with growth can be met across a range of modes of transport. It is therefore essential to promote sustainable travel and provide more opportunities to encourage people to walk, cycle and use public transport.
 29. As part of this, a substantial upgrade and expansion of the cycle network is required to provide an attractive and safe alternative to driving within Science Vale. LTP4 includes a cycling strategy for Science Vale, in accordance with the Oxfordshire Cycling Strategy, setting out the vision for improvements to the cycle network. This network is based around strategic corridors linking the main towns, housing developments and Didcot Station to key employment sites. Schemes will include improvements to existing cycle routes, as well as developing new high quality cycle routes. Strategic cycle corridors in Science Vale are outlined in figure 2. More details of the specific proposals are in the Science Vale Cycling strategy.
 30. The Oxfordshire Bus Strategy has been developed to outline the overall vision for the bus network county-wide. Bus service and infrastructure improvements discussed in this chapter are part of this wider strategy for Oxfordshire. Public transport will be significantly improved and bus priority measures implemented. This will provide high quality, high frequency bus services linking Didcot station with major Science Vale residential and employment sites, as well as connecting to other towns outside of Science Vale. Figure 3 shows the indicative strategic public transport routes and proposed bus priority routes required to support development in the Science Vale area.
 31. In addition, highways schemes to provide extra capacity and accessibility on key routes to Harwell Oxford, Milton Park and Culham Science Centre will offer route choice and travel options between homes and workplaces, helping to spread the impact of increased traffic on the roads.
 32. The Science Vale transport strategy contains a key new scheme, involving a proposed new road from north Didcot, an additional Thames river crossing, supplementary access to Culham Science Centre and a direct link to the B4015. This scheme would help to provide an additional link from south to north between Science Vale and Oxford, in particular the major employment areas of Oxford in the Eastern Arc, as well as providing an alternative route to the A34. Improvements to access to Culham Science Centre through increased connectivity by bus and cycle are also important.
 33. The following additional schemes are seen as a priority to improve connectivity between new growth areas, key employment sites and residential growth areas.

Proposal SV 2 – We will work with partners to improve journeys across the Science Vale area, connecting new homes with jobs and service centres, by better connecting Wantage & Grove, Abingdon-on-Thames, and Wallingford with Didcot, Milton Park, Harwell Oxford and Culham Science Centre through:

Timescale	Proposal
2015 - 2020	SV 2.1 Delivering cycle route upgrades and maintenance through the Local Sustainable Transport Fund. This includes provision of new routes, branded signs, trial bike hire scheme and marketing measures to provide a high quality, safe and attractive network.
	SV 2.2 Securing new strategic bus services and associated infrastructure between major residential sites at Didcot, Wantage and Grove, Wallingford, Abingdon-on-Thames, town centres / retail and the employment sites at Milton Park, Harwell Oxford, Culham Science Centre, and Oxford. A minimum of two buses per hour during the morning/evening peak travel periods is required to provide a credible level of service.
	SV 2.3 Securing improvements to existing bus services and associated infrastructure between Oxford, Didcot, Wantage and Grove, Abingdon-on-Thames, Wallingford and employment sites in Science Vale.
	SV 2.4 Strengthening public transport links from Didcot Station through improved bus connections, including segregated priority sections of route, to improve bus reliability and journey times. Bus priority measures will be investigated on the A4130 from Science Bridge into Didcot, through the Valley Park development site located to the west of Didcot; and between Grove, Milton Park and Didcot via Steventon.
	SV 2.5 Delivering Wantage Eastern Link Road to support developments in Wantage and Grove and provide relief to central Wantage.
	SV 2.6 Providing relief to Manor Bridge, Didcot through the delivery of Science Bridge; a new bridge over the railway and associated highway link at the Didcot A Power Station site. The scheme also includes capacity improvements to the A4130 between Milton Interchange and Science Bridge. This will realign the A4130, help to relieve congestion,

	open up the Power Station site to redevelopment, improve access to Milton Park and accommodate traffic generated by new developments in the area.
SV 2.7	Completing the A4130 Didcot Northern Perimeter Road part 3 (NPR3) , to relieve congestion on local roads, and to improve access to Milton Park and Didcot A Power Station site from the east.
SV 2.8	Delivering Harwell Link Road section 1 (B4493 to A417) and Harwell Link Road section 2 (Hagbourne Hill) to improve access and connections to Harwell Oxford and Didcot, reduce congestion on the local network, and protect villages from unnecessary through traffic.
SV 2.9	Improving Harwell Oxford campus entrance to facilitate additional trips into/from the site and supplement the improved Chilton Interchange.
SV 2.10	Delivering improvements along the A417 corridor to address congestion, safety and the conflict between the volume of traffic, east-west travel, and access to the villages along this route. Elements of the strategy include junction improvements, bus stop infrastructure, footpath and cycleway improvements and speed limit reviews.
SV 2.11	Delivering improvements at Steventon traffic lights at the A4130 / B4017 junction and improvements to Featherbed Lane. To remove the 'bottle-neck' and improve journey times to the A34, Milton Park and other Didcot employment sites.
SV 2.12	Reducing congestion at Rowstock roundabout through measures to increase capacity of the junction.
SV 2.13	Investigating new links to Culham Science Centre including a new Culham river crossing, Clifton Hampden Bypass and a road connecting Culham Science Centre to the B4015 to link to the Eastern Arc of Oxford.
SV 2.14	Promoting schemes to provide relief to villages within Science Vale which are affected by high levels of through traffic.

2021 - 2025	SV 2.15 Providing improvements to the A4130 between Didcot and Wallingford to reflect the volume of trips between Wallingford and Didcot. The ability to move reliably and safely along this corridor is important, particularly in helping to support planned employment growth in Science Vale.
2026 - 2031	SV 2.16 Undertaking a corridor study on the A338 from Wantage to the A420, and promoting capacity improvements to the A338 /A415 Frilford lights junction. This will help to improve accessibility between Wantage, Grove and Oxford.
On-going throughout the plan period 2015 - 2031	SV 2.17 Promoting the use of sustainable transport and reducing single occupancy car use for the journey to work through undertaking travel promotions and marketing measures, particularly with partners at Milton Park, Culham Science Centre and Harwell Oxford.
	SV 2.18 Providing new and substantially upgraded strategic cycle routes to Milton Park, Harwell Oxford and Culham Science Centre through the Science Vale cycle strategy.
	SV 2.19 Securing safe and attractive walking and cycling routes as part of planning for new developments.
	SV 2.20 Establishing links from new development to Public Rights of Way.
	SV 2.21 Establishing a bus route between Grove, Wantage, Milton Park and Didcot.
	SV 2.22 Promoting improved sustainable access to Culham Science Centre through enhanced bus connections and improved cycle routes to Abingdon-on-Thames and Didcot.

Trips within Didcot to town centre facilities and amenities

34. To attract new residents to the area, Science Vale needs to provide a high quality of life by being an attractive place to live, with good access to vibrant town centres providing a wide range of facilities and services.

35. This section focuses on Didcot to reflect the significant scale of the changes that will be happening in Didcot in the coming years. This includes the regeneration of the town centre, extensive housing and employment growth, and the redevelopment of Didcot Station and the Gateway area.
36. Good transport links to access the town centre, as well as provision for active travel and sustainable travel options will enable Didcot to grow. This will be achieved through the following schemes:

Proposal SV 3 – To improve local connectivity to Didcot town centre facilities and amenities by:

Timescale	Proposal
2015 - 2020	SV 3.1 Ensuring appropriate bus access, infrastructure and service patterns to complement plans for new development and suitably serve key destinations in Didcot town centre including Didcot Parkway Station, the Orchard Centre and Broadway.
	SV 3.2 Securing the delivery of capacity improvements at Jubilee Way roundabout , to improve access to the town centre and support the on-going vitality of the Orchard Centre.
On-going throughout the plan period 2015 - 2031	SV 3.3 Pedestrian and cycle network enhancements providing improved routes to the town centre and Didcot Station together with better facilities at employment and residential sites, to encourage the use of sustainable, active modes of travel.
	SV 3.4 Promoting a strategic approach to planning for parking in Didcot to identify an appropriate balance of parking provision in the town and at the rail station to support town centre vitality.

37. Greater accessibility from Ladygrove to Didcot station and town centre is recognised as important, and the creation of a new northern entrance to Didcot Station is promoted as a way to achieve this. The widening of Cow Lane is not an identified scheme within the Science Vale area strategy due to the significant cost and implications of such a scheme.

Safeguarding

38. We will support South Oxfordshire District Council and the Vale of the White Horse District Council in safeguarding land for schemes in areas where it is possible that significant development may occur in the future, most likely beyond the period of this Plan.

Proposal SV4 – to safeguard and maintain the ability to deliver strategic pieces of infrastructure if required in the future due to significant additional development:

Timescale	Proposal
On-going throughout the plan period 2015 - 2031	SV 4.1 Safeguarding and protecting the ability to provide a Southern Didcot relief road to relieve the town centre if significant additional development is allocated to the south of the town in the future.
	SV 4.2 Safeguarding and protecting the ability to provide a South Abingdon-on-Thames relief road if significant additional development is allocated to the south of the town in the future. This will provide a direct link from west Abingdon to the A415 to the east and relieve congestion in Abingdon town centre.
	SV 4.3 Safeguarding and protecting the ability to provide a Wantage Western Link Road if there is substantial additional development in west Wantage. This would complete the perimeter route for Wantage and provide relief to key roads within the town.
	SV 4.4 Safeguarding and protecting the ability to provide a station at Grove

39. A number of other schemes described in this chapter are safeguarded within the Vale of White Horse Local Plan 2031 Part 1: Strategic Sites and Policies (published November 2014).

Funding

40. Funding for the Science Vale area strategy will be from a variety of sources. Due to the large scale of growth we will seek central Government funding where possible and work with the Local Enterprise Partnership, and Local Transport Board to secure income from the Enterprise Zone business rate retention to fund infrastructure.

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41. The County Council has successfully been awarded Government funding towards transport schemes from a number of sources including the Local Growth Deal, Local Growth Fund, City Deal, Local Sustainable Transport Funding, and Growing Places Funding through support from the Oxfordshire Local Enterprise Partnership. We will actively seek and bid for future funding as and when it is announced.
 42. Developer funding is also important. The Science Vale area strategy identifies a package of transport measures that are required to mitigate the cumulative impact of development across the Science Vale area where the impact of development is not attributable to a single development. Developer contributions will be sought for specific schemes within the Science Vale package using the strategic transport infrastructure contribution rate to mitigate the cumulative impact of development.
 43. The level of contribution has been calculated by dividing the funding required to deliver the package of transport measures by the amount of planned growth. This calculation will be reviewed and updated following changes in planned housing growth and infrastructure requirements within Science Vale as part of the Local Plan process.
 44. Major residential development sites are required to fund new or improved public transport services to key locations agreed with the County Council until they become commercially viable. Other residential sites should make a contribution based on the estimated cost of an improved commercially viable service across Science Vale, divided proportionally by the amount of planned growth to give a cost per development site.
 45. Developments are also required to provide modern bus stop infrastructure, including shelters and Real Time Information, to enhance access to the public transport network. These are usually secured through Section 106 or Section 278 agreements.
 46. When the Community Infrastructure Levy (CIL) is introduced by the Vale of the White Horse District Council and South Oxfordshire District Council, contributions will be sought via this new mechanism, as well as via S106 or S278 agreements.

Proposal SV 5 – To mitigate the cumulative impact of development across the Science Vale area and implement the transport measures identified in the Science Vale area strategy we will:

Timescale	Proposal
On-going throughout the	SV 5.1 Secure strategic transport infrastructure contributions from all new development based on

plan period 2015 - 2031		the contribution rate per dwelling or per m2 for non-residential developments.
	SV 5.2	Secure strategic public transport service contributions for new or improved public transport services as well as bus stop infrastructure to support sustainable development.

47. The Strategic Transport Contribution does not include direct mitigation measures, which will be sought separately.
48. This Area Strategy replaces the Didcot Integrated Transport Strategy - 2004/2005 (DidITS). The new Area Strategy accommodates the measures of the DidITS. Planning obligation contributions, secured in order to mitigate the impacts of development, towards DidITS will be able to be used on the LTP4 Science Vale Area Strategy and be in accordance with the planning obligations.

Maps and Plans

49. Figures 1- 3 summarise the key pieces of transport infrastructure required to support the proposed growth and investment in the Science Vale area. Figure 1 shows the main employment sites, future housing developments, and required strategic highways infrastructure. Figure 2 shows the cycle network required to support the proposed growth in the Science Vale area. These include both existing routes and future routes. Figure 3 shows the proposed public transport network and indicative bus priority routes.

References

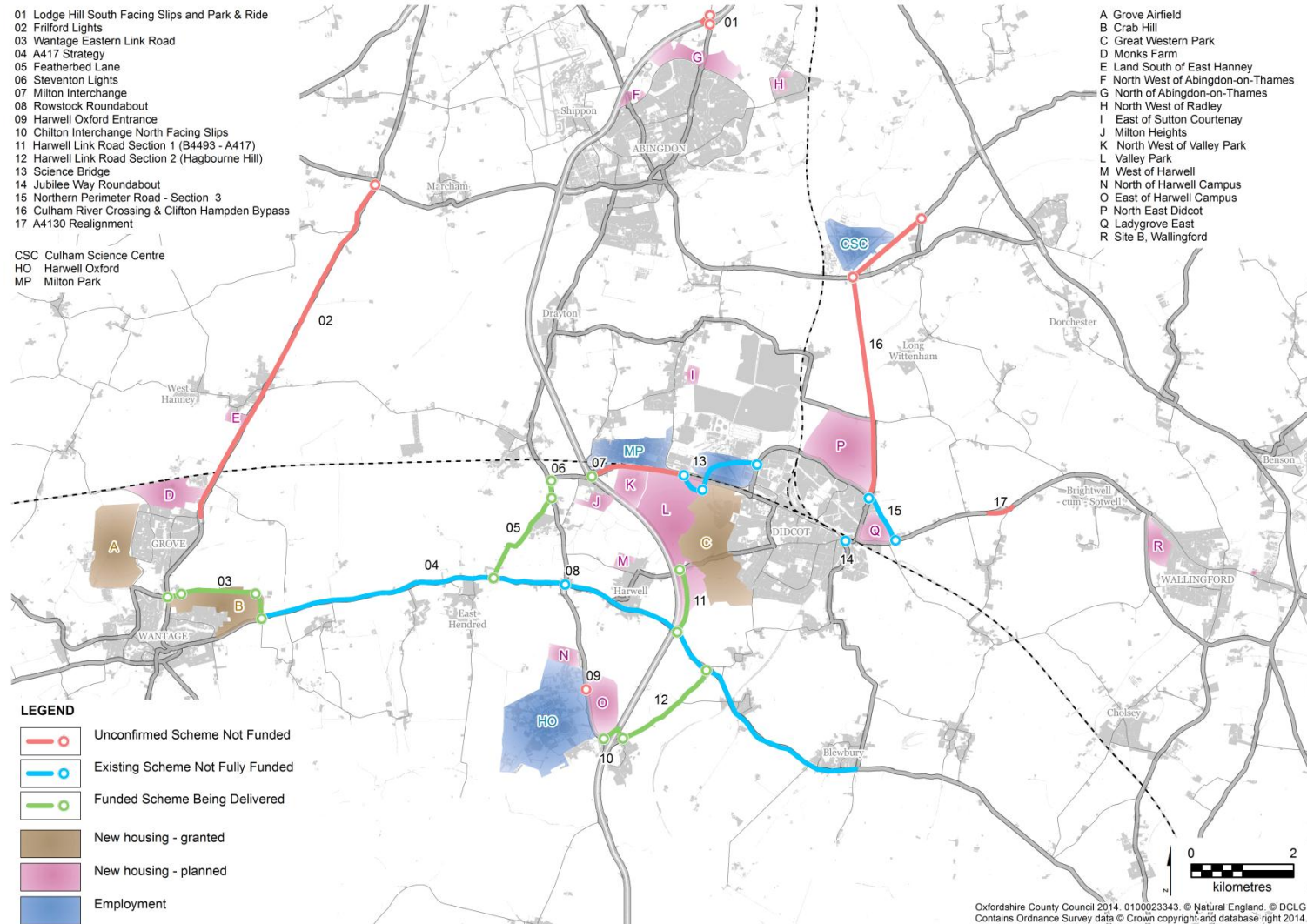
Science Vale Enterprise Zone - <http://www.sciencevale.com/>

Oxfordshire Local Enterprise Partnership <http://www.oxfordshirelep.org.uk/cms/>

Vale of White Horse Local Plan 2031 Part 1: Strategic Sites and Policies (published November 2014) <http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/new-local-plan-2031>

South Oxfordshire Core Strategy 2027 (adopted December 2012) <http://www.southoxon.gov.uk/services-and-advice/planning-and-building/planning-policy>

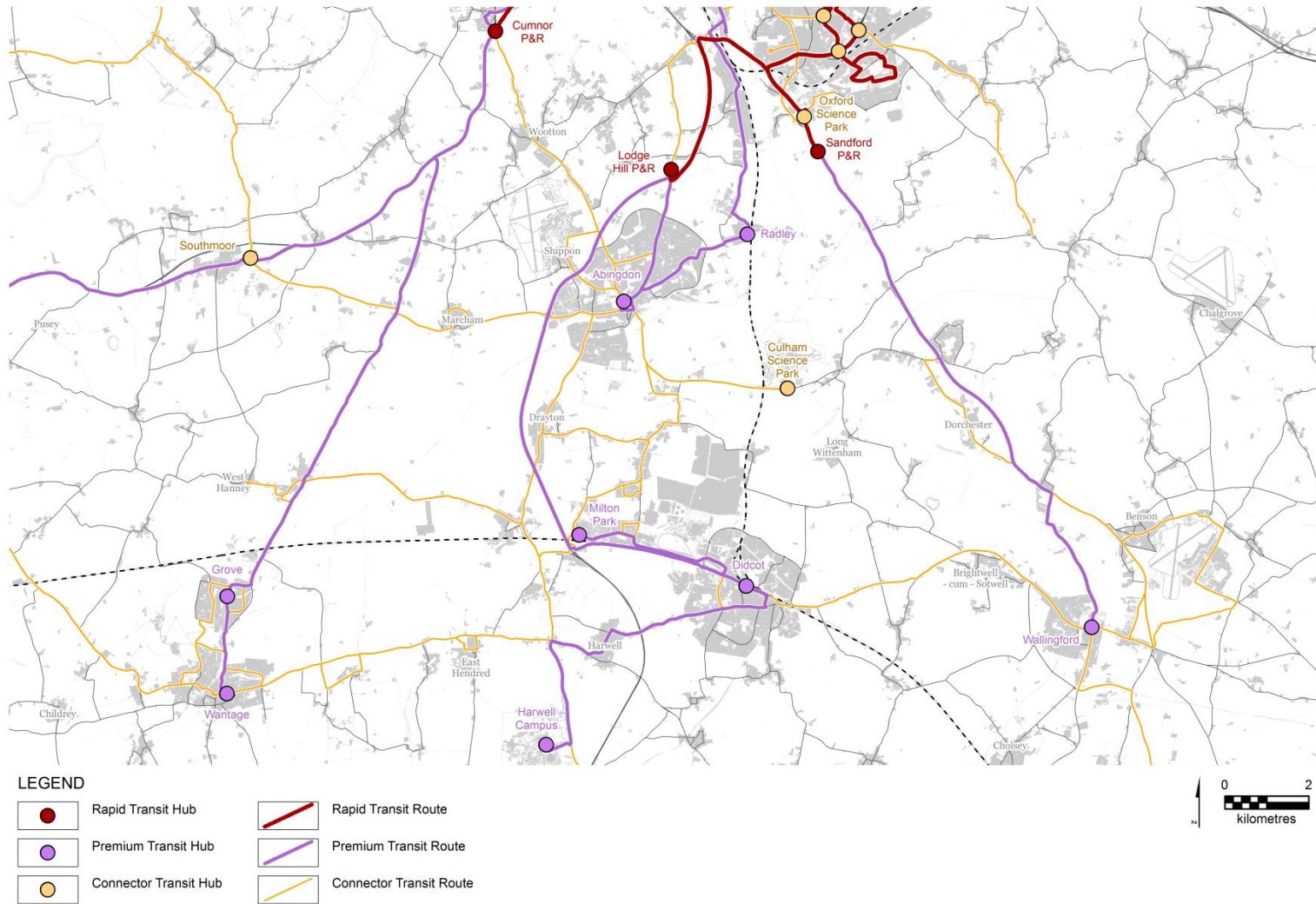
Oxfordshire Local Transport Board - <http://www.oxfordshire.gov.uk/cms/content/oxfordshire-local-transport-board-0>



Science Vale Figure 1: Indicative plan of highways infrastructure required to support development in Science Vale



Science Vale Figure 2: Indicative cycle routes required to support development in the Science Vale area



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Science Vale Figure 3: Science Vale strategic bus map

Bicester Area Strategy

The Local Context

1. Bicester is one of the fastest growing economic centres in the country, with a population of approximately 33,000 people. Its economy is focused on storage, defence and distribution activities, food processing and engineering. Bicester Village shopping outlet is a significant UK tourist attraction, drawing in nearly six million visitors a year, including many from overseas. It benefits from good rail connections with London, which will be improved by a direct connection to London from Bicester Town Station as part of East-West Rail Phase One. Further improvements will come forward as part of East-West Rail Phase Two which will connect Bicester with Milton Keynes, Bletchley and Bedford to the north and Didcot and Reading to the south.
2. The Oxfordshire Local Enterprise Partnership identifies Bicester as part of the Oxfordshire Knowledge Spine (Science Vale – Oxford – Bicester) and within the Strategic Economic Plan this is seen as a key driver for economic growth. Given its advantageous location on the transport network which connects the town with Oxford, Science Vale and the wider south-east region, Bicester is identified for significant residential and economic growth. This is demonstrated through the expansion of Bicester Village, proposed business parks and employment sites allocated in the emerging Local Plan, investment in the town centre as shown by the recently completed £70m town centre redevelopment, and the shift to a low carbon community exemplified by North West Bicester eco development.
3. The Cherwell Local Plan seeks to use this potential to deliver jobs-led growth, supported by housing, with 138.5 ha of employment land, and approximately 10,000 further new homes are planned for Bicester. The Local Plan also sets out an ambition for Bicester to become a greener more pleasant place to live, work and visit.
4. This strategy supports the *Cherwell Local Plan*. The implementation of the *Local Plan* will be helped by proposals and initiatives in the *Bicester Masterplan*. These documents promote an enlarged and vibrant town with a comprehensive range of employment opportunities and local amenities to complement its substantial role in the wider region's economy. The *Local Plan* stresses the importance of securing jobs-led growth in the town to address the critical employment shortfall, and the high levels of out-commuting.
5. The *Local Plan* will enable employment development on allocated sites, with the aim of creating a diverse economy that attracts growth and investment from the business, manufacturing, science and hi-tech sectors. Amongst other sites, employment sites include the Bicester Business Park and South East Bicester that are expected to create up to 9000 jobs. The *Local Plan* also seeks to strengthen the town centre and create additional green and recreational space.

6. Bicester has been awarded Garden Town status by the government, which will provide funding to help with the delivery of homes, jobs and open space as well as transport infrastructure. The proposal for this includes the provision of a new motorway junction to the south of Junction 9, near to Arncott. This needs further investigation to determine its impact and how this could fit within the overall transport strategy in the area.
7. Enhancing access to the strategic transport network and making it easier for people to travel between homes and jobs is critical in accelerating and accommodating future growth in Bicester. Investment in core transport infrastructure will boost the attractiveness and desirability of Bicester as a place where businesses want to locate and grow, and where people want to live and work.

Transport Strategy Aims

8. The priority for Bicester is to provide the transport infrastructure which supports the aspirations set out in the *Local Plan* and the initiatives for their implementation in the forthcoming *Bicester Masterplan*. This includes tackling the challenges identified in the *Bicester Movement Study* and the further technical reports prepared as part of the Main Modifications to the Local Plan, as well as those specific to Central Government standards for transport in Eco Towns which will be re-stated within the Supplementary Planning Document for NW Bicester. These plans and policies will enable the town to thrive and realise its full growth potential, and its essential role in Oxfordshire's economy.
9. This strategy identifies a series of improvements to increase the overall capacity of transport networks and systems within the locality, enabling them to accommodate the additional trips generated by development; to adapt to their cumulative impact and to mitigate the local environmental impact of increased travel. Where schemes are needed to mitigate one particular development, the developer will be expected to either construct or provide funding for the scheme; where a scheme is required due to the impact of more than one development, each developer will be expected to make a contribution proportional to the scale of their impact. Additional funding may also be sought via the Local Transport Board to the Local Growth Fund and other sources.
10. There is a need for a significant increase in the proportion of trips to be made by public transport, cycling and walking if the anticipated level of growth is to be accommodated. It is essential to provide high quality access to the strategic highway and railway network to secure business investment and encourage people to make Bicester their home.
11. We will:
 - Increase highway capacity on the peripheral routes to make these attractive to employment and longer distance traffic and thereby reduce the strain on the town centre and central corridor.

- Implement a sustainable transport strategy within the town centre, reaching out to residential areas and key destinations.
- Accommodate proposed strategic rail initiatives, including East West Rail and plans for electrification, and a possible future Rail Freight Interchange, in order to strengthen Bicester's position on the national rail network and maximise access to regional economic centres, such as Milton Keynes, Oxford, Banbury, London and Birmingham.

BIC1 – We will improve access and connections between key employment and residential sites and the strategic transport system by:

- **Continuing to work with the Highways Agency to improve connectivity to the strategic highway, including future proposals for the A34, Junctions 9 and 10 of the M40.** We will continue to work in partnership on the A34 and A43 route strategies, as well as the two motorway junctions to relieve congestion, particularly in the peak periods, and connect Bicester into the Science Transit proposals to emphasise the town's attractiveness as an end destination, as well as accommodating trips to Oxford, Science Vale, Banbury, and other nearby centres (along the A41, A34, M40, A43).
- **Delivering effective peripheral routes around the town.** This would enable the delivery of the sustainable transport strategy within the central area by providing a local distributor function as well as offering effective connections to strategic corridors for new residential and employment sites. A package of phased improvements will be agreed alongside the introduction of the sustainable transport measures, including:
 - **Western peripheral corridor:**
 - **Increasing capacity at the Howes Lane / Bucknell Road junction and approaches** to maintain this as part of the strategic peripheral route corridor and to accommodate the increase in traffic using this route, further enabling development in the area, including the North West Bicester development.
 - **Enabling a new more efficient junction with the rail-line** as part of improving the strategic western peripheral route for Bicester.
 - **Improvements to the Lord's Lane / B4100 roundabout** to enable this junction to cope with future growth at an important radial route into / out of the town.
 - **Eastern peripheral corridor:**
 - **Improvements to the Buckingham Road / A4221 junction** to provide the necessary capacity for the additional trips generated from nearby employment and residential development, as well as support the heritage tourism development of the neighbouring Former RAF Bicester site.

- **Implementing increased link capacity on the A4421 between the Buckingham Road and Gavray Drive** to complement the transport solution at the railway level crossing at Charbridge Lane and facilitate development in the area. This scheme will improve the operation of this section of the eastern perimeter road, and enhance the integration of the North East Bicester Business Park site with the rest of the town.
- **A new link through the South East Bicester development site** is required from the A41 Pioneer Road junction up to Wretchwick Way as an extension to the south east perimeter detailed below and also to provide connectivity through the site, in particular for buses.
- o **Southern peripheral corridor:**
 - **Improvements to Boundary Way** – the scheme proposed to be implemented by Bicester Village’s expansion is essential to this corridor. Further improvements along Boundary Way may need to be undertaken.

Investigating options for a **South East Perimeter Road** from the A41 north of Junction 9, round to the south of Graven Hill and then crossing the A41 to form a new link up to Wretchwick Way. The Graven Hill development will deliver the section round to the south of this site, joining the A41 at the Pioneer Road junction. There are two route options to connect westwards from Graven Hill to the A41 which need fully assessing and taking through a public consultation and decision process.

- The Garden Town proposal for a new motorway junction near Arncott also needs to be assessed in terms of its impact on the need for a south east perimeter road.
 - Possible future improvements to the peripheral route may include a potential new link road to the north of the NW Bicester site. Although not required during the timeframe of the Area Strategy, assessment and viability will be undertaken and opportunities to safeguard a route will be taken if they arise.
- **Working closely with the rail industry to deliver solutions at the Charbridge Lane level crossing affected by the East West Rail Project.** A road bridge over the railway at Charbridge Lane is critical for this crucial part of the highway to remain open. We are working with the rail industry to deliver an effective solution that meets the overall transport strategy in terms of the peripheral route corridor and considers the impact on the village of Launton.
 - **Working closely with the rail industry and the Department for Transportation to develop a solution to the likely restrictions affecting the London Road as a result of the East West Rail project.** At London Road careful consideration will be given to the reduced accessibility into the town centre resulting from an increased frequency of rail services across London Road level crossing. A solution is required for motorised vehicles, pedestrians

and cyclists where the rail line crosses the road network, as the current proposals will mean that rail traffic inhibits this key corridor connecting to the town centre. This will have a significant negative highway and economic impact and also has the potential to slow the delivery of development sites south of the rail line due to reduced access to the town centre.

- **Supporting the proposals to secure a potential freight interchange at Graven Hill and working with the district and developers to achieve this.** This would reinforce Bicester as a distribution hub within the region's economy and make a significant contribution to the future employment provision in Bicester, especially in the Graven Hill site, which in itself could provide 26 ha of employment land. The south east quadrant of Bicester is viewed to be the most appropriate area for B8 employment uses given the strategic road and rail access. The facility would also assist in removing freight traffic on the M40, A34 and A43, further reducing strain on the strategic road network and benefiting the environment.
- **Working collaboratively on longer term aspirations to rationalise rail station locations within the wider Bicester area.**
- **Delivering a Park & Ride facility adjacent to the A41, close to the Vendee Drive junction,** to serve Bicester town centre, employment centres and rail stations, Bicester Village and Oxford, alleviating congestion along the A41 by intercepting car trips and promoting increased use of the high quality bus services.
- **Reviewing key county road links out of Bicester, including those that cross the county boundary.** A review of whether the B4100 between Bicester and A43 is still fit for purpose will be undertaken including whether an upgrade is required from its 'B' road status. Similarly a review of A41 to Aylesbury and A4421 to Buckingham will also be undertaken. The interrelationship of development at Upper Heyford with that of Bicester, connected by the B4030, will be considered carefully.

12. Providing the above infrastructure and connections will be critical to attracting employment growth in Bicester, especially for the peripheral development sites. Effective transport links between the residential areas, employment sites and other facilities will facilitate economic growth, and provide more opportunities for people to live and work in Bicester, thus reducing the current level of out-commuting. The reduction in the length of people's journeys provides opportunities for them to use non-car modes of travel. Complementary investment in the town's bus, walking and cycling network will have an essential role in accommodating growth, encouraging sustainable travel choices, and raising the quality of the environment. A sustainable transport strategy for Bicester is being developed by Cherwell District Council and has particularly concentrated on the cycle infrastructure improvements and changing travel behaviour through Smarter Choices. This needs to be imbedded within the overall transport strategy.

12. Bus priority measures may be required at anticipated pinch points on the main approaches to the town centre as future developments come forward. This is likely to include the Bucknell Road/Field Street junction, and the Buckingham Road approach to the three arm roundabout.

BIC2 – We will work to reduce the proportion of journeys made by private car by implementing a Sustainable Transport Strategy by:

- **Implementing Bicester town centre highway modifications.** In combination with improvements to the peripheral routes, highway restrictions in Bicester Town Centre will be considered on through routes in order to reduce through traffic in the town centre, constraining it to the peripheral routes and promoting more sustainable travel options in the town.

A review of the purpose and impact of the Buckingham and Banbury Road chicanes will be undertaken to understand whether they have a positive impact on reducing town centre through traffic movements any more, particularly for HGVs. If there is no clear benefit, they shall be removed.

- **Enhancing pedestrian, cycle and public transport links to the Bicester Town Station and Bicester North Station and key employment sites.** Sustainable access between the railway stations and business areas will also be improved and promoted to attract businesses to locate in Bicester. New employment should be located where there are effective, reliable, frequent and well-timed bus and rail services and safe and appropriate cycle access. Accessibility should be considered not only to and from the sites within the town itself, but also to key external destinations.
- We will use the opportunities offered by the redevelopment of **Bicester Town Railway Station** to create a 'state-of-the-art' multi-modal interchange offering high quality facilities for pedestrians, bus users and cyclists, including a cycle hub incorporating hire and repairs. We will also improve walking and cycling routes leading to the station, in particular, the walking route between the station and the town centre, as well as creating a new walking route linking the station with Langford Village and the expanded Bicester Village outlet and the Kingsmere estate.
- **Improving Bicester's bus services along key routes** to connect residential areas with existing and future employment centres, particularly Graven Hill, North West Bicester, the Launton Road Industrial estate, Bicester Business Park, South-East Bicester and North-East Bicester Business Parks. This will be achieved by using funding from development to enhance the quality and frequency of existing services, with the aim of services reaching full commercial viability.
- **Providing bus priority where feasible to ease movements** – in particular there is the need to find a solution to issues at the Bucknell Road / Field Street junction which is proposed to become an important bus route as North West Bicester builds out.

- **Significantly improving public transport connectivity with other key areas of economic growth within Oxfordshire**, through access to high-quality, high frequency services on the core network between Bicester, Oxford, Banbury, Witney and Science Vale, operating on a 'turn up and go' basis throughout the day; integrated connections between local bus services and services on the core network; and flexible, cashless payment, with the ability to switch between modes of travel without penalty or the need to make separate payments. Proposed network improvements are shown in Figure 2.
- **Growth at Upper Heyford** will need to be considered in terms of improved public transport frequency and connectivity with Bicester.
- **Providing improved public transport infrastructure** where there are identified needs arising from strategic development sites and working with Bicester Town Council to enhance passenger information at strategic locations, and potential bus priority measures.
- **Improving access to Bicester Village.** An essential element of mitigating Bicester Village's impact is to improve connectivity with the local area through walking and cycling route improvements to key destinations. This in combination with Highway and Public Transport Infrastructure improvements will reduce the local impact in the area. Specifically a new Park and Ride service in close proximity to Bicester Village will be provided in 2015, improving its connections with Oxford and Bicester town centre.
- **Providing new sections of urban pedestrian and cycle routes to better connect residential developments with the town centre and key employment destinations.** The sustainable transport strategy has identified a number of cycle improvement schemes. This work and other strategy work has included the need for:
 - i. Off road cycle facilities will be considered along premium cycle routes;
 - ii. A direct link from the centre of North West Bicester (Eco Town) to Bicester North Station and onwards to the Launton Road industrial estate;
 - iii. Options along Buckingham Road will be investigated, such as a shuttle working system under the rail bridge for vehicular traffic, in order to enable higher quality cycling and pedestrian improvements along this key corridor into the town centre;
 - iv. Improved pedestrian connections to Graven Hill including A41 crossing options to reduce severance and increase the accessibility of this site;
 - v. A new link through the town park to Kings End to reinforce the east-west pedestrian and cycle links across Bicester;
 - vi. Promoting George Street as a pedestrian route linking to the Sports Centre, Community College and town centre;
 - vii. Providing a pedestrian footbridge over the railway as part of East West Rail to maintain access to the national cycle route;
 - viii. Southern connectivity project to provide sustainable connections between housing and employment developments to the south of the town;
 - ix. Improved cycle provision on the north side of Boundary Way would provide clear connectivity benefits; and

- x. Middleton Stoney Road will become increasingly heavily trafficked in the coming years; the provision of a cycle facility along this route is considered increasingly necessary.
This is not an exhaustive list.

- **Public realm improvements in Bicester Market Square and The Causeway** to enhance the quality of the pedestrian environment by creating a sense of 'place'. This will complement the major investment in the town centre redevelopment and will be progressed once other developments impacting on the Market Square are completed.
- **Securing green links between proposed development sites on the outskirts of the town and existing Public Rights of Way, providing a series of leisure / health walks.** We will also pursue opportunities to join a number of missing links in the Public Rights Of Way network through working with developers.

13. The Eco Bicester Travel Behaviour Demonstration Project showed that working closely with a small number of adults to get them back into cycling was effective. The Bike Loan element of this project has now been taken on by the community through Bicester Green. It is clear that a combination of behavioural change, as well as physical improvements, is required to really make a difference. The sustainable transport strategy is identifying ways to continue with influencing behaviour through Smarter Choices.

BIC3 – We will increase people’s awareness of the travel choices available in Bicester, which should improve public health and wellbeing, by:

- **Undertaking travel promotions and marketing measures** to complement the wider Bicester Vision place-making initiatives to strengthen the town as a place to live, work and invest in commercial enterprises. With the Park & Ride and significant rail service improvements due to be available over the next few years, there is an opportunity to work collaboratively with others to promote these modes. Developer’s Travel Plans will also offer the opportunity to increase the use of walking, cycling and public transport measures by increasing people’s awareness of the travel choices available.
- **Developing a coordinated parking strategy in partnership with Cherwell District Council** to identify commuter parking areas and provide an appropriate balance of parking provision in the town and around the railway stations, including the quantity and location of short stay and long stay parking, as well as appropriate parking management and pricing mechanisms. This may require rationalising parking in some areas.
- **Discourage undesirable routing of traffic by developing a signage strategy**, improving the directional signage on the town’s road network by directing strategic traffic away from the town centre. This will alleviate congestion on the central corridor and enhance the quality of the environment in the town centre. It will also support Cherwell District Council’s emerging Air Quality Strategy, which aims to tackle air pollution in the Kings End / Queens

Avenue Air Quality Management Area.

Encouraging changes in travel behaviour through Smarter Choices

- **Coordinated information and advance notice of construction closures and traffic related issues** will be needed to ensure that the town's transport network operates efficiently during the various improvement and building works.
- **The North West Bicester development site** will provide new approaches to transport, including a heavy emphasis on sustainable modes and travel choice advice, as well as early provision of bus services and cycle routes. This may unlock opportunities for wider travel choice options.

Scheme Delivery

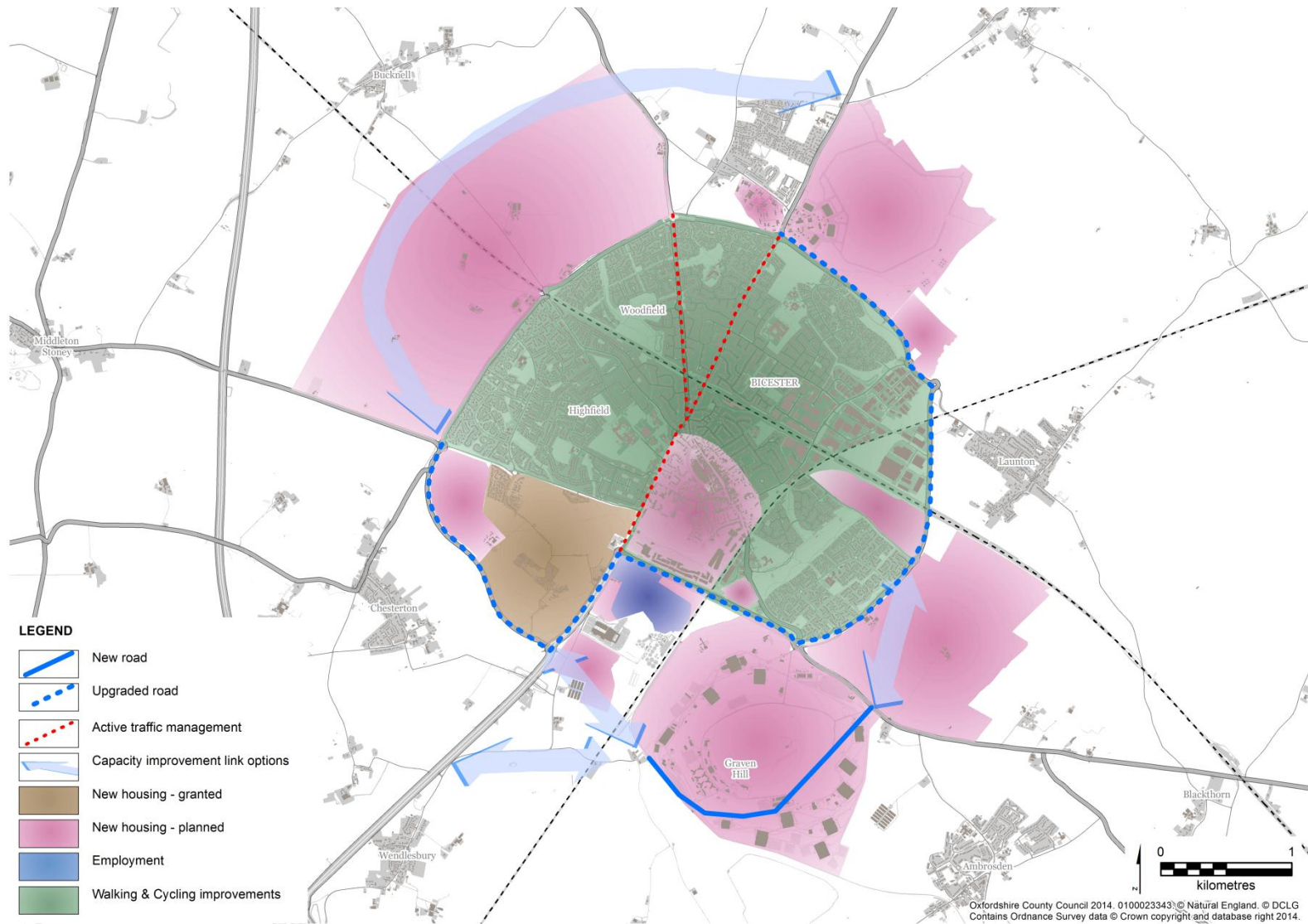
14. Where transport schemes are needed to mitigate the impact of a particular development, provision of infrastructure and/or Transport Contributions will be secured from the developer.
15. This Area Strategy identifies a package of transport measures that are required to mitigate the cumulative impact of development in Bicester. Developer contributions will therefore be sought towards schemes within the Area Strategy using a strategic transport infrastructure contribution rate to mitigate the cumulative impact of development. Additional funding for these strategic schemes may also be sought via the Local Transport Board to the Local Growth Fund and other sources.
16. Major residential development sites are required to fund new or improved public transport services to key locations agreed with the County Council until they become commercially viable. Other residential sites will be required to make a public transport contribution towards improving bus services based on the size of the development.
17. Developments are also required to provide modern bus stop infrastructure, including shelters and Real Time Information, to enhance access to the public transport network. These are usually secured through Section 106 or Section 278 agreements.
18. When the Community Infrastructure Levy (CIL) is introduced by Cherwell District Council contributions will be sought via this new mechanism, as well as via S106 or S278 agreements.
19. This Area Strategy replaces the Bicester Integrated Transport and Land Use Strategy – 2000 (BicTLUS). Planning obligation contributions, secured in order to mitigate the impacts of development, towards BicTLUS will be able to be used to deliver the proposals in this strategy and be in accordance with the planning obligations.

BIC4 – to mitigate the cumulative impact of development within Bicester and to implement the measures identified in the Bicester area transport strategy we will:

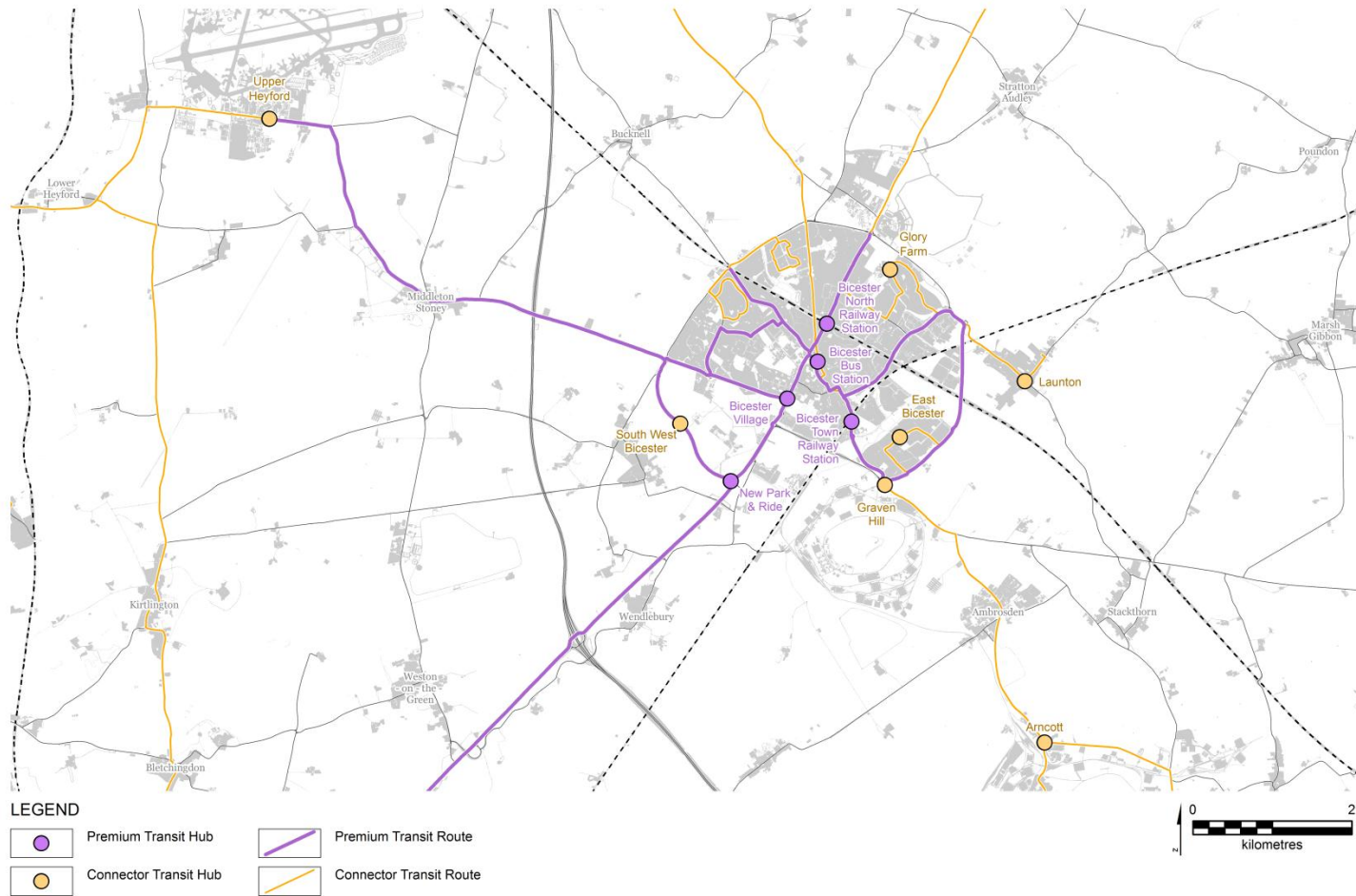
- **Secure strategic transport infrastructure contributions** from all new development based on the contribution rate per dwelling or per m2 for non-residential developments
- **Secure strategic public transport service contributions** for new or improved public transport services as well as bus stop infrastructure to support sustainable development.

Maps and Plans

20. The maps below show the key pieces of transport infrastructure required to deliver the proposed growth and investment in the area.



Bicester Figure 1: Indicative map of transport infrastructure and proposed growth in Bicester



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Figure 2: Bicester's strategic bus network

Banbury Area Strategy

The Local Context

1. Banbury is Cherwell's largest town and Oxfordshire's second largest settlement, with a population of nearly 47,000¹. Banbury acts as a Primary Regional Centre that serves a wide sub-region, with a diverse economy focused on manufacturing, logistics, distribution and services and increasingly, high tech manufacturing. In addition to provision of significant employment opportunities, the town also provides a focus for major retail, housing, cultural, leisure and community activities.
2. Located in north Oxfordshire, Banbury's central position in the wider region and its excellent transport links means that the town has a far-reaching catchment and area of influence extending north to Birmingham, Coventry and Northampton; east to Milton Keynes, Brackley and Buckingham; west to Stratford on Avon and Chipping Norton; and south to Oxford, Bicester and Aylesbury.
3. The aim in Banbury is to strengthen the town centre and its economy by boosting its vitality and attractiveness through strategic investment and regeneration thereby providing a full range of facilities, whilst safeguarding the town's historical character.
4. The Cherwell Local Plan anticipates that the town will continue to grow significantly by 2031, with new employment and residential areas proposed, and creation of a more diverse economy. By 2031, the Local Plan² proposes that there will be an additional 7,000 houses³ and 7,000 jobs in Banbury, at key employment sites including Central M40, to the east of Banbury (2,500 jobs); Southam Road (1,000 jobs); and on land North East of M40 Junction 11 (3,500 jobs)⁴. These are shown in Figure 15.1.
5. The emerging Banbury Masterplan supports the Local Plan proposals and will provide the overall framework and Vision for guiding the sustainable growth of the town to 2031 and beyond. It aims to rejuvenate the town centre with a focus on developing shopping, leisure and night time economy activities, and to secure the long term role of the town centre.
6. This Transport Strategy for Banbury supports delivery of the Cherwell Local Plan; the Banbury Masterplan and its overall Vision for Banbury; and the Canalside Masterplan/ SPD.

¹ Census Data 2011, NOMIS

² Proposed Modifications to the Submission Local Plan 2016-2031 (August 2014)

³ Inclusive of committed development and Cherwell Local Plan Main Modifications (August 2014)

⁴ Land North East of Junction 11 is the 'Banbury 15' proposal in the Cherwell Local Plan Main Modifications (August 2014), subject to an EiP in December 2014.

Transport in Banbury

7. Banbury has excellent road connections, with access to the M40 via Junction 11 and with several strategic A roads serving the town. Movement to, from and within Banbury has historically been influenced by a range of physical and environmental constraints including the rail line through the centre of the town and the Oxford Canal and River Cherwell, both of which dissect the town from north to south. The historic areas of Banbury also influence traffic movements, particularly around the town centre where there are a number of one-way, narrow and pedestrianised areas.
8. Banbury rail station is strategically located on the rail network, between London and Birmingham. New investment in rail infrastructure has substantially reduced the travel time from Banbury to both cities, with regular high quality train services serving Banbury and excellent links to other centres including Bicester and Oxford. Nationally, there are emerging rail proposals for strategic electrification upgrades which are to be undertaken on the Oxford to Banbury line and which are likely to have a significant impact on the town's rail station and adjacent infrastructure.

Transport Strategy Aims

9. This Transport Strategy identifies a series of improvements to address the existing transport issues in Banbury, and to manage the increased travel demand that will be generated by development in the town. The Strategy will:
 - Deliver infrastructure improvements to increase the overall capacity of the local transport network whilst also supporting sustainable travel.
 - Facilitate and promote sustainable travel for trips to, in and around Banbury, including use of the bus, walking and cycling. A step-change in the increased use of sustainable transport modes is essential to support growth in Banbury. The Sustainable Transport element of the Strategy will play a key role in reducing the volume of traffic associated with the town's significant growth and mitigating the traffic impacts on local roads serving Banbury and the surrounding villages.

Infrastructure Improvements

10. Infrastructure improvements to improve operation of the existing highway network; address current transport issues in the town; and protect sensitive areas, continue to form a key element of the Transport Strategy for Banbury⁵. These improvements comprise:
 - Traffic calming along A361 the South Bar Street/ Horsefair corridor to

⁵ As identified in the Banbury Movement Study, 2013

reduce traffic speeds and deter use of this route. This is an historic corridor which has recently been declared an Air Quality Management Area (AQMA), highlighting the importance of protecting this corridor.

- Promotion of Bankside, comprising: i) Removal of traffic calming along Bankside; ii) Signalisation of Hightown/ Bankside junction; and iii) Signal timing optimisation at Swan Close Road. This is being progressed and funded as part of the Bankside development.
- Developing the Cherwell Street 'Eastern Corridor' as the preferred north-south route through the town. This will include improvements to the Bridge Street / Cherwell Street junction, and provision of additional capacity at the Bloxham Road (A361) / South Bar Street junction. This will be delivered in conjunction with town centre redevelopment and the Canalside development.

11. Additional infrastructure improvements will also be delivered to support future regeneration of Banbury and the Local Plan Modifications development proposals:

- A361 Bloxham Road to A4260 Oxford Road Link Road: The co-ordinated approach to development to the south of Banbury as proposed in the Local Plan Modifications (August 2014), will enable provision of essential infrastructure including delivery of an east-west link from A361 Bloxham Road to join White Post Road. This link will support operation of commercially viable bus services through the site, increasing accessibility and long term sustainability of the development.
- Improvements along the Hennef Way to M40 Junction 11 corridor (an AQMA), including:
 - i. Hennef Way/ Southam Road and Hennef Way/ Concord Avenue improvements.
 - ii. Hennef Way/ Ermont Way improvements: replacement of the existing roundabout with a signalised junction.
 - iii. Ermont Way/ Middleton Road improvements: increased capacity provided at entry to roundabout.
 - iv. Junction improvements/ traffic signal optimisation along Hennef Way and at M40 Junction 11.
 - v. Increasing the capacity of junctions along Warwick Road (B4100), including the roundabout junctions with A422 Ruscombe Avenue and Orchard Way.

12. In the longer term (post 2024), there is likely to be a need for additional road capacity to manage anticipated traffic growth at M40 Junction 11. A link road east of Junction 11 is a potential option and would provide a strategic solution, helping mitigate the impact of traffic travelling to/from Banbury from surrounding areas including from the M40. A link road over the railway from Tramway to Higham Way or a south east link road may also be required in the longer term to manage traffic movements within the town. These options will be assessed by the County Council.

13. To improve traffic circulation around Banbury, signage will be reviewed and enhanced. Car parking in the town centre will also be reviewed and the distribution of car parks improved. Car parking matrix signs will be introduced to signpost drivers more effectively to car parks with spare parking capacity.

BAN1 – We will seek opportunities to deliver transport schemes which will support the regeneration and growth of Banbury to 2031 and protect the historically sensitive areas of the town through:

- Traffic calming along A361 the South Bar Street/ Horsefair corridor.
- Promotion of Bankside .
- Bridge Street/ Cherwell Street improvements.
- Bloxham Road (A361)/ South Bar Street improvements.
- Increasing the capacity of junctions along Warwick Road (B4100).
- Hennef Way/ Southam Road improvements.
- Hennef Way/ Concord Avenue improvements,
- Hennef Way/ Ermont Way improvements.
- Ermont Way/ Middleton Road improvements.
- Provision of a link road from Higham Way to the Central M40 site.
- Provision of A361 Bloxham Road to A4260 Oxford Road Link Road.
- Provision of a link road east of M40 Junction 11 (Overthorpe Road to A422), if required.
- Potential link road crossing from Tramway to Higham Way.
- Reviewing the highway signage on routes into the town centre to sign north-south through-traffic away from sensitive areas of the town centre and promote appropriate route choices at key decision making junctions, especially on Oxford Road A4260.
- Car park review and improvements, and provision of car park matrix signs.

Sustainable Transport Strategy

14. Travel to Work Census data (2011) highlights the significant opportunity that exists for encouraging sustainable travel in Banbury and delivering a step-change in the use of sustainable modes for travel around the town. Whilst a significant number of Banbury residents travel to Oxford for work, 60% of journey to work trips are currently undertaken within the town i.e. with a home origin and a work destination in Banbury. However, despite the local pattern of work trips, whilst 32% of these trips are undertaken on foot, 57% of these local trips are undertaken by car. Only 3% are undertaken by bus and 6% by cycle.
15. A Bus Strategy for Banbury is therefore being developed with the aim of increasing use of the bus, particularly for peak hour journeys. A

comprehensive review is being undertaken of bus operations in the town which will identify short, medium and long term infrastructure and service requirements.

16. Service improvements will include enhancement of the town's bus network, with a focus on improving direct links between residential areas and key employment, leisure and retail destinations, and the rail station. There will be a particular emphasis on improving bus links between residential development in the west of Banbury and employment sites on the east side of town (see Figure 15.2). This will involve working closely with a range of stakeholders including Cherwell District Council, bus operators, developers, local employers and business groups.
17. Bus priority at key congestion pinch points within Banbury will also be considered and improvements, including bus-only access links, will be delivered where required. This will complement bus service enhancements by enabling faster, more reliable bus journeys to ensure that the bus becomes a genuinely viable alternative to the car.
18. The existing bus station in Banbury is unwelcoming and under-used. The Bus Strategy will therefore include a review of the need for a bus station, including layover requirements, and the appropriateness of its current location in relation to town centre regeneration proposals. A new bus station facility on the George Street car park, including linkages with the town centre, has been identified as one option to be explored.

BAN2 – We will work closely with Cherwell District Council and other strategic partners to deliver infrastructure and junction improvements to support increased bus use in Banbury. This will focus particularly on the provision of direct links between existing and proposed residential areas, key employment sites and the town centre by:

- i. Delivering short, medium and long term infrastructure improvements in the town centre to support quicker and more reliable bus journeys.
- ii. Reviewing and developing the town's bus network and enhancing existing bus services/ providing additional services, with the long term aim for services to reach full commercial viability. Service enhancements will be funded through developer contributions. Developing inter-urban services through enhancement of existing bus services or providing new services.
- iii. Working with public transport operators to ensure the public has access to high quality public transport infrastructure and passenger information.
- iv. Reviewing the need for a bus station in Banbury, and rejuvenating and/or relocating the existing Bus Station

19. The Government's plans to electrify the rail line through Banbury will

provide a catalyst for economic growth and will result in increased passengers at Banbury Rail Station. We will take advantage of the opportunities created by electrification, to revitalise the Rail Station and improve access to it. The Bus Strategy will include identification of proposals for improving bus links to the Rail Station.

20. Improvements to the Bridge Street junction, together with supporting public realm enhancements, will also enhance connectivity of the railway station with the town centre, to accommodate trips associated with development in the area and promote sustainable access.

BAN3 - We will strengthen Banbury's position on the rail network through revitalising the railway station and improving pedestrian, cycle and bus access to the station.

- We will work with our strategic partners to develop Banbury Station as a transport interchange. This is likely to involve re-designing the station forecourt to create an interchange that will feature a taxi rank, better cycle facilities (including cycle storage), and more pedestrian space, with improved public realm giving a sense of arrival.
- We will improve walking, cycling and public transport links to the station in order to meet future demand and to better connect the station to the town.

21. Walking and cycling will be promoted and encouraged for short trips in Banbury, through improvements to pedestrian and cycle infrastructure. As well as reducing car trips on the network, this will also promote healthy and active transport, as well as complement Cherwell District Council's emerging Air Quality Strategy.

22. The current cycle network is fragmented and does not encourage people to consider cycling. We will involve local users in auditing potential cycling routes within the town using cyclability audits. A network of cycle routes will be developed over time to serve those areas which are identified as having the greatest potential for an increase in cycling. The initial focus will be on improvements to cycle routes connecting residential areas in the west of Banbury to employment areas in the east but more generally, work, school and shopping trips, and access to the rail station, will be prioritised.

BAN 4 - We will work closely with Cherwell District Council and other strategic partners, local users and developers to provide facilities for pedestrians and cyclists and we will work to fill in the gaps in the walking and cycling network, including Public Rights of Way.

23. Residential Travel Plans and Workplace Travel Plans will be secured for all new developments that meet OCC's thresholds. Residential developers will be expected to support and promote sustainable travel options to new occupiers e.g. through personalised travel planning,

whilst occupiers of employment sites will be required to implement a Workplace Travel Plan.

24. With the significant amount of employment proposed in Banbury, Delivery & Servicing Plans (DSPs) will also be an important tool for managing trips on the road network and protecting historic and sensitive areas. For example, DSPs will provide a mechanism for encouraging deliveries to take place outside of peak hours, and for larger vehicles to use designated routes.
25. Construction Logistics Plans will also be required for development sites.

BAN 5 - Travel Plans; Delivery & Servicing Plans; and Construction Logistics Plans will be secured for all new developments that meet OCC's thresholds. Travel Plan/ DSP monitoring contributions will be secured.

This policy supports delivery of the Sustainable Transport Strategy.

Scheme Delivery

26. Where transport schemes are needed to mitigate the impact of a particular development, provision of infrastructure and/or Transport Contributions will be secured from the developer.
27. This Area Strategy also identifies a package of transport measures that are required to mitigate the cumulative impact of development in Banbury. Developer contributions will therefore be sought towards schemes within the Area Strategy using a strategic transport infrastructure contribution rate to mitigate the cumulative impact of development. Additional funding for these strategic schemes may also be sought via the Local Transport Board to the Local Growth Fund and other sources.
28. Major residential development sites are required to fund new or improved public transport services to key locations agreed with the County Council until they become commercially viable. Other residential sites will be required to make a public transport contribution towards improving bus services based on the size of the development.
29. Developments are also required to provide modern bus stop infrastructure, including shelters and Real Time Information, to enhance access to the public transport network. These are usually secured through Section 106 or Section 278 agreements.
30. When the Community Infrastructure Levy (CIL) is introduced by Cherwell District Council contributions will be sought via this new mechanism, as well as via S106 or S278 agreements.

BAN 6 - Where schemes are needed to mitigate one particular development, the developer will be expected to deliver the infrastructure directly, or

provide funding for the scheme. Where a scheme is required due to the impact of more than one development, each developer will be expected to make a contribution proportional to the scale of their impact. This will include contributions towards infrastructure improvements set out in Cherwell District Council's Infrastructure Delivery Plan for Banbury, as well as bus service enhancements and infrastructure improvements.

Oxfordshire County Council is working towards establishing a strategic Transport Contribution rate for developer funding, which will be adopted in a future update of this strategy.

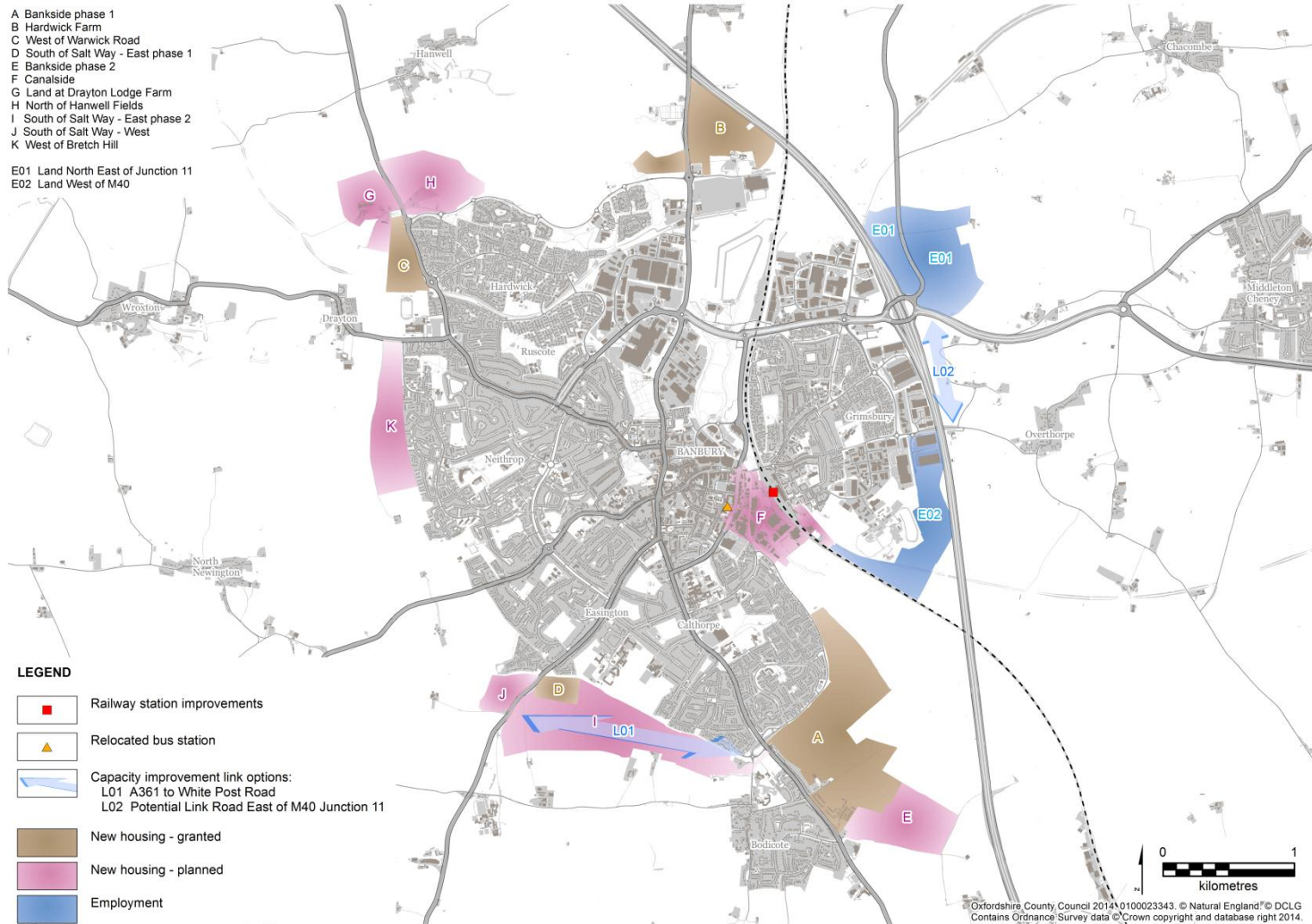
31. This Area Strategy replaces the Banbury Integrated Transport and Land Use Study – 2000 (BITLUS). Planning obligation contributions, secured in order to mitigate the impacts of development, towards BITLUS will be able to be used to deliver the proposals in this strategy and be in accordance with the planning obligations.
32. A comprehensive list of transport schemes proposed for Banbury can be found in: [Link to infrastructure development plan produced for CDC Local Plan \(Nov 2014\)](#)

References

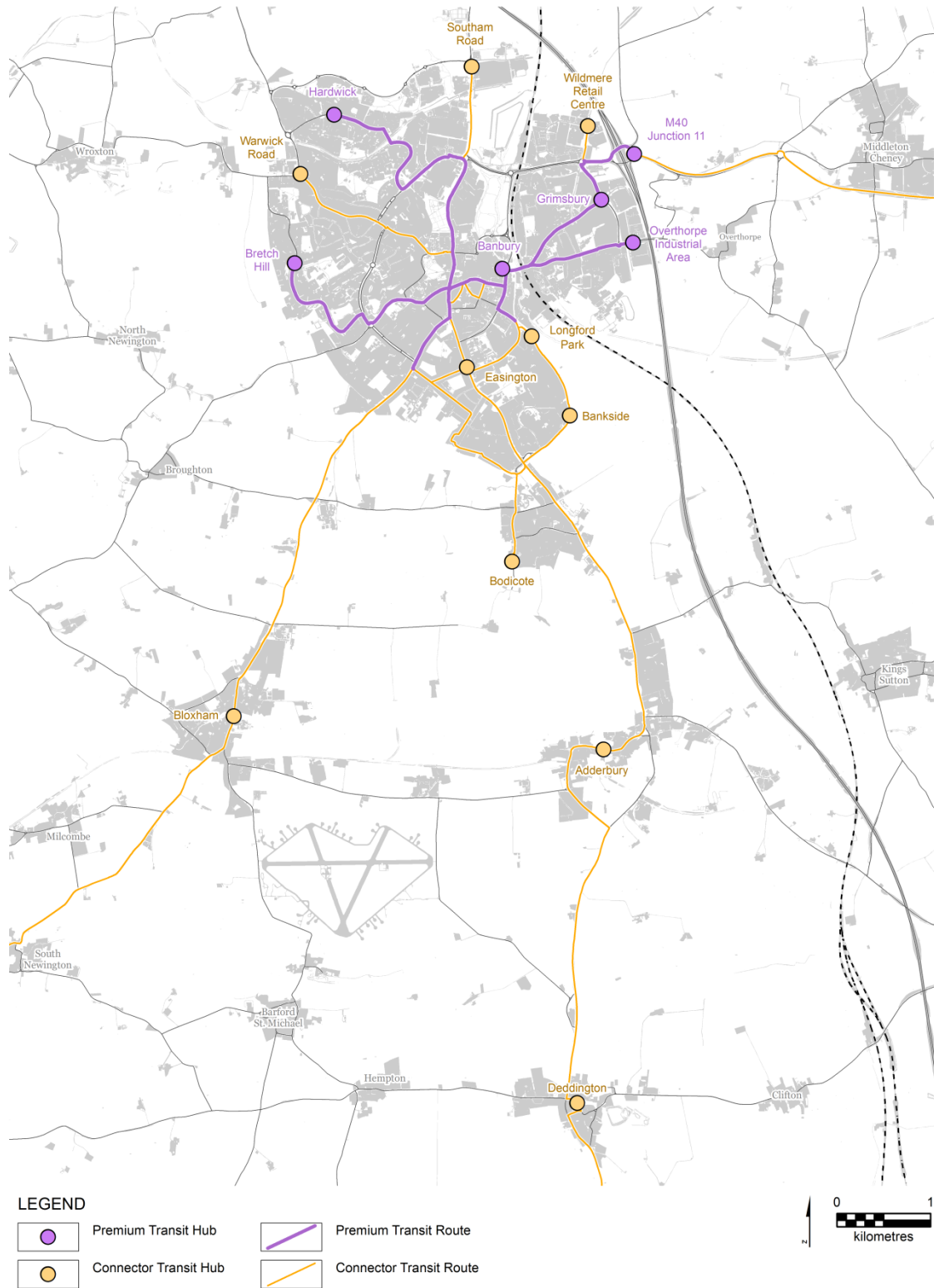
- Cherwell Local Plan – and Main Mods., August 2014
- Banbury Movement Study, Feb2013 – but soon to be updated
- CDC Infrastructure Delivery Plan, Nov 2014
- Banbury Masterplan, Nov 2014
- Banbury SATURN Modelling Technical Reports, Atkins, Nov 2014

Maps and Plans

The maps below show the key pieces of transport infrastructure required to deliver the proposed growth and investment in the area.



Banbury Figure 1: Indicative map of transport infrastructure and proposed growth in Banbury



Oxfordshire County Council 2014. 0100023343. © Natural England. © DCLG
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Banbury Figure 2: Banbury Strategic Bus Network

Witney Area Strategy

1. Witney is the largest town in West Oxfordshire, containing the main commercial, leisure, health and other services for the district. It has a diverse economy and is home to some of Oxfordshire's most successful high technology manufacturing and engineering firms. The historic Market Square, High Street, Woolgate Centre and Marriott's Walk make Witney an outstanding retail and leisure attraction.
2. The travel to work data from the 2011 Census indicates that 32% of all trips to work by residents of Witney are to workplaces within Witney. Of those internal trips, 47% travel by car, 34% by foot, and 11% by bicycle. Only 2% travel by bus, indicating that existing bus routes may not be providing attractive travel between residential areas and employment areas. The level of walking and cycling at 45% may mean the size and character of Witney makes walking and cycling convenient travel options.
3. For residents that work outside of Witney, there are strong trends for travel to employment in Oxford and locally in West Oxfordshire. For trips to Oxford 71% are travelling by car (this would include those using Park and Ride), whilst 19% are using the bus services, and 2% cycling.
4. This Area Strategy is being developed alongside the emerging West Oxfordshire Local Plan. Growth proposals from the West Oxfordshire District Council (WODC) Housing Consultation paper (July 2014) comprise 3,550 new homes in the Witney sub area by 2029. Three Strategic Development Areas are identified: 1,000 homes at West Witney, 400 at East Witney and 1000 homes at North Witney. Twenty hectares of land has been identified for employment to enable Witney to attract inward investment and new jobs. The draft Local Plan (2012) also contains policies to maintain and enhance Witney's town centre shopping, leisure and cultural attractions.
5. The Witney Area transport Strategy will be revised following the adoption, by West Oxfordshire District Council, of the Local Plan. This chapter has been updated since the publication of Local Transport Plan 3 (May 2014) in light of changes to overarching policy, and progress on schemes in the Witney area.

Transport Strategy Objectives

6. The key transport objectives for Witney are to:
 - Establish a transport network that supports future growth and attracts economic investment by improving access to the strategic transport networks and managing through traffic;
 - Mitigate the local environmental impact of increased travel by addressing congestion and poor air quality through improving opportunities for people to travel on foot, by cycle, and public transport;

- Support town centre vitality, by providing a local transport network that enables easy access to services by sustainable means.
7. This strategy divides travel demands at Witney into three categories, which are discussed in turn:
- Witney's Strategic Transport Networks
 - Witney's Local Transport Networks
 - Beyond Witney

Witney's Strategic Transport Networks

8. The A40 is the main strategic route through West Oxfordshire, however there is limited access to the A40 at Witney. The A415 Ducklington Lane junction acts as the main all movement junction with the A40, this has recently been upgraded to improve capacity. To the east of Witney the B4022 Shores Green junction provides west facing slip roads only for trips to and from Oxford. This restricted movement junction, coupled with Bridge Street providing the only river crossing, linking central and east Witney, results in considerable congestion and journey time delay. Housing and employment growth at Witney will place increasing demand on the existing junctions with the A40.
9. Access to the A40 from West Witney will be enhanced by an all movement junction at Downs Road, which has been secured through the Strategic Development Area at West Witney. The A40 Downs Road junction will relieve some pressure on Witney's roads and reduce levels of through traffic by providing direct access from the A40 to both the West Witney housing and employment sites. Better access from east Witney is planned by upgrading the A40/B4022 Shores Green junction to an all movement junction. This will allow the A40 to be used for trips from east Witney to employment areas at West Witney, as well as for a wide range of trips.
10. Witney's main bottleneck is at Bridge Street. With an average of 29,000 vehicles a day, it is the only vehicular crossing of the River Windrush for local journeys and through traffic from the northeast. The constraint of the river combined with the level of demand for vehicular travel, results in severe congestion, delays to buses and air pollution (it is an Air Quality Management Area). The environment deters cyclists and pedestrians from using the route. Proposals WIT1 and WIT2 identify a sequence of schemes to overcome these issues by enabling traffic to use peripheral routes, thus freeing up routes within Witney for walking, cycling and bus use.

POLICY WIT1 – To establish a transport network that supports future growth and attracts economic investment at Witney we will work closely with the District Council, developers and local partners to improve access to the strategic transport networks and manage through traffic by securing:

- **An all-movement at-grade junction on the A40 at Downs Road, related to**

the West Witney strategic housing and employment site to provide a new access to the A40 for businesses and residents to the west of the town;

- **West-facing slip roads at A40 Shores Green junction and improvements to the B4022 Oxford Hill junction with Jubilee Way and Cogges Hill Road to be delivered by housing development at East Witney.** This will provide an all-movement junction east of Witney, and a second river crossing for local journeys. Complementary measures in the surrounding rural area may also be sought to support this scheme.
- **A feasibility and viability assessment of West End Link Road 2 (WEL2), a new road bridge crossing the River Windrush, to be provided** by housing development at North Witney and assuming west-facing slip roads at A40 Shores Green has been delivered.

14. Following the opening of the Shores Green slip roads, a series of further improvements can be realised to initiate greater opportunity for travel by sustainable transport:

POLICY WIT2 – We will work with the District Council, Town Council, bus operators, local businesses and residents as well as local transport interest groups and developers to manage through traffic and improve the environment of Witney’s central areas by:

- **Re-designating the A4095 via Jubilee Way, Oxford Hill, A40, Ducklington Lane and Thorney Leys** so through traffic travels around the edge of the town rather than through it;
- **Implementing schemes to deter through traffic from using Bridge Street and the Woodstock Road** to improve the environment and safety and encourage through traffic to use the re-designated A4095
- **Improving the environment in the town centre** by reducing congestion, and enhancing the Air Quality Management and Conservation Areas.
- **Discouraging undesirable routing of traffic by** improving directional signs.

POLICY WIT3 – We will work with West Oxfordshire District Council to safeguard land for future transport infrastructure, to support Local Plan growth, by:

- **Protecting the line of the Shores Green Slip Roads** and promoting its safeguarding in the Local Plan.
- **Continuing to safeguard land for the proposed West End Link stage 2** pending adoption of the WODC Local Plan.

Witney's Local Transport Networks

15. The proposed Local Plan presents a significant transport challenge, particularly to accommodate trips within Witney. Whilst proposals for increased road capacity, such as A40 Shores Green, will be brought forward by strategic developments sites, road schemes alone will not mitigate nor reduce the levels of congestion experienced now, and predicted to persist in the future. There needs to be a significant shift away from dependence on private cars, towards more people walking, cycling, or using public transport. Improving opportunities for people to travel on foot, by cycle, and public transport, for trips within Witney and for commuting Oxford, is essential to reduce the proportion of journeys made by private car, improve air quality, and improve journey times for trips by all modes.

Public Transport

16. Congestion currently delays buses on the key Oxford-Witney routes via Newland and Bridge Street. Buses are significantly delayed in the morning peak due to the way the double-mini roundabouts favour traffic from West End and from Woodgreen, despite Newland being the more important route for buses.
17. Witney benefits from high quality, high capacity frequent bus services to Oxford, including Oxford rail station. Whilst development will place increased pressure on bus services, it also offers the opportunity to improve bus services to make travel by bus attractive and practical for journeys to work by Witney residents.

Proposal WIT4 identifies how access to public transport and service enhancements will be achieved:

POLICY WIT4 – We will work with the District Council, bus operators and developers to make improvements to public transport and encourage its use by:

- **Improving the frequency of bus services** by using funding from new developments:
 - Between Witney to Oxford; including City Centre, Oxford rail station, hospitals and Oxford Brookes University;
 - Between Woodstock and Burford via Hanborough rail station and Witney;
 - Between Witney's main residential and employment areas;
- **Implementing measures to reduce delays to bus services**
 - through Witney particularly along Corn Street, Market Place, Bridge Street and Newland;
 - joining the A40 eastbound at B4044 Shores Green
- **Improving the environment and quality of bus stops** along these routes, pedestrian and cycle paths to them and the facilities available such as cycle

parking.

Walking & Cycling

18. Walking and cycling are the most sustainable form of travel. It is recognised that Witney already has good levels of walking and cycling for some journeys, particular via the Cogges/Church Lane path. However, in some locations high levels of traffic, poor quality surfaces and on-street parking deter walking and cycling. Improving and maintaining the attractiveness of walking and cycling is a key challenge as the population grows. Providing high quality walking and cycling routes will enable people to seriously consider walking or cycling for some trips within Witney as an alternative to travel by car. Witney has some good foot and cycle paths, but signing to and along them could be improved and there are many gaps in the provision of cross town cycle routes. There is scope to join up existing foot and cycle paths to improve the overall network and to link through to Rights of Way in the countryside
19. Developing the cycle premium route networks **Good to see the Premium Route brand here (DE)** between Witney and nearby settlements, specifically Carterton, will enable greater levels of commuting by cycle between the two towns, as highlighted in Proposal WIT5.

POLICY WIT5 – the County Council will improve facilities for pedestrians and cyclists focusing on enhancing links between homes, schools, employment and the town centre. Improvements will include:

- Enhancing pedestrian and cycle routes from Witney’s existing and future residential and employment areas to the town centre; improve connectivity by cycle within the town centre
- Developing a network of Cycle Premium Routes in collaboration with users
- Improving cycle routes from residential areas to schools;
- Improving conditions and infrastructure for pedestrians and cyclists in Bridge Street, the town centre and Station Lane areas;
- Providing a cycle route between Witney and Carterton.

20. Once the Local Plan is adopted the County Council will work with West Oxfordshire District Council to develop proposals for a Witney Town Centre Transport Strategy, to address the cumulative impact of transport needs arising from new housing and employment sites. Initial modelling has indicated that even with the Shores Green and potential WEL2 the highway demand exceeds capacity at several junctions and links across Witney.

Beyond Witney

21. Although the A40 Witney by-pass is generally free flowing, congestion on the A40 to the east of the town causes very lengthy delays for journeys to and from Oxford, especially at peak times. This impacts on the ability of local businesses to achieve growth, and makes Witney a potentially less desirable place for new businesses to locate. A long term strategy for the A40 corridor is under development and will consider the potential role of public transport improvements, additional highway capacity and/or traffic management measures.

POLICY WIT6 - We will improve access between towns in West Oxfordshire, and Oxford, including the new employment site at Oxford’s ‘Northern Gateway’, by

- In the short term, using Oxfordshire’s Local Growth fund allocation to develop and implement a scheme to provide a step change in public transport provision on the A40 Witney-Eynsham-Oxford corridor, by providing significant bus priority measures on the A40 between Eynsham and Wolvercote. This scheme would be complemented by enhanced bus services.
- Explore the opportunity for an Eynsham Park & Ride site, as part of the Oxford Transport Strategy, to provide increased accessibility to Oxford.
- Retention of the Witney to Oxford cycle route along the A40 and development of this into the Oxfordshire cycle premium route networks.

Delivery and Funding

22. Providing transport services and infrastructure in a timely manner is essential to support and enable growth. The proposed Local Plan Strategic Development Areas (SDA) will be required to mitigate the transport impact arising from the development. Where schemes are needed to mitigate one particular development, the developer will be expected to either construct or provide full funding for the scheme. Schemes identified as direct delivery by the developer are:

- A40 Downs Road by West Witney SDA
- A40 Shores Green by East Witney SDA
- West End Link 2 by North Witney SDA

23. The package of investment in Witney’s transport infrastructure be undertaken in four phases:

Witney Transport Infrastructure Package		
Phase	Scheme	Delivery
Phase 1	Ducklington Lane/Station Lane junction	Completed 2014/15

	improvement	
Phase 2	A40 Downs Road junction	January 2015 – Summer 2016
Phase 3	A40 Shores Green slip roads	2017 - 2019
Phase 4	Bridge Street	Linked to Shores Green slip roads

24. The Witney area strategy identifies a package of transport measures that are required to mitigate the cumulative impact of development across Witney where the impact of development is not attributable to a single development. Developer contributions will be sought for specific schemes within the Witney package using a strategic transport infrastructure contribution rate to mitigate the cumulative impact of development.
25. The level of contribution will be calculated by dividing the funding required to deliver the package of transport measures by the amount of planned growth. This calculation will be reviewed and updated following changes in planned housing growth and infrastructure requirements within Witney as part of the Local Plan process.
26. When the Community Infrastructure Levy (CIL) is introduced by the West Oxfordshire District Council, contributions will be sought via this new mechanism, as well as via S106 or S278 agreements.

Policy WIT 7 – To mitigate the cumulative impact of development across the Witney area and implement the transport measures identified in the Witney area strategy we will:

Secure strategic transport infrastructure contributions from all new development based on the contribution rate per dwelling or per m2 for non-residential developments.

27. The Strategic Transport Contribution does not include direct mitigation measures, which will be sought separately.
28. Every development site will be required to fund improvements to public transport services and infrastructure serving Witney in order to mitigate the cumulative impact of development, including development sites that are not allocated in the Local Plan and sites that are considered speculative.

POLICY WIT 8 – To mitigate the cumulative impact of development across the Witney area and implement the public transport measures identified in the Witney area strategy we will:

Secure strategic public transport service and infrastructure contributions based on the contribution rate per dwelling or per m2 for non-residential developments

29. This Transport Strategy replaces the Witney Integrated Transport Strategy (WITS) 2003 and Local Transport Plan 3. The new Area Strategy accommodates the measures of the previous strategies. Planning obligation contributions, secured in order to mitigate the impacts of development, towards WITS will be able to be used on the updated LTP4 Witney Strategy and be in accordance with the planning obligations.

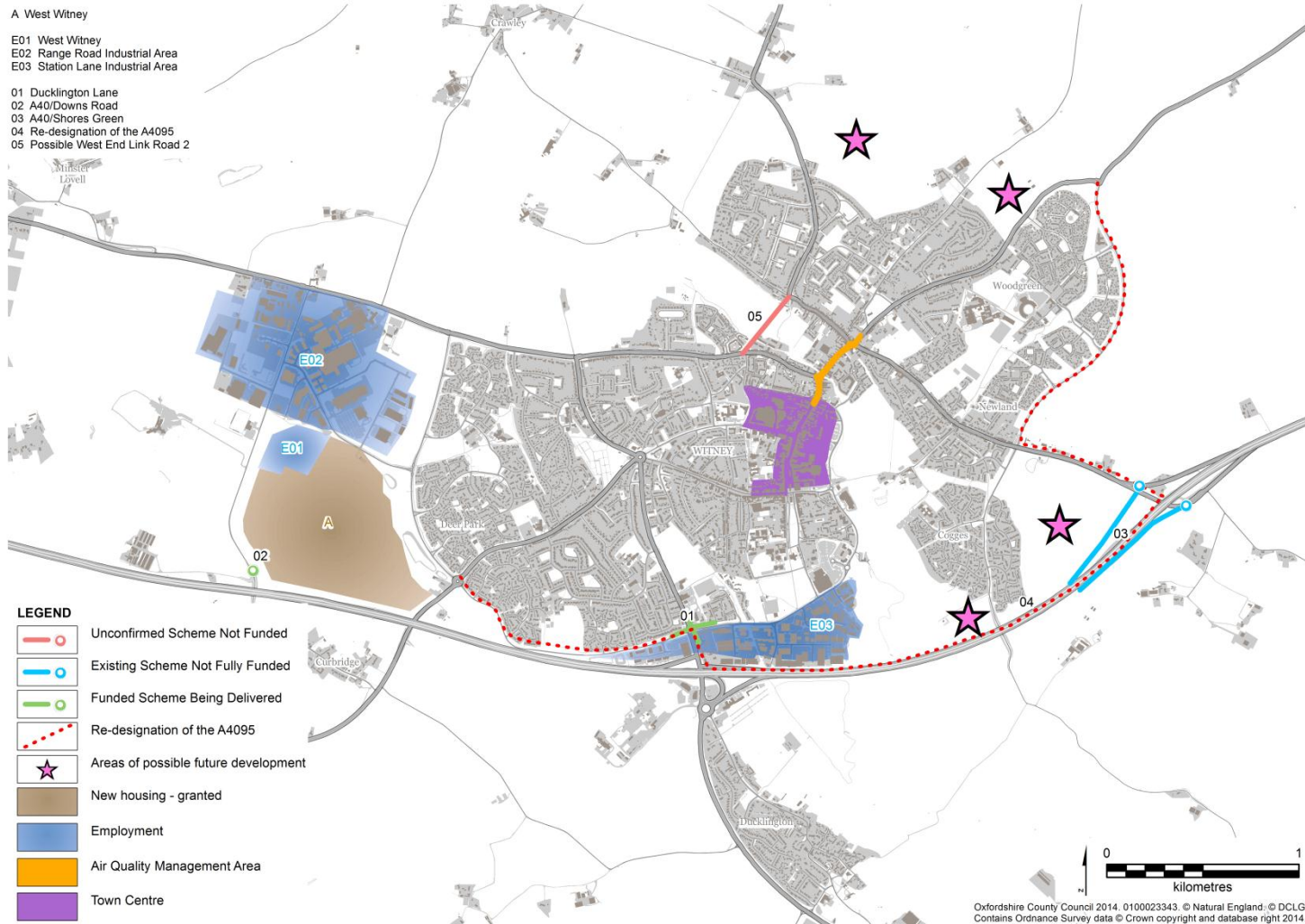
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Witney Figure 1: Indicative map of transport infrastructure and proposed growth in Witney

Carterton Area Strategy

1. Carterton, the second largest settlement in West Oxfordshire, is a relatively modern town which has grown, in the main, to serve RAF Brize Norton. It has a small but varied economy, largely focused around the provision of local services, and has been identified as a growth area by West Oxfordshire District Council, and Carterton Town Council with opportunities for both residential and employment growth.
2. The travel to work data from the 2011 Census indicates that 38% of all trips to work by residents of Carterton are to workplaces within Carterton. Of those internal trips, 45% travel by car, 30% by foot, and 20% by bicycle, indicating that Carterton is a small enough settlement for walking and cycling to be attractive travel options. Only 1% travel by bus, which may indicate routes are not serving the areas people live or work; or that other factors make bus use unattractive, such as car ownership, or timetable or cost implications of using the bus.
3. For residents that work outside of Carterton, there are strong trends for travel to employment at Witney and Oxford. For trips to Oxford 75% are travelling by car (this would include those using Park and Ride), whilst 17% are using the bus services. Travel to work in Witney is also dominated by car use at 73% of trips, compared to 14% using the bus, and 2% cycling.
4. The role of the Ministry of Defence (MOD) within Carterton is very strong with many local people associated with RAF Brize Norton. The MOD seeks to sustain the strategic importance of RAF Brize Norton, as the largest RAF base in the country through Programme Gateway – the RAF’s plan for the future as the UK’s Global Air Mobility hub. In recent years Air Mobility operations have consolidated at Brize through the transfer of C130 Hercules air transport operations and introduction of Voyager aircraft (undertaking air to air refuelling). This has led to an increase in activity at the base, which is likely to continue in the short term, with the introduction of A400M Atlas aircraft from 2014 to 2019.
5. West Oxfordshire’s growth proposals from the WODC Housing Consultation paper (July 2014) comprise 2,450 new homes by 2029 in the Carterton sub area, including Strategic Development Areas to the east of Carterton (700 homes) and 400 homes at REEMA North and Central (current military personnel housing areas). The draft Local Plan (2012) also seeks to deliver a more attractive and vibrant town centre.
6. Carterton Town Council’s emerging master plan for Carterton will focus on strengthening the employment offering in the town and local area, which will in turn, present greater opportunities to work and live in the Carterton area, thus reducing out commuting and the need to travel. The master plan will seek

transport infrastructure and services to support regeneration initiatives, sustain the local economy and attract business investment.

7. The Carterton Area Transport Strategy will be revised following the adoption, by West Oxfordshire District Council, of the Local Plan and Carterton master plan. This chapter has been updated since the publication of Local Transport Plan 3 (May 2014) in light of changes to overarching policy, and progress on schemes in the Carterton area.

Transport Strategy Objectives

8. The key transport objectives for Carterton are to:
9. Establish a transport network that supports residential and employment growth, attracts economic investment and enables the operation of RAF Brize Norton;
10. Encourage people to access jobs and services by sustainable modes of transport by improving opportunities for people to travel on foot, by bike, and public transport;
11. Improve the environment of the town centre, and reduce the impact of traffic accessing the town centre.
12. This strategy divides travel demands at Carterton into three categories, which are discussed in turn:
 - Carterton's Strategic Transport Networks
 - Carterton's Local Transport Networks
 - Beyond Carterton

Carterton's Strategic Transport Networks

13. The routes between Carterton and the A40 are currently only of 'B' road standard. This results in military freight using unsuitable routes, particularly through Carterton town centre and local traffic using a variety of routes, of varying standard, to access Witney and the A40. Improving access to the A40 is therefore a key objective reflected in Proposal CA1 below.

Policy CA1 – To establish a transport network for Carterton that supports residential and employment growth, attracts economic investment and enables operation of RAF Brize Norton, we will work closely with the District Council and key local partners to:

- Improve the B4477 between Carterton and A40 at Minster Lovell and upgrade from B classification road to A classification. Complementary

measures in the surrounding rural area may also be sought to support this scheme.

- Promote West facing slip roads at A40/B4477 Minster Lovell junction, to serve operations at RAF Brize Norton, and future employment growth.
- Continue to work with RAF Brize Norton to establish the implications of Programme Gateway on the existing transport network, to ensure new infrastructure is provided by the Ministry of Defence to enable its intensification of activity.

Carterton's Local Transport Networks

Public Transport

14. There are frequent bus services operating between Carterton, Witney and Oxford, including a service of approximately two buses per hour to Oxford Rail Station. The introduction in July 2014 of a bus service from Carterton to Headington has improved access to the hospitals and Oxford Brookes University, although the attractiveness of this service to commuters is limited by the timetable. Whilst there is good patronage of bus services to Oxford and Witney, increasing the frequency and journey time will make these more attractive to users, which is essential to reducing reliance on private car, particularly for commuting.
15. The Carterton to Swindon bus service frequency, at one bus every two hours, restricts the attractiveness and usefulness of the bus service, particularly for commuters, and people in education. Improving the number of services at peak times will increase the opportunity to travel by bus to jobs and education in the Swindon area.

Policy CA2 – To enable people to access jobs and services by public transport we will work with the District Council, bus operators and developers to make improvements to public transport and encourage its use by:

- Improving the frequency of bus services between Carterton Witney and Oxford; including City Centre, Oxford rail station, hospitals and Oxford Brookes University;
- Improving the frequency of bus services to Swindon, through pump-prime funding from new developments, to eventually run these services on a commercial basis;
- Providing bus stops close to the RAF Main Gate;
- Improving the environment and quality of bus stops along these routes, pedestrian and cycle paths to them and the facilities available such as cycle parking.

Walking & Cycling

16. Walking and cycling are the most sustainable form of travel. It is recognised that Carterton already has good levels of walking and cycling for cross town journeys. Maintaining the attractiveness of walking and cycling is a key challenge as Carterton's population grows. In some locations within Carterton, poor quality surfaces, personal safety concerns and lack of directional signage deter walking and cycling. Ensuring high quality walking and cycling routes throughout the town is essential to enabling people to travel sustainably. Cycle networks linking the town to Witney and nearby villages could also be improved to enable cycling to work and for leisure.

Policy CA3 - We will improve facilities for pedestrians and cyclists focusing on enhancing links between homes, employment and the town centre. Improvements will include:

- a high quality cycle route(s) from the employment and residential areas in the north and east of the town to Carterton town centre;
- high quality cycle links from the west of the town to the town centre;
- establishing a network of high quality cycle routes throughout Carterton;
- work with RAF Brize Norton to improve traffic flow for all modes of transport at RAF Brize Norton's Main Gate including pedestrians and cycle routes;
- support the redevelopment of Ministry of Defence housing stock within Carterton to provide excellent pedestrian access throughout the redeveloped site and clear pedestrian links to facilities across the town, including, where financially practical, the removal of the Upavon Way pedestrian subway;
- provide a high quality cycle route between Carterton and Witney.

17. Carterton Town Council is working on master plan for the town. The main aims are to promote retail and service growth by improving the environment in the town centre including reducing the impact of traffic, whilst maintaining access. On completion of the strategy the County Council will review the transport issues that are highlighted.

Policy CA4 – To improve the environment of the town centre, and reduce the impact of traffic accessing the town centre the County Council will work with the District Council, Town Council, key local partners and developers to secure improvements to:

- reduce queuing traffic and improve the environment in the town centre;
- discourage undesirable routing of traffic by improving directional signs and traffic calming measures;

Beyond Carterton

18. Congestion on the A40 to the east of the Witney causes very lengthy delays for journeys to and from Oxford at peak times. This impacts on the ability of local businesses to achieve growth, and makes Carterton a potentially less desirable place for new businesses to locate. Bus services are vulnerable to delay because of congestion within Witney, through Eynsham and approaching Oxford on the A40.
19. Improving journeys by all modes on the A40 in Oxfordshire is vital to serving the residents and economy of West Oxfordshire as well as operations at RAF Brize Norton. A long term strategy for the A40 is under development which will look at the potential role of public transport improvements, increased highway capacity and/or traffic management improvements.

Policy CA5 - We will improve access between towns in West Oxfordshire, and Oxford, including the new employment site at Oxford's 'Northern Gateway', by:

- Developing, in the short term, public transport enhancements to facilitate trips along the A40 corridor;
- Explore the opportunity for an Eynsham Park & Ride site;
- Retention of the cycle route along the A40 and improving the route if funding permits.

Funding

20. Funding for the Carterton area strategy will be largely secured from developer contributions using the strategic transport infrastructure contribution rate.
21. The Carterton area strategy identifies a package of transport measures (excluding public transport) that are required to mitigate the cumulative impact of development across the Carterton area, where the impact of development is not attributable to a single development.
22. The level of contributions has been calculated based on the scale of funding required for the identified transport infrastructure necessary to support growth at Carterton and the quantum of planned growth. This approach has been taken to ensure contributions are directly related to the development; and fairly and reasonably related in scale and kind to the development. The contribution rate will be reviewed as the planned housing growth or infrastructure requirements change. Funding will be sought from both allocated development sites and speculative or windfall development sites.
23. The Strategic Transport Contribution does not include direct mitigation measures, which will be sought separately.

Policy CA5 – To mitigate the cumulative impact of development across the Carterton area and implement the transport measures identified in the Carterton area strategy we will:

- Secure strategic transport infrastructure contributions from all new development based on the contribution rate per dwelling or per m2 for non-residential developments.

24. Every development site will be required to fund improvements to public transport services and infrastructure serving Carterton in order to mitigate the cumulative impact of development, including development sites that are not allocated in the Local Plan and sites that are considered speculative.

Policy CA6 – To mitigate the cumulative impact of development across the Carterton area and implement the public transport measures identified in the Carterton area strategy we will:

- Secure strategic public transport service and infrastructure contributions based on the contribution rate per dwelling or per m2 for non-residential developments.

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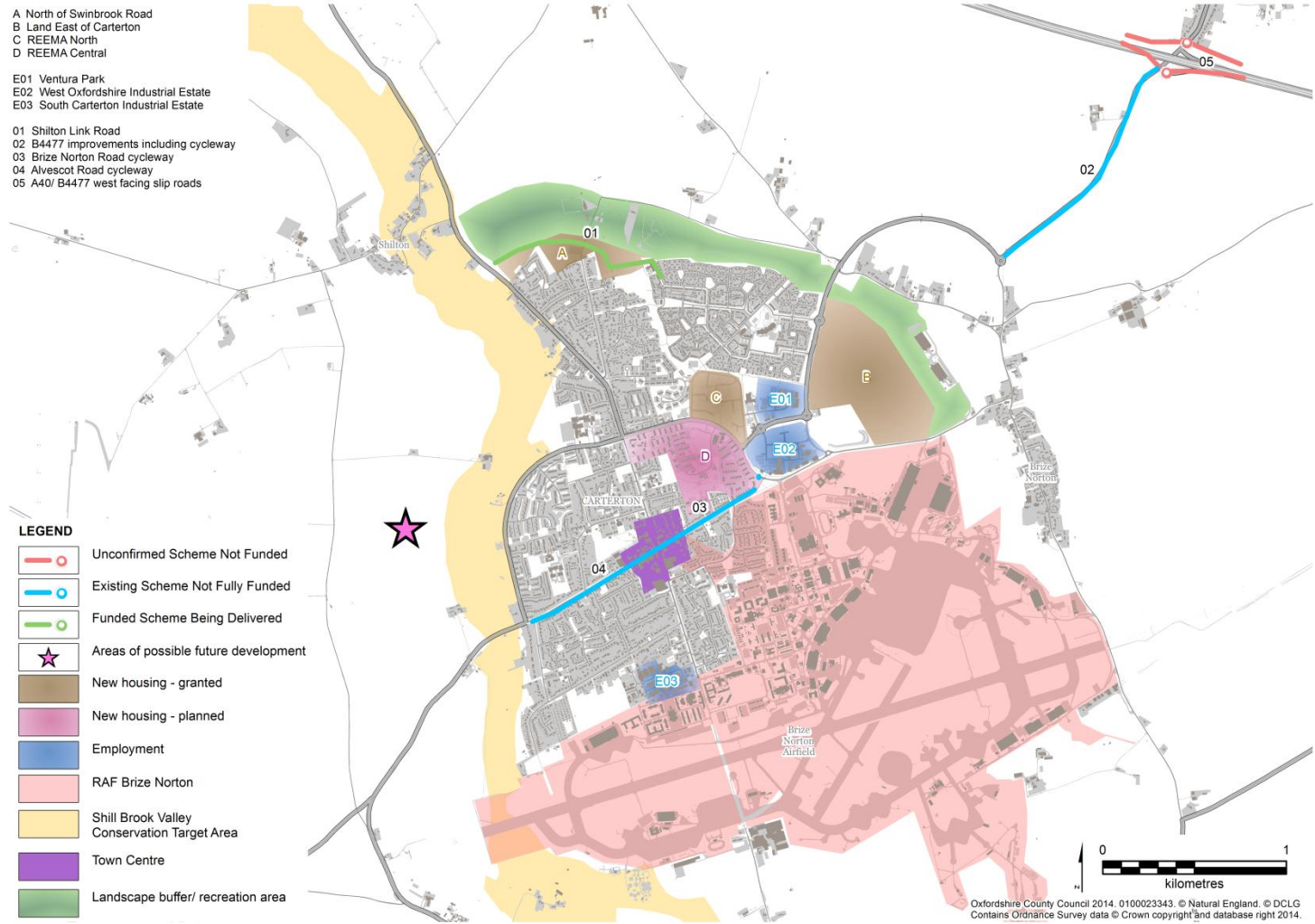
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Carterton Figure 1: Indicative map of transport infrastructure and proposed growth in Carterton

A420 Strategy

The Local Context

Role/function of A420 as principal route

1. The A420, the principal route between Swindon and Oxford is an important strategic link in the Oxfordshire hierarchy. It is a primary route which the Council expects to be of a standard to allow for free passage of current and expected future traffic for the majority of the traffic day. It should therefore operate with minimal congestion in order to avoid rat running on minor roads.

A420 route within Oxfordshire

2. In addition to providing a direct route to Oxford city centre from Swindon, the A420 serves the many settlements along the corridor including: Shrivenham, Watchfield, Faringdon, Kingston Bagpuize and Cumnor. At peak times it operates over capacity resulting in congestion, particularly at the northern end near Botley. Although lorries are advised to use the M4 and A34, there is some HGV usage of the route for through as well as local journeys.
3. The A420 is also a premium bus route corridor, a highly successful commercial bus route with a frequency of two buses per hour Monday to Saturday, with an enhanced peak time service frequency of three buses per hour, plus evening and hourly Sunday services. Significant growth has been experienced on the service over the last 5 years – a doubling in use - which has resulted in increased service frequency and plans for further upgrades.

Growth Context - Oxfordshire growth, Vale Local Plan, Swindon Local Plan and Eastern Villages

4. This Strategy will take account of and evaluate the likely individual and cumulative effect on the capacity of and operational effect on the A420 of planned growth in Swindon Borough and the Vale of White Horse District.
5. The Vale of White Horse Local Plan 2031 aims to make provisions for growth of 23,000 new jobs and at least 20,560 new homes by 2031. It lists 21 strategic site allocations, 6 of these are along the A420 – as shown on the Plan (**cross reference**). These housing figures include the indicative additional allocation for the Vale arising from the Oxfordshire Strategic Housing Market Assessment, although as yet they do not take into account any unmet need arising from neighbouring authorities. This is likely to be taken into account in a future Local Plan review.
6. Swindon Borough Council's Local Plan (2026) identifies an area called 'Eastern Villages' with an allocation of around 8,000 new homes plus employment land on the eastern edge of the town, adjacent to the Oxfordshire boundary and the A420. Work is taking place with Swindon to understand and plan for the transport impacts on Oxfordshire and infrastructure requirements arising from this development.

7. The Council will continue to work with the VWHDC and Swindon Borough Council to develop a strategy for the A420 corridor to mitigate the impacts of growth within the Vale and at Eastern Villages, Swindon. Contributions would need to be sought towards the transport infrastructure and proposals for the development of the strategic bus service identified in the A420 strategy.
8. Any planning application for development in Swindon Borough or The Vale of White Horse District that will generate significant amounts of movement shall be supported by a Transport Statement or Transport Assessment that takes into account the planned growth in both authorities and the proper accommodation of its traffic consequences on the network.

Transport Aims

9. To have a strategic highway and public transport corridor capable of moving a significant number of people along it whilst maintaining suitable access to and from the A420 from communities along the route , both for vehicular access to the A420 and pedestrian or cycle access to bus stops for the premium bus route. This will be achieved by:
 - Improved junctions on the A420 to improve access to main settlements including Faringdon and Shrivenham, focusing on where new Local Plan development is proposed and existing 'priority' junctions require upgrading. Critical junctions Within Oxfordshire on the A420 for evaluation in the Route Strategy will include the following:
 - A420 / Townsend Road junction, west of Shrivenham (upgrading the current t-junction to a controlled junction such as a roundabout)
 - The A420 / B4508 roundabout at Watchfield
 - A420 slip road to Great Coxwell, where a developer funded upgrade, including a new roundabout junction on the A420, is now proposed
 - A420 / A417 Park Road, Faringdon – in particular increased capacity on the approach from Faringdon
 - Additional junctions may be identified through transport modelling work.
 - Enhancement of the A420 premium bus route, focusing on enhancing service frequency initially to three, and then to four buses per hour per direction, improved Bus Stops (including changing on-carriageway stops to bus stop laybys where feasible), better walk/cycle connections and crossing provision, cycle parking and high quality waiting/shelter provision (including real time passenger information) and, where appropriate, parking provision at selected bus stops

- Improved access and increased capacity of the A420 and associated junctions on the approach to Swindon, including White Hart Junction, Gablecross Roundabout, Police Station Access, Old Vicarage Lane, new Eastern access to Rowborough and New / existing access to the Eastern Villages development area south of the A420, as identified in the Swindon and Wiltshire Growth Deal package of schemes.
- Improved access into Oxford, including approaches to the A420/A34 interchange at Botley to be developed as part of the Oxford Transport Strategy, together with improvements to this junction announced by the Highways Agency and the development of a new A420 corridor Park & Ride site at Cumnor as identified in the Oxford Transport Strategy.
- Reviewing and managing the impact on the surrounding road network, including parallel roads to quantify the likelihood of rat running being caused by proposed and allocated development traffic and identify effective measures to combat this. Potential mitigation measures required to reduce the impact of through traffic on these include local traffic calming and traffic/speed management measures, to be agreed with the relevant local communities. Key other routes to be evaluated are:
 - B4508 east of Shrivenham
 - B4000 south of Shrivenham
 - B4507 Swindon – Wantage

Baseline Information

10. There is local concern over safety along the route. Accident data for 2009 to 2014 shows there were 157 accidents and along the A420 between Botley and the county boundary. Of these accidents, 5% were fatal, 22% serious and 73% slight. These accidents created 251 casualties: 4% fatal, 17% serious and 80% slight. 146 (93%) of the accidents were motor vehicle only. The forecast increase in traffic flows could increase the number of accidents along the route. Automatic traffic counter data along the route for the period 2009 to 2014 shows a 4.4% increase in vehicle numbers travelling towards Oxford, and a 2.5% increase in vehicle numbers travelling towards Swindon.
11. Traffic modelling data for forecast year 2030 (base year 2007) shows that:
 - The eastbound route will be over capacity in the AM peak period at Botley Interchange, Fyfield, Buckland, Faringdon.
 - The eastbound route will be over capacity in the PM peak period at Botley Interchange
 - The westbound route will be over capacity in the PM peak period at Fyfield and Buckland
 - Many other sections of the route will be near capacity in both the AM and PM peak periods

Strategy

12. A major upgrade of the A420 corridor is not proposed for the current LTP period. Any significant scheme (such as further dualling of all or part of the route) would attract more traffic and be likely to encourage further sites on this corridor to be identified for development. However there is a need to balance this approach with allowing for the significant transport impact arising from planned development, particularly in terms of providing appropriate route/junction improvements and enabling access onto and off the A420 from local communities.
13. Proposal 1 - Ensure the A420 continues to perform a strategic function operating as a principal road moving people quickly and efficiently between Swindon and Oxford by
 - Promoting improvements to Botley Interchange as part the Highways Agency's A34 Route Strategy
 - Ensuring junction designs continue to support the main east-west general traffic and bus flow, with a consistent approach to junction type.
 - Reviewing speed limits to ensure that changes in limit are at the most appropriate locations
 - Identifying opportunities for bus priority as required
14. Proposal 2 - Maintain suitable access from settlements along the A420 ensuring:
 - safe and timely movement onto and off of the A420 by ensuring new and enhanced junctions enable local access and egress along the route – as shown by the proposed new A420/Great Coxwell junction
 - safe access to and from bus stops along the A420
 - high quality bus stop facilities, including cycle parking at key locations

Safeguarding

15. We will support the Vale of the White Horse District Council in safeguarding land for transport schemes in areas where it is possible that significant development may occur in the future, including that which is more likely to take place beyond the period of this Plan.
16. Proposal 3 – to safeguard and maintain the ability to deliver strategic pieces of infrastructure if required in the future due to significant additional development. For the A420 corridor these include the Townsend Road junction with the A420 (Local Plan reference E17) and the Great Coxwell Road junction (E18).

Funding

17. Funding to deliver the A420 strategy will primarily need to be secured through development. Developer contributions will either be sought through s106 agreements or CIL. It may also be appropriate for development to directly deliver the proposed strategy elements.
18. Major residential development sites are required to fund new or improved public transport services to key locations agreed with the county council until they become commercially viable. Other residential sites make a contribution based on the estimated cost of an improved commercially viable service across the western Vale area, divided proportionally by the amount of planned growth to give a cost per development site.
19. Developments are also required to provide modern bus stop infrastructure including shelters and Real Time Information, to enhance access to the bus network. These are usually secured through Section 106 or Section 278 agreements.
20. When the Community Infrastructure Levy (CIL) is introduced by the Vale of the White Horse District Council and South Oxfordshire District Council, contributions will be sought via this new mechanism, as well as via S106 or S278 agreements.
21. Proposal 4 – To mitigate the cumulative impact of development across the Science Vale area and implement the transport measures identified in the A420 strategy we will:
 - Secure strategic transport infrastructure contributions from all new development based on the contribution rate per dwelling or per m2 for non-residential developments.
 - Secure strategic public transport service contributions for new or improved public transport services as well as bus stop infrastructure to support sustainable development.
22. The Strategic Transport Contribution does not include direct mitigation measures, which will be sought separately.

Timescales

23. The schemes and projects described in this chapter will be implemented at different stages of the Local Transport Plan period 2015 - 2031, as outlined in the table below. Please note, these timescales are influenced by a number of different factors and may be subject to change.

Project / Scheme	Date of commencement	Date of completion

Maps and Plans

References

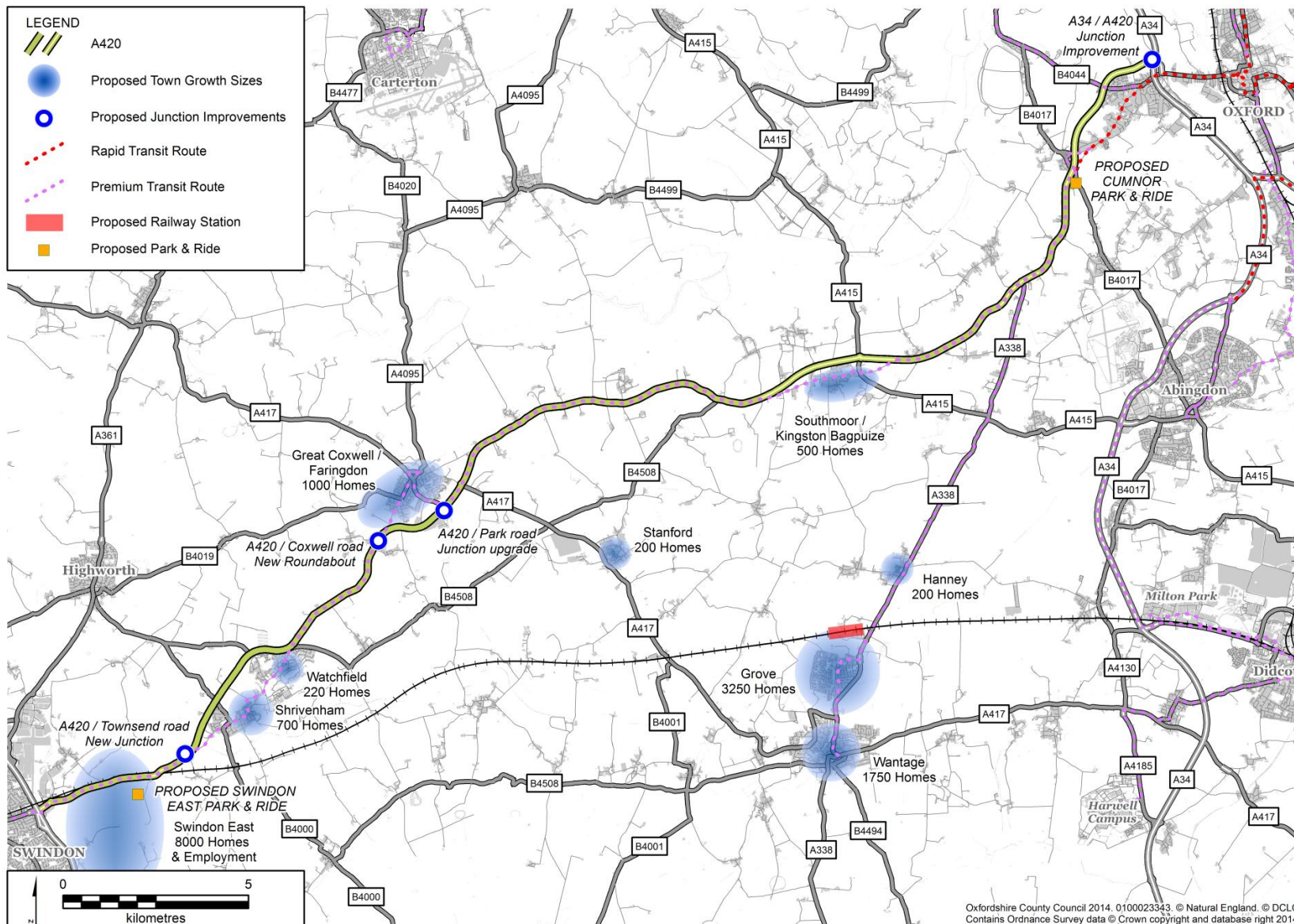
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South Oxfordshire Core Strategy 2027 (adopted December 2012)
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Swindon Local Plan <http://www.swindon.gov.uk/localplan>



A420 Figure 1: Indicative plan of transport infrastructure and proposed growth along the A420 corridor

