Oxfordshire LEP
Strategic Economic Plan

March 2014

Driving Economic Growth Through Innovation

Foreword

Adrian Shooter

Chairman, Oxfordshire Local Enterprise Partnership

Oxfordshire is renowned across the globe for its academic excellence, Innovative business culture and quality of built and natural environment. We have Europe's largest concentration of multi-million pound science research facilities, underpinning our leading position in advanced engineering, manufacturing and life sciences, in addition to being at the heart of the UK's growing international space cluster.

Oxfordshire is therefore primed for investment with solid economic foundations. We have ambitious plans to support our economic growth and the creation of sustainable jobs for our communities

Our integrated approach, driving "economic growth through Innovation", presents government and business with a compelling case for investment. Therefore investment of Local Growth Fund resources will leverage significant public and private sector commitment building upon our successful City Deal and proposed European Structural and Investment Fund programme. We are confident that by jointly investing in our economy the Government will see significant positive growth for the UK as a whole.

Through our collaborative working arrangements, the Local Enterprise Partnership, businesses community, local authorities and universities are working together to plan and deliver economic growth for the benefit of Oxfordshire and the UK economy.

Oxfordshire is successful, we have the potential to do much more and fulfil our economic potential. We believe we are in a great place to start delivering on this potential and our plan sets out how we intend to get there.

Adrian Shooter

Chairman, Oxfordshire Local Enterprise Partnership

Summary:
Oxfordshire's Strategic Economic Plan

Oxfordshire Local Enterprise Partnership brings together business, the universities, colleges, research facilities and local authorities in our area: Oxford City Council, Cherwell District Council, South Oxfordshire District Council, Vale of White Horse District Council, West Oxfordshire District Council and Oxfordshire County Council.

This is our Strategic Economic Plan for Oxfordshire and our bid to Government for Local Growth Funding. This plan has been developed by, and is jointly supported by, our business community, academic institutions and county and district councils.

Our Strategic Economic Plan sets out our ambition for Oxfordshire to 2030 – to drive accelerated economic growth to meet the needs of our science and knowledge rich economy placing Oxfordshire at the forefront of the UK's global growth ambitions.

It sets out our ambition for increased business growth and productivity supported by accelerated housing delivery, better integrated transport, a better qualified workforce underpinned by a quality of place that few locations can offer.

We already have a successful economy. Oxfordshire is regularly cited amongst the top 10% of Local Enterprise Partnerships nationally. However we, like other Thames Valley Local Enterprise Partnerships, operate in a globally competitive arena where historic and continued success cannot be taken for granted. It is vital therefore that our Strategic Economic Plan focuses on our unique economic assets and seeks to drive investment in our sectors and locations of greatest economic return and potential. Recognised nationally for the strength of our science based knowledge industries, we have an ambition to be a global leader in 'Big Science'.

Our recently agreed City Deal allows us to put in place the initial phase of our growth ambitions to accelerate Oxfordshire's economy and drive growth. Our Strategic Economic Plan builds on these ambitions.

Our City Deal will:

- Invest in an ambitious network of new innovation and incubation centres to nurture small businesses and capitalise on the intellectual assets of our universities and Big Science facilities:
  - » the Harwell Innovation Hub: focused on open innovation
  - » the UKAEA Culham Advanced Manufacturing Hub: focused on remote handling technologies
  - » the Oxford BioEscalator: focused on the life sciences sector
  - » the Begbroke Innovation Accelerator: focused on advanced engineering sectors
- Invest in Growth Hubs to help small and medium enterprises to grow through better business support – with a particular focus on supporting innovation
- Accelerate the delivery of 7,500 homes across the county; and recognise that the provision of quality housing will be fundamental to the delivery of innovation-led growth
- Enable three new transport schemes to support developments: the Enterprise Zone, the Northern Gateway and the first phase of the "Science Transit" public transport scheme that aims to join up our growth areas
- Deliver over 500 new Apprenticeships for young people
- Provide £95m of local and national public sector investment with a further £550m of investment from housing providers

- Lever in nearly £600m of private sector investment through site development, transport infrastructure, skills schemes, and business support services and innovation centres
- Create 18,600 new jobs and a further 31,400 jobs during the construction phase

Our City Deal provides the immediate impetus for delivery in the short term, and will be complemented by our bid through our Strategic Economic Plan into Local Growth Funds to further accelerate delivery initially to 2020 and to 2030 in the longer term and by our European Structural Investment Funds Strategy.

Aligned to our City Deal, our European Structural and Investment Fund (ESIF) plan sets out our proposals for the use of the c£20 million European funds which have been earmarked for Oxfordshire for the 2014 to 2020 period.

Our ESIF delivery is designed to boost our ability to innovate, support business growth and job creation, and provide opportunities for residents throughout the county to participate in our high skills, high quality labour market, including measures specifically targeted on our rural areas.

It is within this context that this Strategic Economic Plan identifies and prioritises key themes which will shape our future and, through which, we will drive economic growth across the county and create the conditions necessary to underpin our long-term economic success. It sets out our priorities to 2030 and provides a framework to guide our activity, investment and collective resources, focusing limited government resources on areas of greatest economic impact which will permeate economic growth across the whole of the county.

Our Strategic Economic Plan focuses on our priority localities of Science Vale Oxford in the south, through Oxford, to Bicester in the north of the county - **the Oxfordshire Knowledge Spine**:

- **Science Vale Oxford** – where we will build on its extensive research infrastructure and the designation of Harwell as the home of the national Satellite Applications Catapult and the European Space Agency and Enterprise Zone
- **Bicester** – where improved infrastructure, 28% population growth by 2016, and increased land availability will unlock the potential for significant increases in employment growth and low carbon development
- **Oxford** – where we will continue to invest in developing the critical infrastructure necessary to realise the full potential of its world-class education, research and innovation that underpins our growth

Whilst our focus is to increase economic growth centred around the largely urban knowledge spine we are equally cognisant of the significant contribution our rural and visitor economy makes to our economic success and the unique quality of life on offer in Oxfordshire.

Our global brand in heritage, rural landscapes and academic excellence makes us economically attractive to business and a sought after place to live, study, work and visit. Oxford's global profile, academic excellence and the county's unique agglomeration of research facilities provides an outstanding environment for inward investment and business growth in high quality business locations across the region.

As a place to live, Oxfordshire has a wide ranging offer from the unique, globally known city of Oxford, to strategically located market towns and rural villages set within outstanding landscapes.

Tourism is strong and growing across the county with impressive hospitality venues, beautiful countryside and the World Heritage Site of Blenheim Palace. West Oxfordshire's Cotswolds landscape attracts significant investment with Forbes magazine placing Burford as one of the most idyllic places to live in Europe. Oxford's rich historical heritage means that the city is a key world tourism destination, and Bicester Village attracts a global market of over 5.8 million high value visitors each year.

Oxfordshire benefits from three Areas of Outstanding Natural Beauty – the Cotswolds, North Wessex Downs and the Chilterns, It has around 2,500 miles of public rights of way, including the Thames path and Ridgeway National trails and other long-distance paths such as the Oxford Green Belt Way and d'Arcy Dalton Way. The World Heritage City of Oxford set within Green Belt is an iconic visitor attraction. Our cultural, heritage and visitor attractions and internationally renowned events such as Henley Regatta attract over 26 million visitors per year adding c£3.1bn to the local economy.

The Oxfordshire Knowledge Spine

Our approach to growth is focussed on the Knowledge Spine and underpinned by our high quality natural capital which delivers quality of life and supports our rural and visitor economy. This approach builds upon our successful City Deal, is further supported through our ESIF delivery plan and is founded upon our four thematic objectives:

Innovative Enterprise

Innovation led growth is at the heart of our strategy, underpinned by the strength of our University research and development capacity, business collaboration and supply chain potential.

Innovative People

Delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, with full, inclusive employment and fulfilling jobs.

Innovative Place

Providing both the quality environment and choice of homes needed to support smart growth whilst capitalising upon the exceptional quality of life, vibrant economy and the dynamic urban and rural communities of our county.

Innovative Connectivity

Allowing people to move freely, connect easily and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.

Oxfordshire's vision

"By 2030 Oxfordshire will be recognised as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise and research excellence."

Together these have been used to develop our Strategic Economic Plan, providing the context in which specific issues can be addressed in order to unlock the county's full economic potential and thus, continue to support the UK economy as it moves back into sustained growth. Investment in Oxfordshire will further cement UK PLC's ambition to be at the forefront of the 'global economic race' bringing direct benefits to the country through increased economic activity, productivity and innovation.

Oxfordshire is successful. Our employment and housing growth is above the national trend. We make a positive net contribution to the Exchequer as a result of our academic excellence, global brand and quality economic assets. But our economic output is not growing as quickly as it might, largely due to infrastructure pressures easily attributable to an already successful economy – congestion, housing supply and affordability, skills and labour availability and business costs.

We could be much more economically successful if we can better translate our academic excellence into wealth through research, technical development and export of products and services. Oxfordshire can become a world leader in the science and knowledge economy.

If our goal is to be successful we need to create the conditions that make Oxfordshire the location of choice for the world's leading science and technology businesses. We must encourage investor confidence by setting out and delivering Oxfordshire's long term growth ambitions; aligning the agendas of our different stakeholders and developing a culture that focuses on the benefits of pooling resources to achieve a shared future of prosperity for all.

Achieving our ambitions will result in delivery of our vision:

"By 2030 Oxfordshire will be recognised as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise and research excellence."

In achieving our vision we foresee an economy based on the continual cross fertilisation of ideas, investment and application, which takes place within a business environment, and which is fully integrated with and supportive of its natural environment.

We are aware that many other places make similar claims – which area does not want to grow, which area does not champion their special features, the excellence of their people and imagination of their entrepreneurs? Yet, few have the asset base required to show what sustainable, innovation driven growth can really mean.

This is no small claim, and will be a major task. Our vision will be achieved only by a strategically astute focus on the elements which we have identified as of central importance, and which have to be delivered to time and budget and be of the highest quality.

Our Strategic Economic Plan will:

- Grow Oxfordshire's world-class, technology clusters leading to a Gross Value Added uplift of c£6.6 billion at constant prices
- Create 85,600 new jobs by 2031 (a 1% increase per annum) compared to 0.8% per annum achieved between 2001 and 2011
- Fulfil our potential as an internationally renowned business, academic and research centre to attract a minimum of 30 new high value international investments per year
- Enable a step change in the delivery of sufficient and sustainable quality housing that is affordable yet attractive to the market, makes innovative use of blue and green infrastructure to enhance our built and natural capital and deliver multiple benefits to our communities
- A minimum of c£2.5 billion private sector investment
- Between 93,560 to 106,560 new homes by 2031
- c£65 million investment to support Superfast (25mb/s +) and Ultrafast (100mb/s+) broadband speeds across the county that support innovative knowledge rich businesses and communities
- c£815 million of highways infrastructure improvements
- Over £500 million rail investment to unlock growth
- Increase the amount of Skills Funding Agency funding that supports our STEM sectors by 15% to better reflect our economic profile
- Increase the proportion of the working age population qualified to level 2 and above to 90%
- Commitment to raising schools' attainment to support access to apprenticeships and training
- An additional 1,150 apprenticeships for young people in our priority and growth sectors
- Grow Oxfordshire's Green Economy and Natural Capital through the development of a Strategic Environmental Economic Plan

We have high ambition - Oxfordshire's political, business and community leaders - believe our county has the potential to deliver a real a vision of the future where human ingenuity delivers a better life for all and an improving environment.

Local Growth Fund Proposition

Interim Outputs	GVA to 2030	GVA to 2021
GVA Uplift	6,616,780,260	2,870,635,660
Jobs from construction (one-off)	159,172	69,074
Directly dependent jobs	8,953	8,297
Jobs created	168,125	77,371
Ask	**678,335,000**	**678,335,000**
Indicated funding	6,321,490,000	2,977,880,000
Capex	6,999,825,000	3,656,215,000
Multiplier £Funding : £1 Ask	9.32	4.39
£ Ask per job	8,767	8,767
Capex per job	90,471	47,256
Multiplier £GVA : £1 Ask	4.23	4.23
% Ask funding	9.70%	18.60%
% Other Funding	90.30%	81.40%

Talented individuals are also highly mobile, Boston and Oxford are both synonymous with excellent higher education, but relatively few graduates stay after graduating...

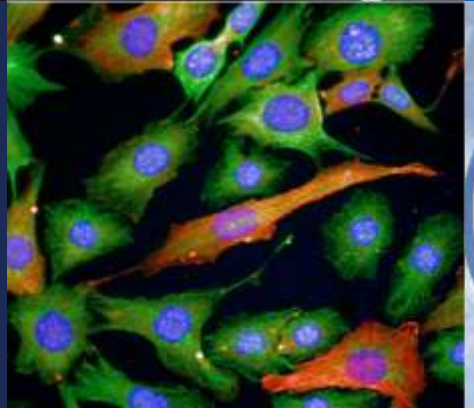
The Economist Intelligence Unit, 2012

The Government has created the conditions for businesses to thrive..... Enterprise Zones are one of the best ways Oxford can entice new companies to the area.

Communities Secretary Eric Pickles

Our industrial strategy is a key part of the Government's economic plan and we're helping to drive the car industry further and faster with over £4bn of investment.

Prime Minister & MP for Witney David Cameron



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1. Introduction

Oxfordshire's Strategic Economic Plan

Sitting at the western axis of the UK's 'Golden Triangle' (Oxford-London-Cambridge), Oxfordshire has outstanding and unique 'Big Science' and technology-based credentials that drive economic growth, locally, nationally and internationally. The county is one of the best-performing and most innovative areas in England and has unique assets to support growth in the national economy.

The University of Oxford is among the best in the world, Oxford Brookes University is a top performing new university, and the Defence Academy at Shrivenham provides post-graduate education to the tri-services from home and abroad. Our universities and science institutes are pre-eminent in UK technology transfer. This globally renowned academic cluster has spawned in excess of 50 Nobel prizes and supports a unique grouping of 'Big Science' and other research facilities including the UK Atomic Energy Authority Culham Centre for Fusion Energy; the Science and Technology Facilities Council (STFC) Rutherford Appleton Laboratory; Diamond Light Source, the national synchrotron facility; the Medical Research Council's facilities at Harwell; the newly established European Space Agency and the Satellite Applications Catapult Centre.

Together with Oxford's global profile this provides an outstanding environment for foreign direct investment and businesses to spin out and grow in high quality business locations across the region: Oxford's science parks, Bicester, Science Vale, the Enterprise Zone, and beyond.

But we have the potential to do much more and increase our already positive contribution to UK economic performance and finances and to position UK PLC at the forefront of global economic race.

Our Strategic Economic Plan (SEP) sets out our ambition and strategy for Oxfordshire to 2030. The overarching theme of the Plan is 'Driving Economic Growth through Innovation', which focuses on our strong international proposition to exploit growth in science and our knowledge-rich sectors, supported by the premium skillsets emanating from our universities. We have the ambition to grow our local economy above trend focussing investment on the knowledge spine and on the commercialisation of our innovation and knowledge rich assets.

This SEP builds upon our City Deal, which was recently agreed with government. The City Deal allows us to put in place the initial infrastructure required to accelerate Oxfordshire's economy, which will be enhanced and continued through implementation of the SEP.

Oxfordshire facts:

- 660,800 people
- 380,600 jobs
- £15.5 billion a year to national output
- 45 businesses per 1000 people

Structure of Our Submission

Our Strategic Economic Plan sets out our ambition and the basis against which we will negotiate our Local Growth Deal with Government.

We set out the context for our Plan in Section 2 where we review our strengths and opportunities as well as the current and projected challenges facing our economy. Building from this, Section 3 sets out our vision for Oxfordshire across our four key themes: Innovative Enterprise, Innovative Place, Innovative People and Innovative Connectivity. These themes are underpinned by our delivery strategy centred on the 'Oxfordshire Knowledge Spine' – the focus of increased economic growth around the largely urban centres of Bicester in the north of the county, south into Oxford City and the Science Vale Oxford area centred around Didcot. We set out our strategic interventions across these four themes and then look at area-specific proposals in our three core economic areas: Bicester, Oxford and Science Vale Oxford. Our Local Growth Fund bid is summarised in Section 5. Sections 6 through 8 outline how we have undertaken the assessment of opportunities and arrived at our bid proposal as well as how we plan to manage and deliver our ambitious plan.

Our Strategic Economic Plan has been developed in collaboration with a wide range of partners across Oxfordshire. Letters of support for our plan are provided in Appendix A1.

In developing our Strategic Economic Plan, a number of key assessments have been undertaken. Many of these provide the evidence base upon which our Strategic Economic Plan is based. A list of key documents in provided in Appendix A2.

2. Oxfordshire Today

There are six local authorities in Oxfordshire: Oxfordshire County Council, the Districts of Cherwell, South Oxfordshire, Vale of White Horse, West Oxfordshire, and Oxford City. Together the area is home to 660,800 residents and 29,245 businesses, employing 380,600 people producing a GVA per capita of £23,600, as well as a number of strategically important assets, most notably the Universities of Oxford, Oxford Brookes, and the Defence Academy at Shrivenham, their associated research infrastructure, and a number of globally significant business sectors. Taken together, Oxfordshire has a diverse economic base with strengths across a broad base of knowledge-intensive sectors: satellite and data tracking; biomedical engineering; pharmaceuticals and advanced manufacturing, as well as medical software for managing healthcare technology and services.

Our Strengths

Oxfordshire is one of the best-performing and most innovative areas in England and has unique assets to support growth in the national economy.

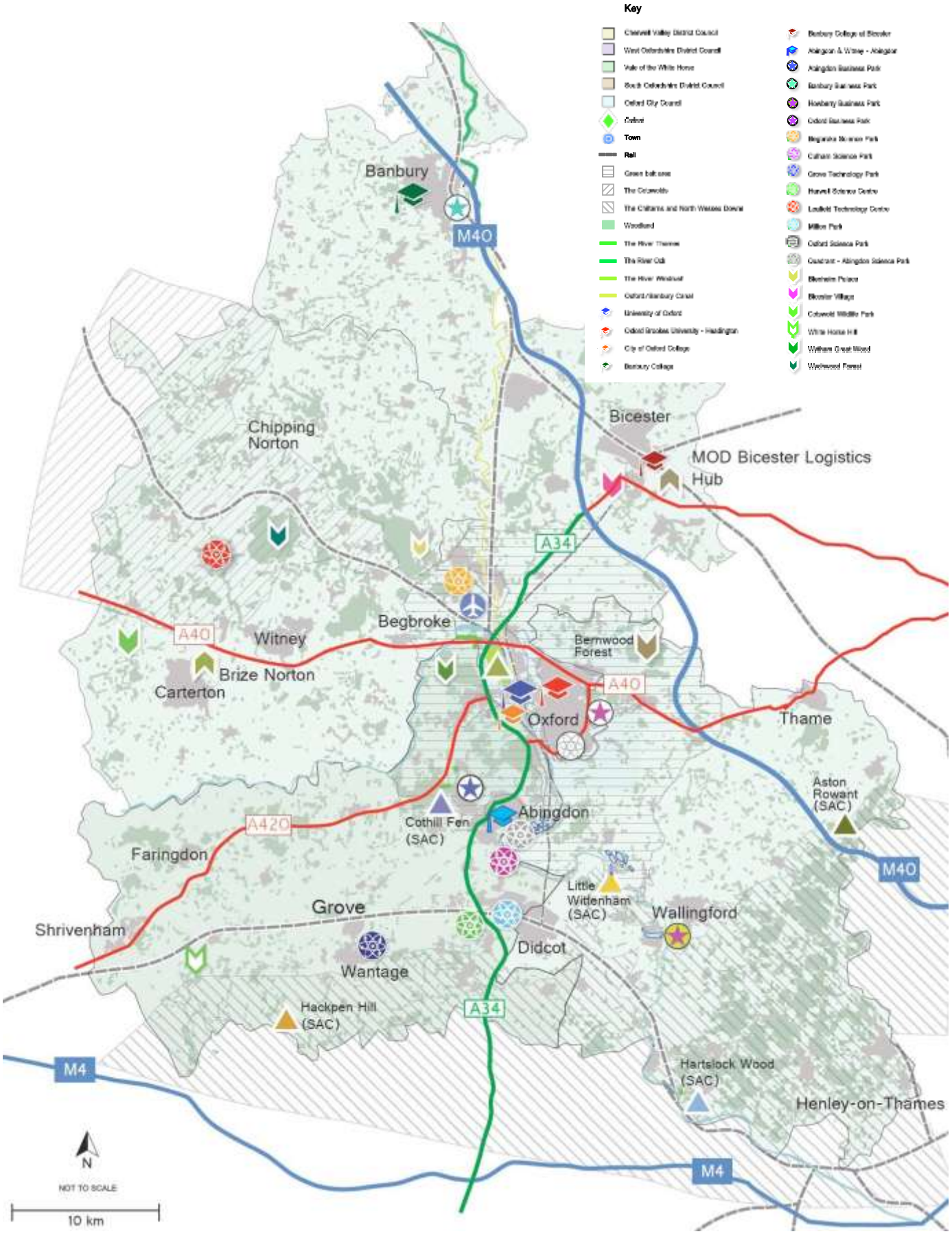
Oxfordshire is asset rich – the University of Oxford is amongst the best in the world. Oxford Brookes University is a top-performing university, and the Defence Academy provides post-graduate education to the tri-services from home and abroad. Our universities and science institutes are pre-eminent in UK technology transfer. Together with Oxford's global profile, this provides an outstanding environment for inward investment and businesses to spin out and grow in high quality business locations across the region: Oxford's science parks, Bicester, Science Vale, the Enterprise Zone, and beyond.

This globally renowned academic cluster has spawned in excess of 50 Nobel prizes and supports a unique grouping of 'Big Science' and other research facilities including the UK Atomic Energy Authority Culham Centre for Fusion Energy; the Science and Technology Facilities Council Rutherford Appleton Laboratory; Diamond Light Source, the national synchrotron facility; the Medical Research Council's facilities at Harwell; the newly established European Space Agency and the Satellite Applications Catapult Centre.

These assets provide huge opportunities and resources to drive high tech business growth. They have supported the development of many high tech firms that now form an Oxfordshire technology cluster with outstanding strengths in four overlapping technologies[5]:

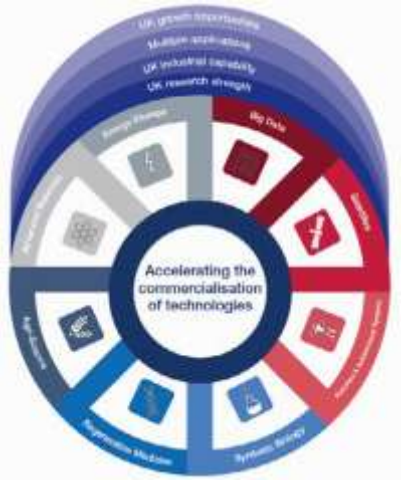
- Life science - bioscience/medical technology/pharmaceuticals
- Physics related specialisms including cryogenics (Europe's largest cluster), instruments and magnets
- Engineering and electronics, including motorsport
- Telecoms and computer hardware and software

Oxford is a unique and truly global brand, known the world over for its academic excellence and historical significance. Oxfordshire, and the UK's 'Golden Triangle', competes internationally with Silicon Valley and San Francisco, Boston and Massachusetts, and greater Shanghai.



Oxfordshire's Strategic Economic Assets

The UK Government's 'eight great technologies'



Oxfordshire is uniquely placed by having significant presence and potential in sectors that are poised for growth. Government has identified 'eight great technologies': big data, space, robotics, synthetic biology, regenerative medicine, advanced materials, agricultural technologies, and energy storage. Oxfordshire has a strong and growing capability in the first six 'great technologies'.

Our Strengths

Innovative Enterprise

- Global brand for academic excellence
- Significant strengths in six of the 'eight great technologies'
- Net contributor to the Exchequer
- Top 5 technology innovation ecosystems in the world
- International leader in the advanced engineering and manufacturing sector
- Largest concentration of multi-million dollar science research facilities in Europe clustered in and around Science Vale Oxford Enterprise Zone
- Over 85,000 new jobs projected to 2030
- Internationally significant Life Sciences sector
- Strong international inward investment offer and pipeline
- Harwell Oxford is at the heart of the growing international space cluster

Innovative People

- Higher than average high skilled workforce
- Lowest Job Seekers Allowance claimant count of all the LEP areas
- Above trend apprenticeship delivery
- Higher than national average economic activity rates

Innovative Place

- Major tourist destination with a growing visitor and cultural economy
- At the western axis of the UK's 'Golden Triangle': Oxford-London-Cambridge
- Attractive urban and rural housing and communities in and near Areas of Outstanding Natural Beauty
- A high quality of life attractive to knowledge rich business investment

Innovative Connectivity

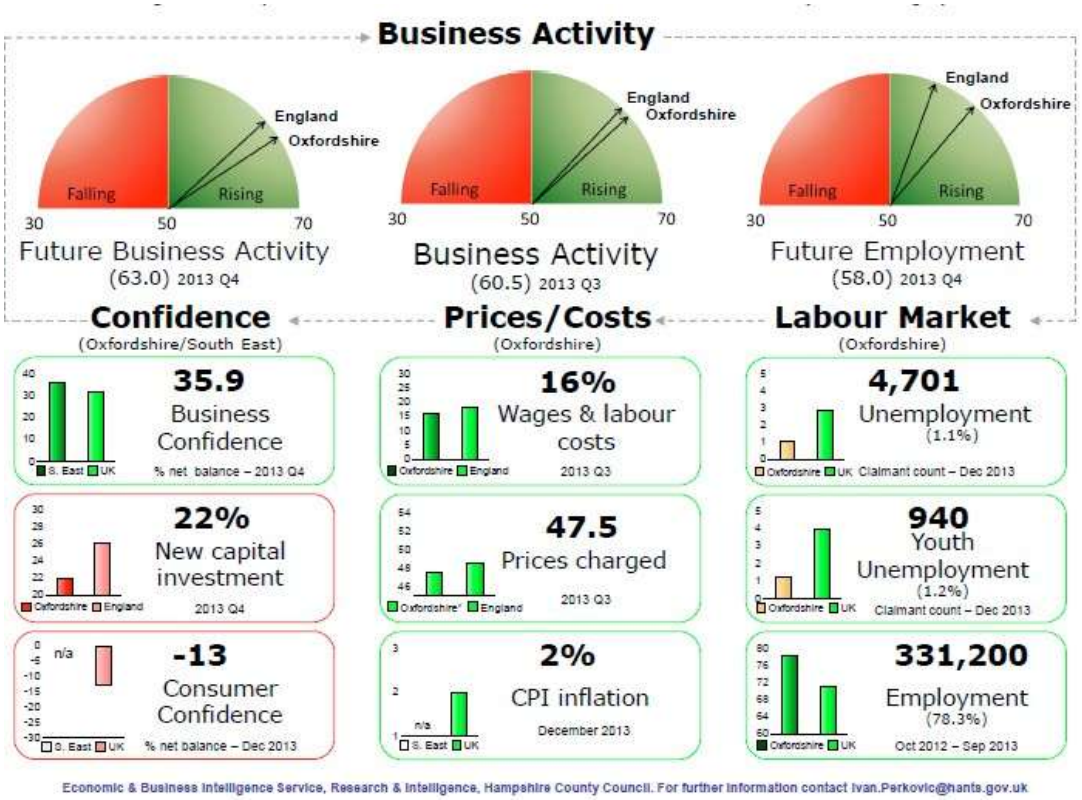
- Strategically located on the UK road and rail network
- Ease of access to the two largest cities in the UK, London and Birmingham
- Within an hour of London Heathrow - the UK's and Europe's premier global hub airport

A Positive and Diverse Economy

Oxfordshire is a significant regional economy, contributing approximately £15.5 billion a year to national output[1] and one of only three areas that are positive contributors to the Exchequer. The Gross Value Added (GVA) per capita for Oxfordshire is above the national mean (£23,600 compared to £21,300[2]). In 2011, Oxfordshire had the 6th highest GVA per capita of the 39 Local Enterprise Partnerships (LEPs). Oxfordshire also has a high business density per head of population; 45 businesses per 1000 people, which again is 6th of the 39 LEPs[3]. Our latest business dashboard from quarter 4 2013 shows current and future activity levels in Oxfordshire are expected to exceed England growth rates.

- Banking & finance and research (48,000 including 6,400 in Research & Development)
- High technogoloy manufacturing, excluding ICT (43,000)
- Education (41,200)
- Retail (37,700)
- Health including social care (34,000)
- Creative Industries (30,100)
- Tourism and visitor economy (24,000)
- Military (15,000)
- ICT (11,400)
- Agriculture and Rural (8,900 including 3,900 in agri-food processing)

In 2012, the top two sectors in terms of concentration were the manufacturing of computers and peripheral equipment and book publishing, reflecting Oxford Brookes'



Oxfordshire 2013 Quarter 4 Business Dashboard

strength as home to the International Centre for Publishing Studies, one of the leading academic institutes for publishing education and the largest university publishing department in Europe.

Sectors increasing in concentration in the area include plastics, medical and dental instruments, postgraduate education and research and experimental development on social sciences and humanities.At the heart of 'motorsport valley' the county is home to Formula One icons such as Williams and Lotus, and emerging forces of Caterham and Marussia. Our automotive sector is strengthened by the presence of BMW Mini and Prodrive.

Science Vale Oxford has one of the largest concentrations of multi-million dollar science research facilities in Europe. This includes the Harwell Science and Innovation Campus where more than 4,500 people work on a range of science projects – from new medicines to the exploration of space with the work of the European Space Agency. The Diamond Synchrotron at Harwell can project light that is as much as 100 billion times brighter than the sun while Harwell also houses ISIS, the world's most powerful pulsed neutron source. Over 60 high tech businesses are based at Milton Park while the Culham Science Centre is the home to the UK's fusion research programme.

Oxfordshire's economy benefits from a strong defence sector, including the defence logistics hub at Bicester the Defence Academy at Shrivenham, RAF Benson and Brize Norton – now the single air movement base for the military in the UK.

With global headquarters and research and development facilities for world leading, high technology companies such as Oxford Instruments, Siemens MR Magnet Technology, Sophos, RM plc, Infineum and Sharp, Oxfordshire is providing state of the art facilities that are shaping the future economy.

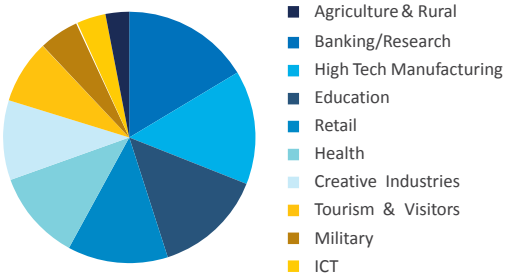
Strategically Located

Oxfordshire is strategically located between the two largest cities in the UK, London and Birmingham, as well as between London Heathrow and Birmingham International airports.

We are at the heart of the national road network with the A34 providing a vital strategic link between the Midlands, London and the south coast via the M40, M4 or M3. Direct coach and bus connections run to central London.

We are at the centre of the national rail network with mainline services to London Paddington and London Marylebone. Oxford railway station provides links to Worcester, Hereford, Banbury, Bicester and Birmingham to the north, whilst routes to the south serve connections to Bristol, South Wales, Southampton, Basingstoke, Reading and London. Chiltern Railways Evergreen 3 project will improve links to London, via Bicester, and the East West Rail project will provide further improved transport links into Buckinghamshire and beyond. Oxford sits at the heart of the significant rail freight route between Southampton docks and Birmingham.

Top 10 employment sectors in Oxfordshire



Oxfordshire's strategic location supports the growth of BMW's MINI plant in Oxford, with the company exporting vehicles to 110 countries from their Oxford base, using transport links to Southampton Docks.

The county has a large air transport need. The Civil Aviation Authority identifies 2.1 million passengers travelling by air to/from Oxfordshire mostly through Birmingham International and London Heathrow airports. We have close strategic links to international networks via London Heathrow, Europe's premier global hub airport, which is fundamental to competing in international markets. Oxfordshire's close proximity to Heathrow makes it a great place to do business. Direct, western rail access to Heathrow will provide faster and reliable access, connecting businesses with global markets. Currently dual mode access to Heathrow is possible via Reading by train prior to onward travel by coach.

We are fully supportive of the Western Rail Access to Heathrow scheme promoted by Thames Valley Berkshire LEP which will benefit Oxfordshire by:

- Up to 30 minute journey time reduction
- 250,000 additional passengers
- Up to 75,000 fewer car journeys
- Up to 6,000 jobs created
- Up to £30 million Gross Value Added

London Oxford is a successful business aviation airport and has every opportunity to develop to achieve the status of a successful

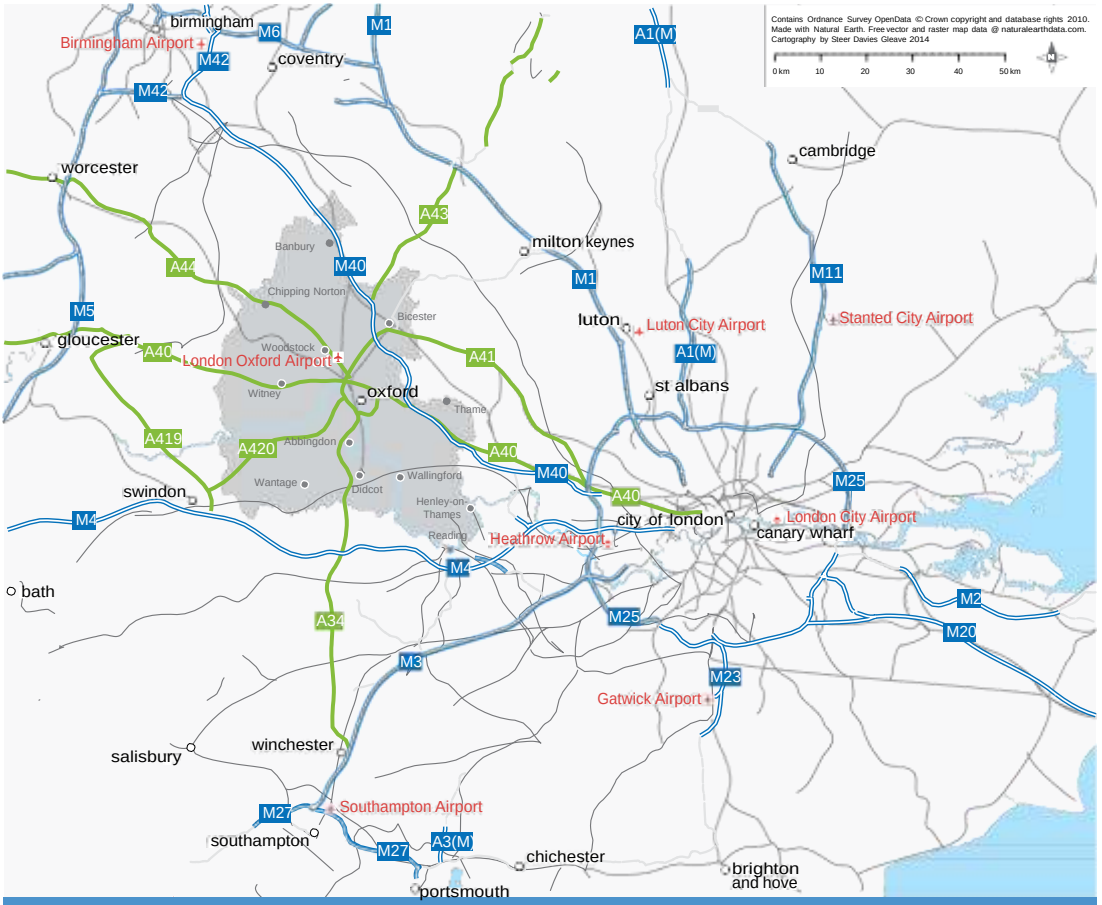


Figure 5: Oxfordshire's Strategic Transport Network

niche regional airport. The strategy for the next phase of its development, subject to gaining planning consent, is to deliver a core of scheduled air services to identified destinations focussed on corporate business travel satisfying the needs of the established businesses and acting as a catalyst for new businesses.

London Oxford has the ability, capacity and airside infrastructure to accommodate the future strategy of a niche regional airport. Domestic and near European scheduled air services destinations are targeted (radius 90 minute flying time from Oxford). Typically Edinburgh, Belfast, Dublin, Amsterdam and Paris feature in the most demanded top 10 destinations. Each top 10 route has a passenger potential of more than 50,000 passenger sectors per annum for Oxfordshire.

A Global Centre of Academic Expertise

Oxford is the oldest university in the English-speaking world and currently has more than 22,000 students. The University, including the colleges and Oxford University Press, supports more than 16,500 jobs and contributes £750 million annually to the regional economy. Total research income for 2011/12 totalled £538 million. Of this £129 million was received in Higher Education Funding Council for England (HEFCE) research funding, and £409 million from externally funded grants and contracts.

The University of Oxford is central to technology and knowledge-based development in the county. It is one of the world's leading universities, with an outstanding depth and breadth of research and a global perspective. Oxford's research activity involves more than 70 departments, the colleges, more than 1,600 academic staff, more than 4,100 research and research support staff, and more than 5,500 graduate research students.

Oxford Brookes University has established itself as one of the leading new universities. It has nearly 18,000 students, has an annual expenditure of more than £159 million and contributes over £1m per day to the UK economy[4]. Oxford Brookes complements the University of Oxford with a greater emphasis on high level training and applied research.

The Defence Academy headquarters in Shrivenham is responsible for post-graduate education and the majority of command, staff, leadership, defence management, acquisition and technology training for members of the UK Armed Forces and Ministry of Defence Civil Servants.

Our global brand, academic excellence and quality of life fuel a healthy inward investment pipeline with over 90 enquiries received year to date, which originate from a variety of sources including UKTI, University collaborations, direct and via other stakeholders.

Oxford Brookes University is one of the few universities worldwide that makes over £1m per year from a single patent (Downs syndrome test)

Science Vale Oxford Enterprise Zone

Science Vale Oxford Enterprise Zone is a global hotspot for enterprise and innovation in science, high technology and the application of knowledge.

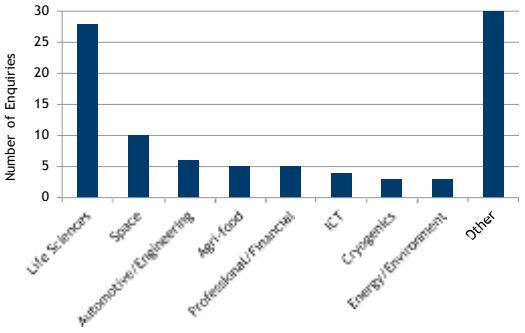
The Science Vale Oxford area is already one of the most successful science hotspots in the country with 13% of research and development employment in South East England.

Businesses benefit from a range of offers including:

- Business rates discount of up to £55,000 per annum for five years
- Simplified planning to speed up the design and build process
- Superfast broadband
- Support to relocate and recruit staff

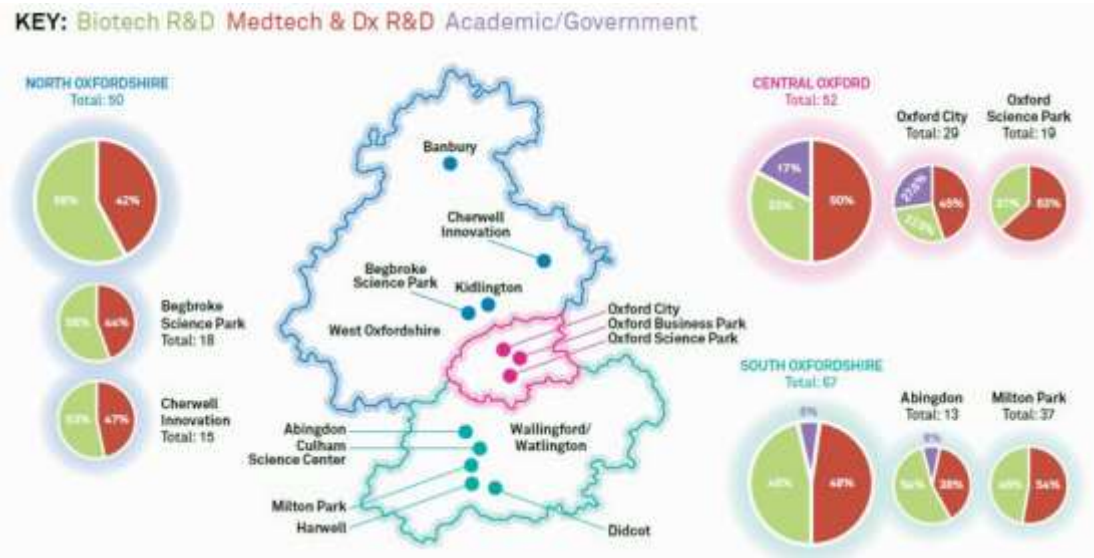
Attracting Foreign Direct Investment: A Focussed Offer

Attracting Foreign Direct Investment is led by Invest in Oxfordshire, a collaborative inward investment service jointly supported by the County Council, Oxford University and the LEP which has focussed its activities on those sectors where Oxfordshire competes globally for internationally mobile investment.



Life Sciences

Oxfordshire has one of the largest bio clusters in Europe with the University of Oxford's Medical Sciences Division receiving more than 60% of the University's external research income. Oxford is a world-leader in the development of treatments in a range of clinical areas, including diabetes and is pioneering work to speed up the drug discovery process through renowned centres such as the Structural Genomics Consortium.



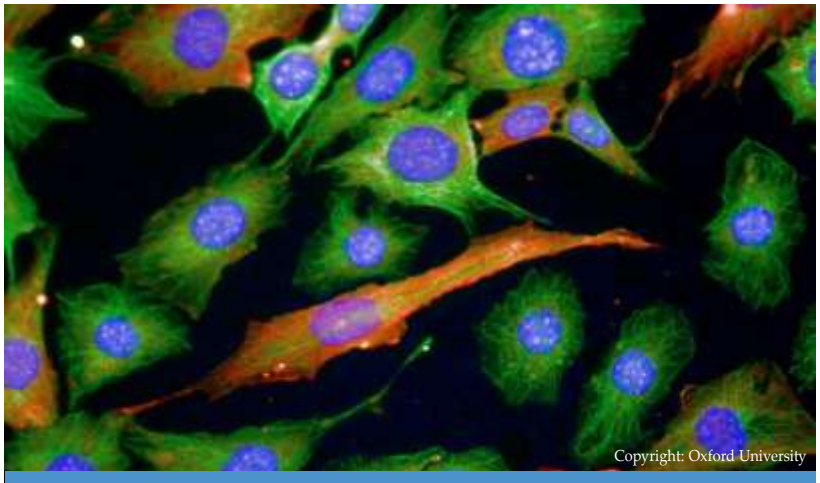
Oxfordshire's Biotech Centres

Sub-sector strengths lie in diabetes and Alzheimers with the University of Oxford having specialist resources in these areas supporting a growing concentration of companies in these fields. Both conditions affect an increasing number of individuals globally with many companies investing heavily in research and development to seek sustainable and viable remedies.

Oxfordshire is at the centre of funding into the Life Sciences sector, including strong networks for private capital and also Government-backed research grants. This includes £90 million from the NHS to translate biomedical research into clinical research to help in the adoption of new technologies, techniques and treatments.

Space and Satellite Applications

Harwell Oxford is the Gateway to the UK's space industry, both in upstream and downstream technologies. RAL Space, Europe's largest non-private space research team, manufactures and tests components used in space missions and has a strong track record globally across a spectrum of stakeholders including NASA.



Drug Discovery - Screening in Biological Cells in Oxford University

The European Space Agency is currently building their European Centre for Space Applications and Telecommunications (ECSAT) on the Harwell Oxford Campus which will be ready in 2015 - further embedding Harwell Oxford at the heart of the UK and European space sector. Harwell Oxford is also home to the Satellite Applications Catapult which supports companies utilise data derived from space develop new products and services. This is a significant growth area with recent investment successes from US and Spain.

Creative/Media/Big Data

With the rise of inter-connected media and the ever-growing demand for information Oxfordshire is well-placed to service companies that supply into these different media and who require 'super-computing' capabilities to process data.

The Oxford Technology Media and Finance Network supports over 300 senior industry figures to collaborate and promote Oxfordshire internationally. Members such as Vicon developed the motion capture technology used in the Oscar winning film Gravity, while others such as Natural Motion were recently acquired by Zynga for $527 million.

Working with UKTI

We continue to work closely with industry and academia to ensure our 'offer' supports the growth aspirations of companies, alongside the overseas UKTI network to assist in the promotion of our unique assets. This includes a range of world-leading research groups across both our Universities as well as facilities such as the UK's national synchrotron at Harwell Oxford.

We have hosted numerous inward missions from UKTI sector leads including those covering life sciences, space and engineering.

A tour of global UKTI sector leads for life sciences is scheduled for March 2014 and staff from the Life Sciences Investment Organisation have visited on many occasions.

When visiting trade events overseas Invest in Oxfordshire engages with the relevant UKTI 'Posts' and presents the up-to-date offer to staff, an example of which is a recent visit to the Boston UKTI office during attendance at the US Bio Convention.

Supporting Our Existing Company Base – Aftercare

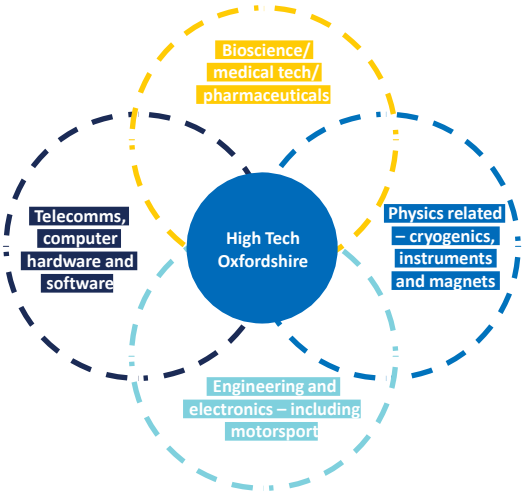
Invest in Oxfordshire spends a considerable amount of time with partners to develop a co-ordinated account management aftercare programme to ensure we are effectively supporting our existing company base, especially high growth potential companies in our core sectors. Successes through this activity include the expansion of SS Tube Technology as they diversify from motorsport into the likes of aerospace and the energy industry.

In addition, Element Six who were supported by UKTI to locate on the Science Vale Oxford Enterprise Zone, were assisted in their RGF application which yielded an award of over £1 million to support further expansion.

Partnership Working

Oxfordshire's City Deal has facilitated the joint working of numerous partners across the County and led to investment in critical infrastructure that supports our offer, such as new incubator space and transport infrastructure improvements to improve connectivity and accessibility.

We are also working jointly with neighbouring LEPs in key sectors such as the promotion of our globally significant high performance engineering base via the cross-LEP High Performance Technology Group. The group is developing promotional material to be utilised by UKTI on behalf of six LEPs that form the backbone of the UK's high performance engineering base. It will be launched at a technology showcase event in the run up to the British Grand Prix in July.



High Tech Oxfordshire: Core Overlapping Technologies[5]

A High Technology Economy

Oxfordshire is amongst the top five technology innovation ecosystems in the world, home to an impressive knowledge-intensive cluster, with 1,500 high tech firms employing around 43,000 people. The cluster has outstanding strengths in four overlapping technologies[5].

Oxfordshire is an international leader in the advanced engineering and manufacturing sector, especially in automotives and motorsport. The county is at the heart of 'Motorsport Valley' with four Formula 1 teams based in the county: Lotus F1, Williams F1, Caterham F1 and Marussia F1. This hub of motorsport activity is supported by 4,000 high performance engineering companies employing close to 40,000 people in the area.

Case Study: Oxfordshire; Leading Global Life Sciences, University of Oxford and Oxford Brookes

The University of Oxford is one of the largest biomedical research centres in Europe with 2,500 staff and 800 postgraduate students involved in medical research. The Medical Sciences Division of the University brings in 66% of the University's external research income.

The creation of the Oxford University Hospital Trust and the ranking of Oxford University's medical school as No.1 in the world places Oxfordshire at the centre of the largest and fastest growing bio-tech cluster in the UK and builds on the sector's success in attracting 20% of all UK bioscience investment since 2008 spawning 168 new companies.

The University of Oxford is ranked first in the world in clinical, pre-clinical and health and has 23 Nobel Prize Winners in medicine and chemistry. The University of Oxford has developed innovative ways of working in partnership with industry to help improve the process of drug discovery and development such as the formation of the Structural Genomics Consortium (SGC) and the new Target Discovery Institute.

Over £1.2 billion has been invested in biomedical academic research in Oxford over the last five years, with companies taking advantage of specialist facilities and world-leading expertise. Oxfordshire is unique in offering clinical understanding, research, development expertise, and in patient implementation - a truly bench to bedside environment. Nowhere else will you find such a balanced, triangular powerhouse of academia, research and industry.

Oxford Brookes specialises in the training of nurses and other healthcare professionals and hosts research groups on topics including movement science and rehabilitation, human nutrition and psychology. Oxford Brookes is a partner in the Academic Health Science Centre for Oxford and a member of the Academic Health Science Network (AHSN).

The Oxford AHSN covers a population of some three million people and includes all NHS providers, private healthcare providers, Clinical Commissioning Groups, universities, county and district councils, the local National Institute for Health Research (NIHR) infrastructure, third sector bodies and charities and a significant and increasing number of partners from the Network's renowned life science business ecosystem and beyond.

The Science Vale Oxford Enterprise Zone in Oxfordshire, covering Milton Park, Harwell Oxford and the Oxford Science Park are home to numerous spin-outs from the Universities and international companies covering US, Europe and Asia. Examples include Adapt Immune (US), Amgen (US), Vertex Pharmaceuticals (US), Evotec (Germany), Proteros (Germany) and WuXi PharmTech (China).

Car manufacturing in Oxford is well established and growing. The city is home to BMW Mini and over five million cars have been sold worldwide since the Mini car was first conceived. In 2011, parent company BMW announced a further £500 million investment in the car plant in Oxford, taking the total invested in the past ten years to £1.5 billion. BMW recently announced a further £750 million investment that will fund the creation of an additional 700 jobs locally.

Another well-known, international brand in Oxfordshire is Prodrive. This automotive engineering consultancy firm designs, builds and runs motorsport and vehicle technology programmes for vehicle manufacturers. Their specialist manufacturing operation also works with the motor, aerospace, defence, marine and other high tech sectors to produce machined, fabricated and composite parts.

Epicentre of Research and Innovation

Our internationally unique proximity of technology clusters, university research programmes and high-technology businesses stimulate significant business spin-outs and growth opportunities. The close proximity of these economic assets provides major opportunities to expand university and business interaction for the existing business base, by converting knowledge to wealth.

Multiple world leading high technology companies choose Oxfordshire to base their global headquarters and research and development facilities. These include Oxford Instruments, Siemens MR Magnet Technology, Sophos, RM plc, Infineum and Sharp. The county has become a hotbed for research and development businesses, which has produced an economy of scale through state of the art facilities and a common labour pool.

Science Vale Oxford has one of the largest concentrations of multi-million dollar science research facilities in Europe. This includes the Harwell Science and Innovation Campus where more than 4,500 people work on over 150 high-tech organisations. The Diamond Synchrotron is one of the most advanced scientific facilities in the world, and its pioneering capabilities are helping to keep the UK at the forefront of scientific research.

Case Study: Supporting The Global Pipeline; Automotive and Motorsport Technologies, Oxford Brookes University

A key requirement of motorsport and on-road vehicles is a flow of talented people. Oxford Brookes University offers a comprehensive range of undergraduate and higher degrees in automotive and motorsport technologies in a £9 million purpose-built engineering centre.

Automotive Laboratory at Oxford Brookes University

Approximately 750 students are on degree and postgraduate courses in-house at any one time. The courses have significant industry input with involvement from high profile teams such as Lotus F1.

Oxford Brookes Graduates at Lotus F1

Oxford Brookes further supports the sector by undertaking significant consultancy activity for motorsport and road going Original Equipment Manufacturers. Areas of work include composite analysis for companies such as Bentley and electric vehicle development for BMW. Materials recovery and 'End-of-Life' are also growing consultancy areas, as are engine optimisation, performance testing, noise and vibration analysis and emissions assessment. The University of Oxford's Internal Combustion Engineering Group also has good links with industry, with research projects conducted for clients such as Jaguar Land Rover.

British Cryogenics Council

Case Study: Winning The Global Race; Cryogenics, University of Oxford and Harwell Oxford

Oxfordshire's significant research facilities have spawned the highest concentration of cryogenic activity in Europe, with companies such as AS Scientific, ICE Oxford, Oxford Instruments, Scientific Magnetics and Thames Cryogenics. Oxfordshire also hosts Siemens Magnet Technology, who manufacture more superconducting magnets for MRI scanners than anywhere else in the world.

The roots of this world-class cluster lie in the pioneering work carried out at the Clarendon Laboratory in the Department of Physics at the University of Oxford, which also resulted in the very first University of Oxford spin-out, Oxford Instruments. In addition, the Rutherford Appleton Laboratory at Harwell Oxford has a specialist Cryogenics Group that works alongside an Advanced Materials Group.

The cluster is supported by finely tuned infrastructure including cryogenic piping contractors, logistics experts familiar with shipping superconducting magnets all over the world and suppliers of liquid helium and other cryogenic media.

Oxfordshire companies form the backbone of the British Cryogenics Council. There are a growing number of international members from across Europe, North America and the Middle East, including Siemens and Sumitomo. The British Cryogenics Council provides an introductory point for international investors in the sector.

Cryogenics is an all-enabling technology that integrates with many other sectors of Oxfordshire, the UK, and international economy, including manufacturing, life sciences, space, ICT and energy. Oxfordshire's cryogenic community can be relied on to play a key role in the application of new technologies and are investing in skills development locally to support this activity.

An International Visitor Destination

Oxfordshire is one of Britain's best known and most visited destinations with an internationally renowned visitor and cultural offer. The iconic dreamy spires of Oxford, the quintessentially English countryside of the Cotswolds and Thames Valley, and the popular attractions of Blenheim Palace, a UNESCO world heritage site, and Bicester Village for high end shopping, attracts visitors from across the world. Oxfordshire draws in excess of 26m million visitor trips per year[6].

It is estimated that Oxfordshire's cultural, visitor and heritage economy is worth around £3.1 billion per year. Organisers of meetings, conferences and events are attracted to Oxfordshire not only because it is an extraordinary place to visit, but also because of our international reputation for scientific and academic excellence, and our first rate facilities.

The Oxfordshire retail offering is expansive, and expanding. Bicester Village had 5.8 million visitors in 2012. 65% of visitors are tourists with 30% of these high wealth visitors coming from non-EU countries. Bicester Village is one of the most popular destinations for Chinese visitors to Britain. The £400 million Westgate redevelopment in Oxford will add 72,400 sq.m to the City's retail offer and create over 3,500 full-time-equivalent jobs.

Oxfordshire benefits from three Areas of Outstanding Natural Beauty (AONB) – the Cotswolds, North Wessex Downs and the Chilterns. The natural and built assets of the Cotswold AONB suggests that around £260 million of Gross Value Added (GVA) (13% of AONB total) and 7,500 jobs (14% of AONB total) are 'critically dependent' on the high quality environment and landscape of the AONB. The total turnover of businesses in the Cotswolds AONB is estimated to be around £5 billion[7]. The total value of this economic activity in the AONB, measured as GVA, is estimated to be around £2 billion.

Quality of Life

Oxfordshire's high quality natural environment makes the county an attractive place to live and work, providing health and well-being benefits to communities as well as direct economic benefits through agriculture, tourism and leisure.

Oxfordshire is largely rural in character. Over 70% of Oxfordshire's diverse landscape is farmland, which has an agricultural GVA of £91 million per year.

Our county has a number of historic market towns as well as a large area with relatively dispersed populations. Over one third of Oxfordshire's employment is located in the City of Oxford but over half of Oxford's workforce is drawn from outside the city, mainly from the rest of the county with Oxfordshire's market towns accommodating 45% of Oxfordshire's population. As such, the market towns offer significant business and retail space (46% of the county's businesses) and are important economic centres for the county and neighbouring areas.

The county has a wealth of natural and built heritage assets including Blenheim Palace, a UNESCO world heritage site, and seven Special Areas of Conservation (SACs). The SACs are distributed across the county and form part of a wider ecological network of 36 Conservation Target Areas (CTAs), along with many of the 111 Sites of Special Scientific Interest (SSSI) and 472 Local Wildlife Sites. Parts of nine Natural Character Areas (NCAs) fall within Oxfordshire's county boundary, reflecting its great range of landscape types. The presence of three AONBs is indicative of the high quality of Oxfordshire's landscape. Taken together the three designated landscapes comprise 25.6% of Oxfordshire, (Chilterns 9.6%, Cotswolds 9.4% and North Wessex Downs 6.6%). They were designated for their landscape beauty and are of equal landscape status to National Parks.

Employment and Skills

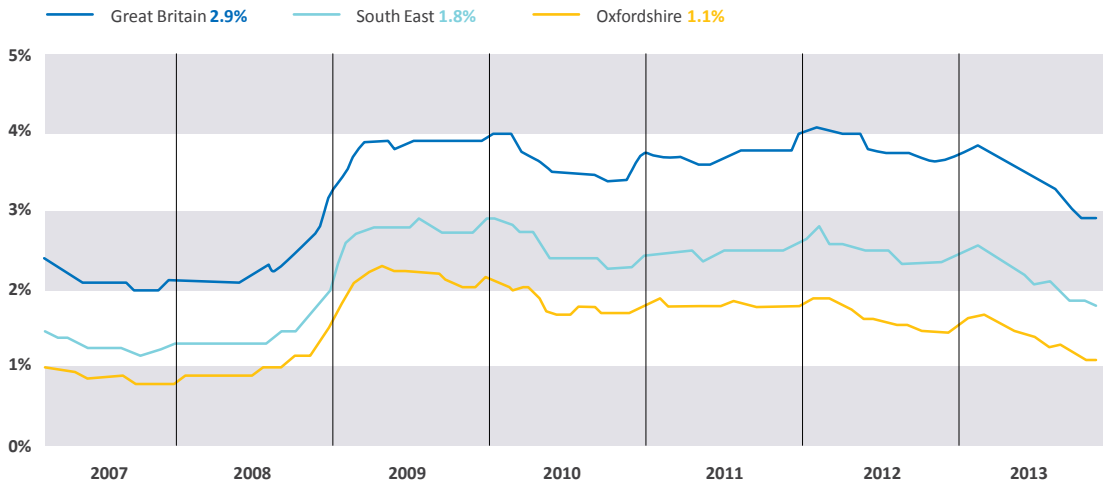
Oxfordshire starts from a strong position in relation to skills. In 2012, 197,900 people were qualified at NVQ4 and above, which is 47% of residents aged 16-64 and the second highest rate among the 39 LEPs (only the London LEP area showed a stronger performance). At the same time, the share of the population without qualifications is low. 36,300 people – 8.7% of residents – had no qualifications in 2012, a proportion which has fallen over the last decade. This is significantly below the national average (9.5% for England), although only the 13th best performance among LEPs.

Only 69,500 residents – 16.4% of working age people – were economically inactive between April 2012 and March 2013, a far lower proportion than the national average (22.7%). A relatively high share of economic inactivity is accounted for by students and retired people, meaning there is little 'hidden' unemployment compared to other parts of the country. Economic inactivity is highest in Oxford City.

Oxfordshire has a low rate of Job Seekers Allowance claimants – 1.1%, fewer than 4,700 residents[8]. The numbers of Job Seekers Allowance claimants in the county is at the lowest since 2008 and remains below the regional and national averages.

For an area rich in science and technology, with huge growth potential, it is essential that we broaden the appeal of science based employment and increase the investment into the sector. Currently less than 5% of existing Skills Funding Agency budget invested in the county supports science, technology, engineering and mathematics (STEM) delivery across the Further Education sector.

Oxfordshire's 2013 GCSE results are slightly ahead of the national average. The proportion of Oxfordshire GCSE students achieving at least five A*- C grades including English and Maths is at its highest ever level with 60.3% of students achieving the benchmark – up 2.4% on the previous year, the biggest margin of improvement since 2010. The proportion of GCSE students making 'expected levels of progress' – another key measure – in English has also increased by 5.1% to 70.3%, whilst the figure for maths rose by 0.1% to 70.9%.



Job Seekers Allowance Claimant Trends in Oxfordshire, the South East and Great Britain (Dec 2013)

Our Opportunities

Oxfordshire has significant opportunities for economic growth based on the commercialisation of world class academia, unrivalled 'Big Science' and a quality of life that is second to none –a shared innovation led growth narrative.

Growth in Oxfordshire will significantly contribute to economic prosperity on a national scale, with increased growth leading to increased GVA, productivity and additional income to the Exchequer.

Innovative Enterprise

- Strong and growing capability in six of the 'great technologies'
- Internationally unique proximity of technology clusters, university research programs and high-technology businesses to stimulate significant business spin-outs and growth opportunities
- UK expertise in innovation based technologies and new approaches to green (environmental) and blue (water use) management with significant growth potential

Innovative People

- Improve retention of graduates within the local economy both as employees, and as new business owners
- Maximise the levers of growth to offer a range of employment opportunities to all who are able to participate in our labour market
- High value, higher paid employment opportunities

Innovative Place

- Economic assets attractive to the international labour force that has a choice of where to work
- A globally renowned visitor and cultural economy
- Manage flood risk to release land for housing and employment

Innovative Connectivity

- Maximise the opportunity presented by c£65 million investment in enhanced broadband connectivity
- Over £500 million rail investment to unlock growth
- £716 million highways investment to unlock growth and better connect planned housing growth to employment sites

Converting Knowledge to Wealth

Oxfordshire is an epicentre of technology clusters, university research programmes and high-technology businesses. The close proximity of these economic assets provides major opportunities to expand university and business interaction. Closer links between academic research excellence and entrepreneurs can stimulate significant business spin-outs and growth opportunities for the existing business base, by converting knowledge to wealth.

The University of Oxford received over £39 million industry funding in 2010/2011which is the highest in the UK[9]. In 2010/11 there were 235 spin-outs from the University still active, 183 of which were established by graduates.

Oxford generated the highest number of spin-outs from any UK university in the three years from 2010 to 2012[10]. However, links with local firms tend to decline as they grow. There is an opportunity to more actively maintain these networks which would benefit the high-tech innovation and business community.

Case Study: At the Heart of Global Space Related Technologies, Harwell Science and Innovation Campus

Harwell Oxford Science and Innovation Campus is the UK home of space collaborations. It is the location of the European Space Agency's UK Research Centre and the Satellite Applications Catapult; a Technology Strategy Board part-funded initiative providing the expertise and facilities to develop new satellite-based products and services. This brings together the best of the British space sector, industry and academia in collaboration with international partners to facilitate the commercialisation of space research.

The Science & Technology Facilities Council's space research and development department, RAL Space, possesses a unique combination of science and engineering expertise, laboratories and testing facilities and has been working in this field for 50 years, including with the European Space Agency and NASA. It focuses on applications in space and undertakes world-leading space research and technology development, provides space test and ground-based facilities, designs and builds instruments, analyses and processes data and operates S-band and X-band ground-station facilities, as well as leading conceptual studies for future missions.

The European Space Agency's Business Incubation Centre Harwell supports innovative entrepreneurs and high-tech Small and Medium Enterprises as they utilise space research to develop new businesses around non-space applications.

The Centre provides up to 10 start-up companies per year with an intensive package of technical expertise and business support including a £41,500 grant to develop their product, fully-equipped office space, easy access to Science & Technology Facilities Council and European Space Agency's technical expertise, intellectual property and facilities, business support advice, and help accessing sources of venture capital funding.

At the Heart of the Global Technology Race

Oxfordshire is uniquely placed by having significant presence and potential in sectors that are poised for growth. The Government has identified 'eight great technologies': big data, space, robotics, synthetic biology, regenerative medicine, advanced materials, agricultural technologies, and energy storage[11]. Oxfordshire has a strong and growing capability in the first six 'great technologies'.

New jobs and new skills are likely to be generated in the space and other science rich sectors. The UK space sector is predicted to grow by 100,000 jobs nationally to 2030[12] with approximately 10,000 jobs predicted locally centred around the internationally renowned space cluster at Harwell Oxford – which is becoming recognised as the 'gateway to the UK space sector'.

Growing our Green Innovation

Oxfordshire is home to initiatives championing new approaches to green (environmental) and blue (water use) management, spurred by both the county's natural environment assets and its pressures, for example propensity to flooding. The strength of innovation from emerging methods such as catchment area management, innovative renewables and sustainable exploitation of natural resources positions this sector well for both generic innovation support, as well as specific low carbon programmes.

A review of all economic sectors indicates a growing demand for skills in the context of the green economy. These skills are at all levels and of many types including those supporting resource efficiency, the low carbon industry, climate resilience and skills to manage natural assets[13]. Employment in our agriculture sector is predicted to grow[14] by 8.5% to 2020, alongside the demand for better management and leadership training.

FAI Farms operates from the old University of Oxford farm, and combines innovation in research on agricultural techniques and methods alongside education and consultancy. The business has an increasingly global reach and reputation for demonstrating UK expertise in a sector with significant growth potential in the global food market.

Oxfordshire has a growing number of environmental and land based bodies making important contributions through research and demonstration, such as the UK's Centre of Excellence for integrated research The Centre for Ecology and Hydrology; the Global Canopy Programme - a tropical forest think-tank based in Oxford working through multidisciplinary networks worldwide; and the Freshwater Habitats Trust who are working with land-owners locally to assess the best options for flood management, and for minimising the effects of polluted floodwater on freshwater and riverside habitats.

Capitalising on Our Graduates

With one of the leading universities in the world, and a high-performing new university there are significant opportunities to retain graduates within the local economy both as employees, and as new business owners, providing growing levels of entrepreneurship, leadership and management qualifications.

Growing Tourism

Forecasts suggest that the visitor economy should grow by £155 million a year to 2025 creating a further 2,864 jobs[15]. Located between London and Birmingham, we are well connected and perfectly positioned to attract visitors arriving into their airports.

Case Study: Nurturing talent and the environment, innovation through enterprise, people and place with the Earth Trust

Oxfordshire is renowned for its innovative thinking and nowhere is this more in evidence than at the Earth Trust. This Oxfordshire based environmental learning charity is all about new ways of working, encouraging enterprise, enhancing skills and engaging people as we strive to look after the environment.

Special places and learning

Wonderful places such as the Wittenham Clumps SAC Nature Reserve close to Science Vale Oxford are exemplars for biodiversity as well as attracting visitors and tourists. With more than 150,000 visits made to this special place annually this heritage site is the most visited, free to access place in the county and makes Oxfordshire an attractive location to live and work with significant benefit to people's quality of life.

The Earth Trust Farm aims to illustrate the balancing of food productivity, healthy habitats for wildlife and flood alleviation. Many innovations in habitat management originated from this farm – from beetle banks to wildflower margins – and the Trust is supporting local businesses and communities producing local food.

The Trust innovates through environmental learning and more than 3,000 school children and 10,000 people of all ages and backgrounds benefit annually. Through building confidence, developing STEM skills and providing a foundation for applying core skills, the Trust's learning initiatives contribute to and support business growth.

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Applied research

Working with private businesses, forestry industry and Oxford University the Earth Trust is leading research work to identify and bring to market hardwood trees that will be resilient to climate changes and provide economically viable tree crops for future generations.

Significant and potentially damaging pests and diseases such as ash dieback could become more prevalent. Using the scientific studies and methodologies, resistance in trees are being studied by the Trust, University and Government partners for long term use in the forestry industry.

Case Study: Sigmavision Ltd, Weston-on-the-Green

Sigmavision Ltd. is a UK designer and manufacturer of laser vision systems with core markets in the tyre manufacturing and tyre aftermarket sectors. The company designs, assembles and supplies a full range of laser and LED based sensors and systems, with task-specific software for inspection, measurement and control applications, and a particular focus on the tyre and rubber industry. The company's industrial solutions enable material convertors and rubber and tyre manufacturers to improve process capability, eliminate waste and maximise bottom line benefits.

TreadReader from Sigmavision Ltd is a laser measurement technology specifically developed for measuring tyre wear in service. Compact and low cost laser sensors are able to generate 3D tyre scans and can be configured as a portable hand held scanner or a surface mounted drive over ramp. TreadReader is protected by worldwide patent applications.

TreadReader product and service propositions are targeted at fleet operators, tyre maintenance providers, garages, workshops, and car dealerships to improve tyre measurement by reducing fuel consumption and CO2 emissions and improve road safety. In 2012 there were 1,100 casualties and 194 deaths on British roads due to defective tyres and over 9,000 convictions for illegal tyres.

TreadReader identifies badly worn or unevenly worn tyres that need replacing, and helps early detection of vehicle problems such as wheel misalignment that adversely affect tyre wear.

To mark the launch of TreadReader, John Howell MP formally opened a new manufacturing facility at Sigmavision's offices on 7th February 2014. This facility will expand rapidly over the next three years to provide a boost to the local economy and employment for more than 100 people.

Operating from the company's ISO 9001:2008 registered manufacturing facility in Oxford, UK and via a network of OE, sales and service partners, Sigmavision is able to support a global market, with a £2.5 billion market for TreadReader alone.

Following a successful demonstration of the TreadReader technology, an exclusive supply agreement in the passenger car sector was signed in September 2012 with Hunter Engineering Company - a leading and global garage equipment manufacturer headquartered in the USA. The contract is valued at £6 million sales to be generated over the next three years.

With the drive over ramp now entering production, further interest is developing rapidly in other markets where TreadReader can provide a superior and faster solution to manual tyre measurement. These include significant and global opportunities in commecial fleet management, retail and vehicle compliance sectors.

To mark the launch of TreadReader, John Howell MP formally opened a new manufacturing facility at Sigmavision's offices on 7th February 2014.

During this period Oxford's retail offer will receive substantial investment, as will its connectivity to London enhancing our attractiveness. Developments of this kind add to the case for new business investment, whether it is to address our under-supply of accommodation, cater for the needs of high value visitors from China and other emerging economies, or service the county's growing business sector.

Oxfordshire is superbly placed to capitalise on Britain's forecast 9.9% value increase in the tourism by 2025, perhaps even to exceed it.

Enhancing Our Competitive Advantage

Oxfordshire has some very strong economic assets and attractions. The universities and research institutes in the county are outstanding internationally, and Science Vale Oxford Enterprise Zone provides sites with pre-approved planning permission to new businesses that want to locate in the area and business rate incentives to firms to invest within one of Europe most knowledge intensive clusters. Oxfordshire's markets and high value focus for growth make the county attractive to a skilled, mobile labour force that has a choice of where to live and work.

Transport Investment Commitment

In Oxfordshire we have:

- The highest level of bus usage outside of London
- The newest bus fleet in the country – with the majority of buses using hybrid technology – Oxford's Low Emission Zone has helped to drive innovation adoption in this field
- Strong partnership working with the public transport operators – both bus and rail – who understand the scale of our growth ambition and see this as an opportunity for investment

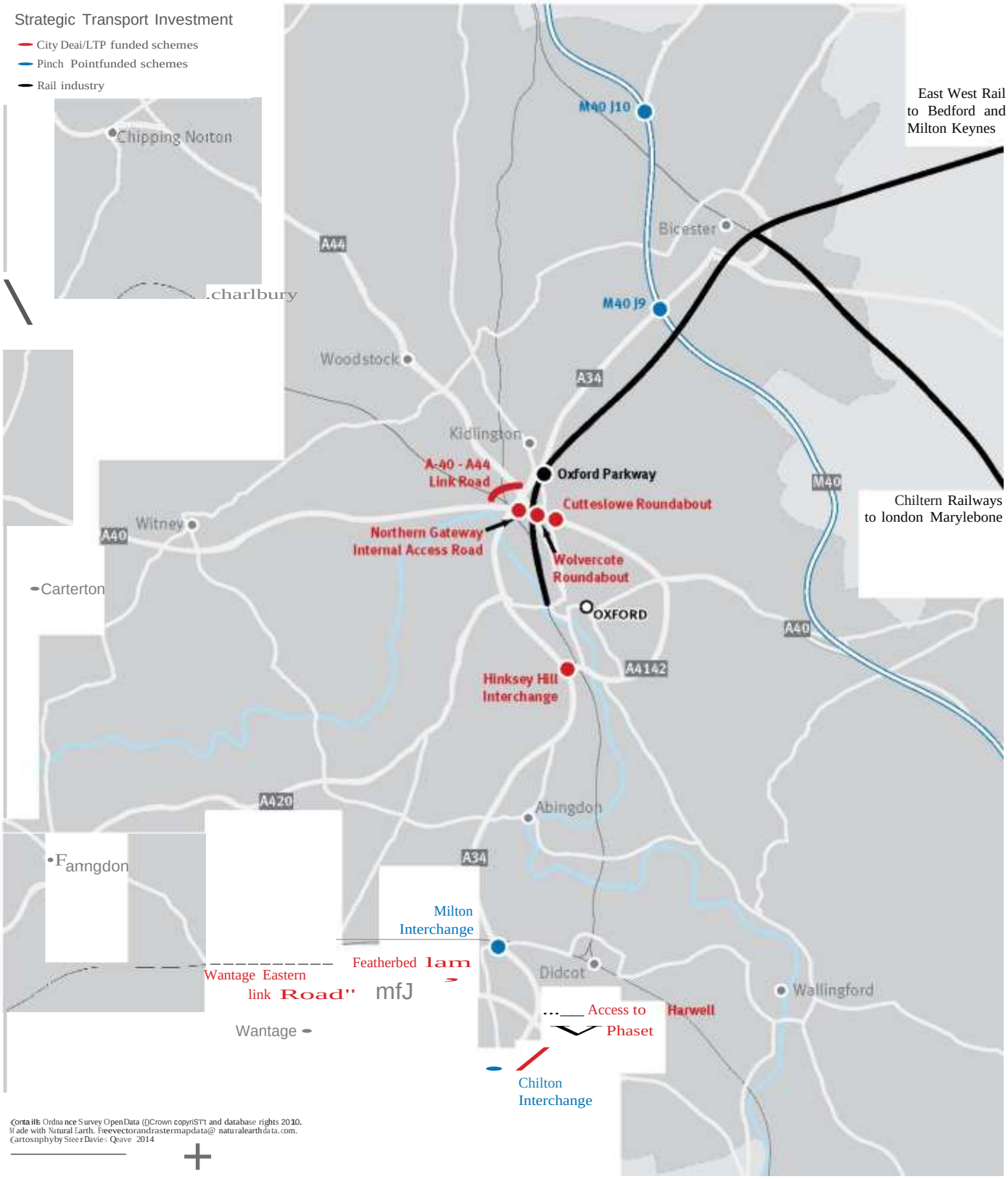
We already have commitment to a number of strategically important schemes which will be delivered in the short term including over £500 million of rail investment to unlock growth. We need to maximise the opportunities this strategic investment presents including maximising the opportunity presented by around £65 million investment in enhanced broadband connectivity and over £716 million highways investment identified to unlock growth and better connect planned housing growth to employment sites.

Investment in a direct connection to London Heathrow Airport is a significant opportunity for the economy of Oxfordshire. We are fully supportive of the Western Rail Access to Heathrow scheme promoted by Thames Valley Berkshire LEP which will benefit Oxfordshire by achieving:

- Up to a 30 minute journey time reduction
- 250,000 additional passengers
- Up to 75,000 fewer car journeys
- Up to 6,000 jobs created
- Up to £30m GVA

We also have commitment to Oxford Science Transit which underpins our long term plan for public transport, linking planned and future investment in rail, bus, and smart solutions to deliver a seamless customer orientated transport system. This is essential to provide the capacity from future demands for trip movements that planned growth and the boosted growth the SEP will help to achieve.

These schemes and the ambitious vision for Oxfordshire's future connectivity will provide a platform to which businesses can invest in Oxfordshire with confidence.



Committed Transport Schemes

Our Challenges

The Oxfordshire Engine Innovation Report commissioned by Science Oxfordshire showed that although Oxfordshire has a strong economy, growth between 1997 and 2011 was an estimated £500 million lower than would have been expected given its potential to turn scientific research into business opportunities. There are multiple reasons for this, and a number of inter-linked factors and challenges need to be addressed for the LEP to realise its growth ambitions.

Innovative Enterprise

- Low business formation and growth in the number of businesses
- Too few businesses trading internationally
- Knowledge economy currently relies on fragmented and informal collaborative networks
- Poor accessibility between investment locations and university/knowledge clusters
- Lack of suitable business start-up, incubation, grow on premises and research/collaboration facilities
- Complex business support schemes
- Shortage of early stage investment for new businesses and start-ups
- Lack of available freehold land for development to support growth
- Need for additional 'clean room' space for life sciences companies in particular has been raised amongst the development community

Innovative People

- Mismatch of skills with current and projected employment
- Labour market competition - retaining graduate talent
- A 'tight' labour market with pockets of unemployment
- Low growth in working age population projections - rapidly ageing population
- Increasing the attractiveness of apprenticeships as a viable career option

Innovative Place

- Housing affordability
- Four major flood incidents in the past decade impacting on businesses and communities
- Reliance on private sector land owners to bring forward development
- Geographically constrained Oxford city

Innovative Connectivity

- Slow or indirect international connections compared to our competitors
- Key arterial routes and inter-connections at capacity
- Limited connectivity within Oxfordshire - infrastructure that doesn't match new travel patterns
- Exploiting the investment and resilience of super-fast broadband

Low Business Growth and Export Levels

Whilst businesses are growing and performing well in terms of productivity, the business base is static, with only a 21% increase in business stock over the past 10 years, ranking Oxfordshire in the lower half of all LEPs for growth in the number of businesses. We have the 7th highest rate of business churn (rate of start-ups and closures).

Oxfordshire businesses, when formed, have a high level of survival rates, with the LEP ranked 3rd out of 39 LEP areas. Businesses in Oxfordshire do not perform well in terms of employment in export intensive industries, ranking in the bottom half of LEP areas and hindering our growth potential.

Oxford has the highest ratio of public sector to private sector employment of any city in England[16] with a ratio of 1:1 or 50% public sector employment, which includes Oxfordshire's academic sector. Oxford is in the bottom 10 cities for private sector job growth, -4.1% growth between 2011 and 2012- reflecting the significance of our life sciences, medical and academic sectors.

Skills and Labour Shortages

Low unemployment and inactivity rates make it difficult for employers to recruit suitably qualified staff. High growth, innovative companies need access to a range of services, skills and support to enable them to grow and scale their businesses.

In 2011-2012, 7% of employers reported that hard to fill vacancies were impacting on their business (compared with 5% nationally)[17]. The primary reason for these difficulties was a lack of applicants with the required skills, qualifications or experience; this issue was more common in Oxfordshire than nationally and in neighboring areas with similar economies (for example Berkshire and Surrey). The availability of specialist skills is a barrier to growth in the advanced manufacturing/ motorsport industries and the Culham Centre for Fusion Energy reported over 70 current skilled vacancies at technical level.

Retaining graduates from the University of Oxford is highly competitive with global business locations. Oxfordshire is surrounded by strong economies that are also growing and the jobs market in London and the Thames Valley is an increasing draw for residents in the county. This means that employers in Oxfordshire wishing to expand their workforce are competing for labour with firms across a much wider geography than Oxfordshire and the UK.

Gaps exist in other sectors as well. Service roles are key in supporting local economies and providing the services required by businesses, investors, and residents, with significant numbers of roles available at entry and lower skilled entry points. The Oxfordshire service sector is currently suffering labour shortages, particularly in health and social care, retail and hospitality, and the logistics sectors.

Industry	Sector Skills Area Tier 1 or Tier 2 where more appropriate	SFA Sector Lead Body	EFA SGF Learning Aims	SFA Learning Aims	Employees		Learning Aims	
					Number	%	Number	%
Manufacturing	Manufacturing Technologies (T2)	Process and Manufacturing	241	320	25,200	7.9	561	0.6
Professional Scientific & Technical Activities	Science and Mathematics	Science, Engineering and Manufacturing Technologies	8,396	1160	34,200	10.7	9,556	10.8

Oxfordshire's STEM Business base and Education Provision 2011

These sectors overlap with the concentrations of long term unemployment where skills, labour and jobs are not matched or connected. These areas are to be found in both urban and rural parts of the county. Negative social conditions occur particularly in areas with the poorest communication, lack of access to services, and weakest business bases. There is currently a lack of integrated travel options that is constraining mobility for people, business and communities that will need to be overcome to bridge the gap between available labour, jobs and skills.

There are insufficient people with the right intermediate level skills flowing through into Science Technology Engineering and Mathematics (STEM) occupations. Of particular concern is that whilst STEM businesses account for 18.6% (approximately 60,000 employees) of our business base, the Skills Funding Agency fund less than 1,500 individual learning aims per annum, which is less than 2.5% of the total STEM workforce indicating a mismatch between skills funding and business needs.

Digital Connectivity

There has been limited access to resilient and fast broadband that is expected by businesses for collaboration. Provision of effective broadband in rural areas is a particular constraint. Oxfordshire County Council has committed to, and implemented, a scheme to improve broadband across the county, including rural areas by the end of 2015. This will take coverage of superfast broadband to 92% of the county. We will continue to work with local authorities and BT as investment partner to continue to increase coverage through various funding channels. To supplement this work the 'Super-connected Cities' project in Oxford will deliver ultrafast broadband to businesses and a public wireless service across the city. There is a further targeted investment delivering ultrafast broadband in the Science Vale Oxford Enterprise Zone from 2014.

Evidence suggests that broadband speed and coverage upgrades can provide major GVA uplift of around 0.3% for every doubling of speed. Many businesses in Oxfordshire will be experiencing a quadrupling in speed from the planned investment.

Our information and exchange networks and hubs need greater focus, connectivity, scale and reach across the region and need to be better linked with the universities, research centres and incubator accommodation that already exist.

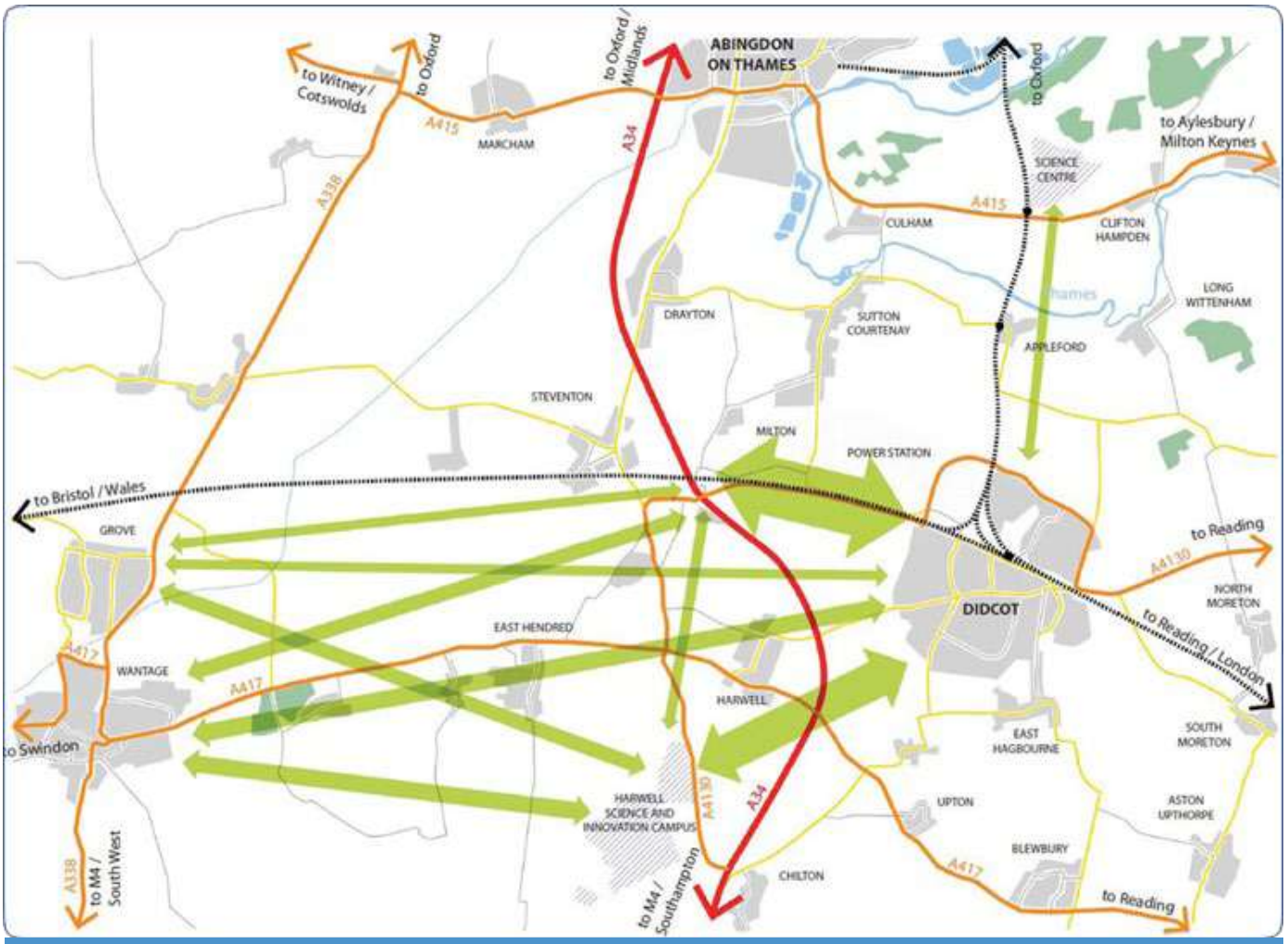
Connectivity within Oxfordshire

Transforming connectivity across and into Oxfordshire is critical to underpin the spatial aspirations that deliver the innovation based growth. This needs to be done in ways that provide leadership on responses to climate change and maintaining biodiversity, as well as supporting a strong, innovative local economy and overall enhancing the quality of life for all across the county.

The current road and rail connections do not support close physical connections between the key areas of Bicester, Oxford and Science Vale Oxford and this is important in reducing the distance between and across these investment locations and between the University of Oxford and high tech business clusters. Current direct local rail services are limited to:

- Didcot – Oxford: 2 trains per hour (3 trains per hour in the AM peak)
- Oxford – Bicester: limited service

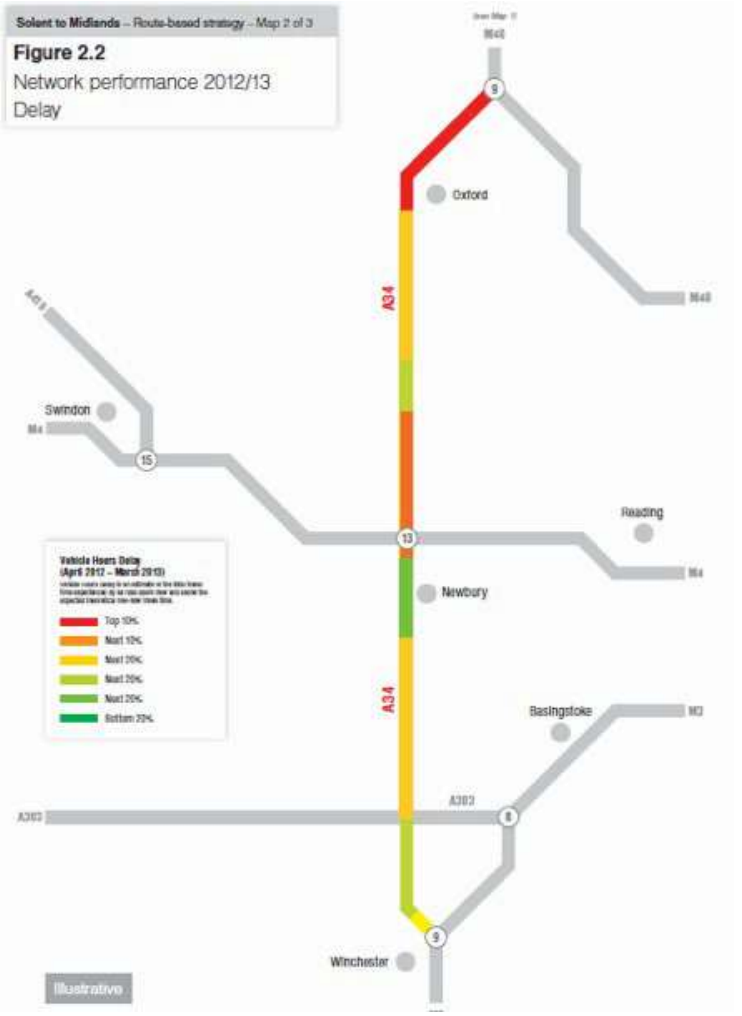
Public transport options linking the three main railway stations to homes and businesses are infrequent, indirect or



Transport Network Versus Travel Desire Lines

unavailable. The public transport map does not currently match the pattern of development in the high-tech industries. The road network within Science Vale Oxford does not reflect the polycentric character of the area or the employment and housing growth of recent years: the routes are not well aligned to connect the new and emerging sites, and their capacity is being outstripped by the scale of growth. The main need is to improve east-west links to provide improved access for Wantage/ Grove and the Harwell Campus and to link with Milton Park and the new housing sites to the west of Didcot.

Transport System Capacity



Network Performance 2012/13 Delay

Oxfordshire currently suffers from capacity issues exacerbated by in-commuting. These in turn create constraints to economic productivity and growth in the county. The A34 and A40, in the heart of Oxfordshire, suffer from poor journey times that will prove a significant constraint as the economy grows. The delays caused by congestion are a cost borne by businesses and can lead to less productive employees. These (and other) capacity restrictions limit business efficiency and investment, and the ability for communities to access the full range of services.

The A34 has many roles. It is an important regional/national corridor for both freight and people movement between the South Coast and the Midlands. It is also the key spine route for Central Oxfordshire between Bicester, Oxford and Science Vale Oxford and it also acts as a western bypass for Oxford and has an important role for local traffic. The A34 is at capacity and suffers from severe journey time reliability problems which in turn cause major delays to users. All of the A34 through the county, except the southernmost section, is amongst the worst 20% for journey delays with the northern section around Oxford amongst the worst 10% and 34% of all journeys experience delay[18]. Businesses cite the A34 and A40 as having a significant impact on business and it is identified as the key piece of infrastructure restricting innovative growth[19].

The A34 Oxfordshire Route Based Strategy Baseline Report (2013) based on observed traffic, found that most of the route is working above congestion reference flows, meaning many sections of the A34 are likely to experience peak time congestion. The baseline report clearly highlights the congestion issues the A34 already experiences across most of its route in Oxfordshire. Traffic modelling suggests that, by 2030, with the current planned

level of development within Oxfordshire plus exogenous growth, peak periods are likely to spread and maximum capacity peaks will occur more frequently causing increased vehicle delays on the network. Current trends in traffic growth (Department for Transport forecast) also suggest that congestion through the day and at weekend peak periods is likely to occur on a regular basis. Other key arterial routes in the county suffer from current and predicted congestion. The A40 currently experiences average delays of 25 minutes[20], the A41 currently experiences congestion and is expected to experience delays of up to 20 minutes by 2031[21] and the M40 section between J9 and 10 is also predicted to experience an increase in traffic which will cause major delays by 2030 even with new schemes such as pinch point projects at both J9 and 10[22].

Traffic congestion is also a significant challenge within the urban centres and is a particularly issue in Oxford, one of the most congested cities in UK with a congestion rate of 31%, compared with London at 27%. UK Congestion is estimated to cost £20 billion (RAC) in lost production. This translates on averages to £400 million to £500 million a year across Oxfordshire, of which A34 would be a large part of the problem. A recent Study by INRIX and Centre for Economics suggests direct cost to consumers is £491 per household, based on wasted fuel, wasted commuting time, additional delivery costs. Using this as a standard and given that Oxford has a 50% worse congestion index than the average City area this is, arguably, costing the county a further £100 to 150 million.

Lack of Space to Retain Growing Businesses

Demand for commercial premises currently outstrips supply, which inflates costs and constrains growth and business performance[5]. In addition, lack of suitable business start-up and particularly grow-on space limits business growth and often leads to businesses starting in Oxfordshire before moving elsewhere, both nationally and internationally. Demand for innovation infrastructure, including, incubation and start-up work space, grow on and research/ collaboration facilities is outstripping demand across Oxfordshire.

Low-Level Support for New (and Existing) Businesses

Businesses across Oxfordshire have cited accessing relevant, effective and valued business support advice as a key barrier to their growth[23]. Levels of uptake of some of the nationally developed business support schemes are not as high as would be expected. The main reason is the complexity of offers and support that can be communicated to a business, leaving a feeling of confusion and inertia. Simplifying the current fragmented landscape and providing relevant and effective support going forward are needed to address this constraining issue.

Access to finance and investment is a critical requirement for business growth. Whilst there is evidence to demonstrate that banks are improving borrowing levels to support established businesses, there is evidence from high technology firms across Oxfordshire that there is a chronic shortage

of early stage investment for new businesses and start-ups. This is not unique to high technology businesses, but given that these types of businesses need early investment to develop products and services from concept into commercialised products and services, which is a key constraint on Oxfordshire's innovation-led growth ambitions.

Lack of Affordable Housing

Being able to attract the right work force to match projected future growth requires an increase in housing provision across Oxfordshire.

Despite the significant levels of new homes planned in Oxfordshire over the next 15 years, local housing is at the limit of affordability for many who live and work here. The Department for Communities and Local Government (DCLG) evidence of affordability ratios show Oxfordshire is significantly above the national and regional averages and have been worsening over time. The average house price in Oxford is 15 times the average salary.

Lack of public land ownership, particularly in the rural districts, constrains the land available to accelerate new housing delivery. A significant amount of potentially suitable land in the growth areas is under long standing option agreements and not available for purchase by the authorities if they wished to do so. This means that the public sector cannot support the private sector developers in a proactive way as a land owner.

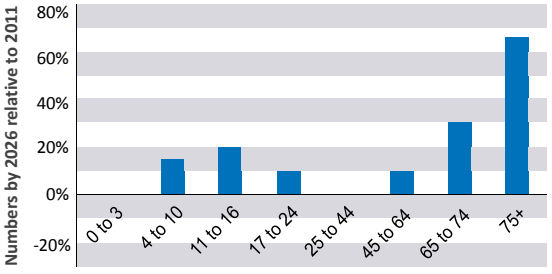
In Oxford, the market is overheating and complexities of land availability, assembly and associated high costs cause long delays. Overcrowding in Oxford is above regional/ national averages and the City is tightly constrained both in terms of flood risk, historic built environment and Green Belt, which means that it is difficult to fulfil demand. The city has and will release public sector land, and assembled sites for accelerated housing delivery using their own private-public sector investment model.

The narrowness of the housing model also creates a challenge to meet the needs of an ageing population, particularly in the rural areas. The delivery of private homes specifically designed for older people as part of larger housing schemes has not been achieved in Oxfordshire.

The number of people aged 65 years and over is forecast to increase by 46% to 2026, with numbers of very elderly (85 years and over) forecast to increase by 69%. Whilst significant growth (around 16%) is also forecast for the youngest age groups, the working age population is forecast to increase by just 6%.

	1997 ratio	2011 Ratio	2012 Ratio
Oxfordshire	4.68	8.93	9.00
South East	4.20	8.19	Unavailable
England	3.57	6.57	6.59

DCLG Affordability Ratios for Oxfordshire, 2011 and 2012



Jan 2014 population forecasts – relative change in population numbers 2026 vs. 2011

Forecast population growth

Social Constraints

Although Oxfordshire is relatively wealthy, twelve areas that fall into the category of 20% most deprived in the country remain, mostly in Oxford, Cherwell and the Vale of White Horse.

76.6% of pupils in Oxfordshire achieved 5 GCSEs, at grade A-C. This compares to 82% for the region and 81.8% nationally. 60.6% of Oxfordshire pupils gained 5 A*-C grades at GCSE (including English and Maths), compared to an England average of 59.2%. 6.6% of our 16-18 year olds are not in education, employment or training (NEET). While the majority of 16 year olds continue learning when they complete their statutory education, there are others – often the most vulnerable – who do not. Young people who do not obtain 5 GCSEs at A*-C are seven times more likely to be NEET at 17 than those who achieve this level, thus stifling their potential. The skills deficit is broadly aligned to the major urban centres.

Flooding Constraints

The past decade has seen four major flood incidents occur in Oxfordshire impacting on businesses and communities. The long term economic success of Oxfordshire will depend on being able to grow and stay open for business. The emerging Oxford Flood Risk Management Strategy (OFRMS) will identify critical pieces of enabling infrastructure that will keep the City's key transport links clear, businesses open and a workforce able to concentrate on work rather than the recovery of their property from flood damage. It will conserve and enhance Oxford's special environment and provide a greater draw for visitors. Floods in the Oxford area are lengthy, typically lasting between seven and nine days.

Loss of transport infrastructure due to flooding has been experienced five times: 2003, 2007, 2012, 2013 and 2014. This has an impact on existing businesses but also on the confidence of new business to want to invest in the area. The 2007 flood event created £874,000 damage on the Botley Road, Abingdon Road, Kennington Road - excluding the effect of people not being able to get in or out of Oxford.

Enabling infrastructure to reduce flood risk will keep road and rail links open making Oxford a more attractive proposition for investment. The railway line in the OFRMS study area runs from the south, dividing in Oxford to continue to the north east and northwest. During previous flood incidents the railway line has been closed due to inundation of the tracks to the north of, and in the vicinity of, Old Abingdon Road in Oxford city centre. Severe disruption to mainline railway services occurred during the 2003, 2007 and 2014 floods.

Area protected by OFRMS

A number of major roads serve, and run through, the OFRMS study area.

Road	Provides links to
A34 (western bypass and part of southern Oxford bypass)	Bicester to north
A40 (northern Oxford bypass)	Cheltenham to west M40, Thame and Aylesbury to the east
A420 (Botley Road - main route into Oxford city centre from the west)	Oxford city centre, Swindon and M4 motorway
A4144 (Abingdon Road - main route into Oxford city centre from the south)	Oxford city centre, A474 southern bypass, A34 western bypass
A4074 (southern Oxford bypass)	Wallingford and Reading
A415 (Witney to A420)	Witney and the south west of the study area

Local Routes Affected by Flooding and Impact on The National Infrastructure

Several important roads run directly through the floodplain crossing the watercourses at right angles and causing flow to be restricted at times of flood. Botley Road and Abingdon Road were flooded during the 2007 and 2013 floods along with B-Roads leading to Binsey and Kennington, leaving these two villages effectively cut-off. The loss of these arterial routes has a direct impact on businesses in Oxford and on their work force.

Oxfordshire today has significant opportunity to create the conditions that make us the location of choice for the world's leading science and technology businesses, driving economic growth across the county and underpinning our long-term economic success.

Innovative Enterprise

Oxfordshire is one of the best-performing and innovative areas in England. We have significant strengths in six of the 'eight great technologies', are one of the top 5 technology innovation ecosystems in the world, international leaders in advanced engineering and manufacturing and we have the largest concentration of multi-million dollar science research facilities in Europe

However, our strong academic and research economy is not translating through to services and products to the extent of its full potential – we rely on fragmented and informal collaborative networks, lack start-up and ongoing business support and facilities and suffer from poor accessibility between investment locations and university/knowledge hubs which we know generates economic activity and innovation

There are opportunities to build economic growth and wealth through building in our capabilities in the 'eight great technologies', improving the proximity of technology clusters, university research programs and high-technology businesses to stimulate significant business spin-outs and growth opportunities and expanding our UK expertise in innovation based technologies

Innovative People

We have a higher than average high-skilled workforce and national economic activity rates but we also have a mismatch of skills needed for our high-technology businesses and pockets of unemployment. Retaining our graduate talent is challenging and we suffer from labour shortages, particularly in many STEM based sectors as well as health and social care, retail and hospitality, and the logistics sectors

Given the scale and range of planned growth we have the opportunity to offer a range of employment options to all who are able to participate in our labour market at all levels, including to those most marginalised

Innovative Place

Oxfordshire offers a high quality of life, attractive to knowledge rich businesses and to our local and international labour force supported by a globally renowned visitor and cultural economy

Local housing is not affordable for many who work here, and is a major constraint on recruitment and retention at all levels

Oxford City is geographically constrained by flood risk, historic built environment and Green Belt

There are opportunities to sustainably uplift and prioritise integrated transport and housing development that enables a step change in the delivery of sufficient and sustainable quality housing that is affordable yet attractive to the market

We have the opportunity to make innovative use of blue and green infrastructure to enhance our built and natural capital and deliver multiple benefits to our communities

Innovative Connectivity

We are strategically located at the heart of the UK road and rail network, within an hour of London Heathrow Airport with access to global markets, but our connections are often slow, indirect or unreliable, largely as a result of limited capacity

Our electronic and transport infrastructure doesn't match the demands of our knowledge and innovation based high-technology businesses

We have the opportunity to capitalise on significant existing investment commitments in broadband, rail and highway networks to ensure increased connectivity in our core economic areas and across Oxfordshire as a whole

3. Strategic Vision for Oxfordshire's Economy to 2030

Our Vision

Focussing on the overarching theme of Driving Economic Growth through Innovation and recognising our opportunities and challenges, the Oxfordshire vision is:

"By 2030 Oxfordshire will be recognised as a vibrant, sustainable, inclusive, world leading economy, driven by innovation, enterprise and research excellence."

In achieving our vision we foresee an economy based on the continual cross fertilisation of ideas, investment and application, which takes place within a permissive business environment, and which is fully integrated with and supportive of its natural environment.

In order to achieve our Vision, we will need to focus our energy and investment to capitalise on our opportunities, and address our challenges.

Our City Deal provides the immediate impetus for delivery in the short term, and will be complemented by our Strategic Economic Plan to further accelerate delivery to 2020 initially, and to 2030 in the longer term.

Objectives

Our ambition is to create the conditions that make Oxfordshire the location of choice for the world's leading science and technology businesses.

In order to achieve this we have developed four key themes based on identification of Oxfordshire's opportunities and challenges. These themes are underpinned by specific objectives that are achievable and measurable. Through our interventions and delivery plan, we have the opportunity to fulfil the objectives and drive economic growth across Oxfordshire, growing the UK economy as a whole.

The objectives reflect our priorities for economic growth to 2030, focusing limited government resources on areas of greatest economic impact. The four themes are:

Innovative Enterprise

Innovation led growth is at the heart of our strategy, underpinned by the strength of our University research and development capacity, business collaboration and supply chain potential.

Innovative People

Delivering and attracting specialist and flexible skills at all levels, across all sectors, as required by our businesses, with full, inclusive employment and fulfilling jobs.

Innovative Place

Providing both the quality environment and choice of homes needed to support growth whilst capitalising upon the exceptional quality of life, vibrant economy and the dynamic urban and rural communities of our county.

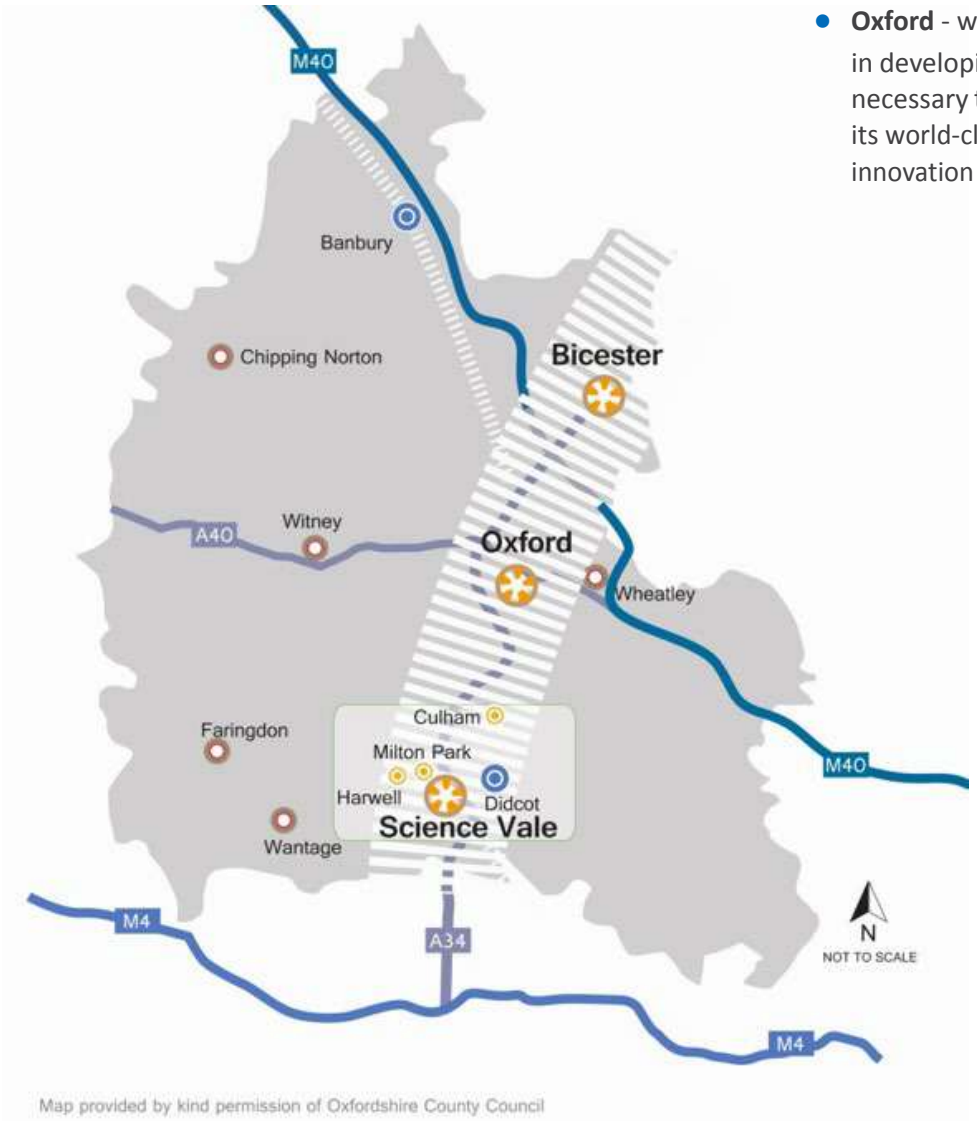
Innovative Connectivity

Allowing people to move freely, connect easily and providing the services, environment and facilities needed by a dynamic, growing and dispersed economy.

The Oxfordshire Knowledge Spine

Our Strategic Economic Plan prioritises interventions in key locations, specifically along the 'Oxfordshire Knowledge Spine'. The Knowledge Spine runs through the centre of the county with the three key areas for growth potential in population, employment and housing at Bicester, Oxford City and Science Vale Oxford.

- **Science Vale Oxford** - where we will build on its extensive research infrastructure and the designation of Harwell as the home of the national Satellite Applications 'Catapult', the European Space Agency and Enterprize Zone
- **Bicester** - where we will support significant increases in employment growth through infrastructure improvements and land availability
- **Oxford** - where we will continue to invest in developing the critical infrastructure necessary to realise the full potential of its world-class education, research and innovation that underpins our growth

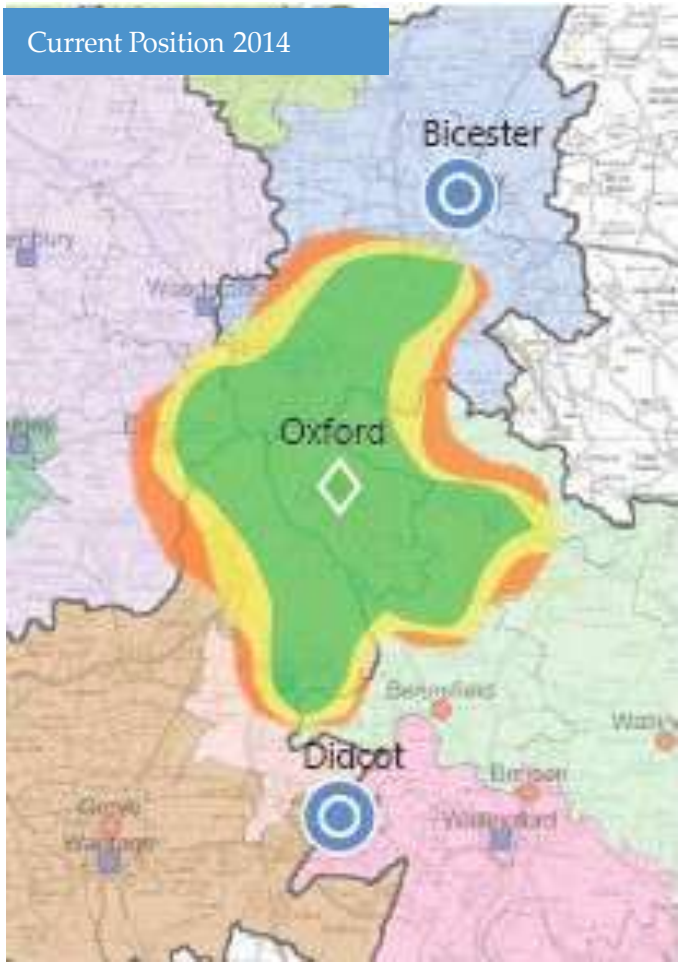


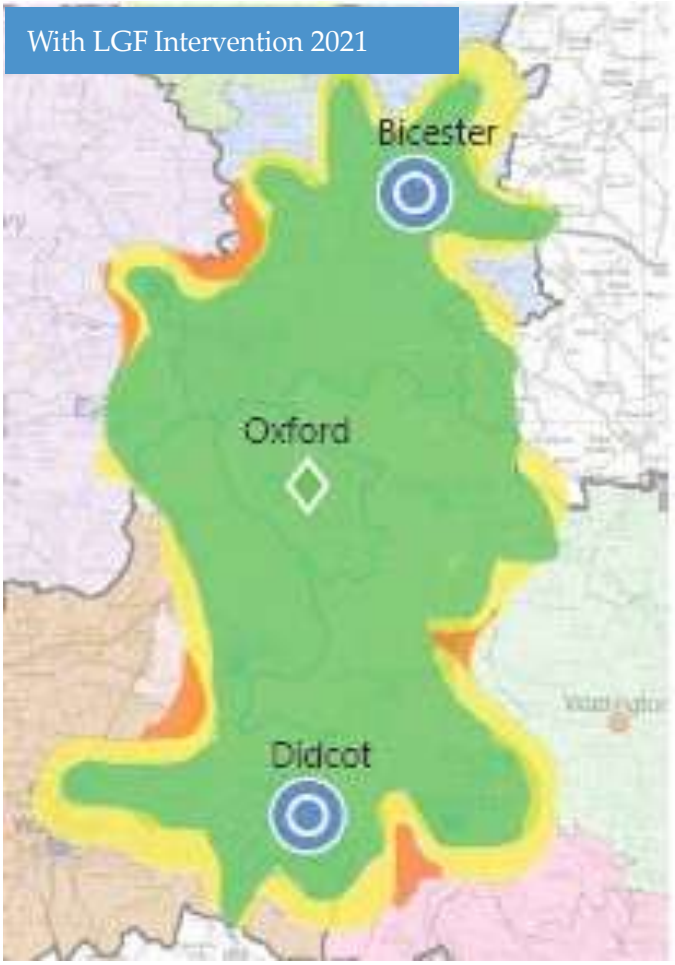
Map provided by kind permission of Oxfordshire County Council

The Oxfordshire Knowledge Spine

The projects identified in our Strategic Economic Plan for delivering growth focus on the connectivity of the Knowledge Spine that links the key hubs to the wider transport network locally, nationally and internationally. In this way, growth in the Knowledge Spine will drive benefits throughout the whole economy of Oxfordshire, the south east region, and nationally.

The investment for the Strategic Economic Plan, builds on this potential to release the maximum economic benefit for the UK. As identified in the economic forecasting report[25], this will have significant indirect jobs growth across the county as a whole in the supply chain industries.





30 Minute Public Transport Travel Time Within Oxfordshire Knowledge Spine

4. Our Programme for Growth

Our aim is to create the conditions that make Oxfordshire the location of choice for the world's leading science and technology businesses. Crucial to realising that aim is investor confidence: a commitment to ensuring that our networks and infrastructure are fit for purpose is central to creating that confidence which will build on Oxfordshire's natural advantage as a world leading centre of knowledge and innovation. To support our Strategic Economic Plan we need:

- Overarching, county-wide Investments in our networks and infrastructure
  - » **linking Oxfordshire to the World**: providing efficient connectivity to international markets for information, people, logistics and products
  - » **linking The Knowledge Spine**: reducing the distance and barriers between our core economic areas, Bicester, Oxford and Science Vale Oxford and ensure the benefits of investment are able to spread in to the wider Oxfordshire economy
- Investment in our core economic areas and in our local networks and infrastructure: ensuring our core economic areas can function and are not constrained by capacity, efficiency and resilience problems

Our City Deal provides the immediate impetus for delivery in the short term. Aligned to City Deal, our European Structural and Investment Fund (ESIF) plan sets out our proposals for the use of the c£20m European funds which have been earmarked for Oxfordshire for the 2014-2020 period. Our ESIF delivery is designed to boost our ability to innovate, support business growth and job creation, and provide opportunities for residents throughout the county to participate in our high skills, high quality labour market, including measures specifically targeted on our rural areas.

Our Local Growth Deal bid will further shape our future, creating the conditions necessary to underpin our long-term economic success, focusing limited government resources on areas of greatest economic impact which will permeate economic growth across the whole of the county.

Our programme for growth will deliver:

- Gross Value Added uplift of c£.6.6 billion at constant prices
- 85,600 new jobs by 2031 (a 1% increase per annum) compared to 0.8% per annum achieved between 2001 and 2011
- A minimum of 30 new international investments per year
- 93,560 to 106,560 new homes by 2031
- c£2.2 billion Private sector investment levered
- c£65 million investment to support Superfast (25mb/s +) and Ultrafast (100mb/s+) broadband speeds across the county that support innovative knowledge rich businesses and communities
- £125 million flood alleviation programme
- £500 million investment in rail improvements
- c£815 million of transport infrastructure improvements
- Increase the amount of Skills Funding Agency funding that supports our STEM sectors by 15% to better reflect our economic profile
- An increased proportion of the working age population qualified to level 2 and above to 90%
- Increased school attainment to support growth
- An additional 1150 apprenticeships for young people in our priority and growth sectors
- Growth in Oxfordshire's Green Economy and Natural Capital

Countywide Investment - Innovative Enterprise

Our aim is to develop a culture of innovative enterprises that is better able to support our growth ambitions, world class sectors and communities.

Our Oxfordshire Innovation Strategy is well advanced and will provide greater analytical depth and specific programme actions for this central area of the strategy. It builds upon the foundations established by the City Deal and ESIF Programme; looking forward to assess the implications for Oxfordshire's economy – and society – and of our position as a world leader in innovation.

Our enterprise economy spans innovation at all levels and in many sectors, with the county's large number of businesses, organisations and community groups strongly linked with growth in environmental innovation, including a significant increase in Agri-Tech services and the low carbon agenda. This makes Oxfordshire an ideal location for innovation, research and development coupled with demonstration and test-beds to grow environmental business innovation and enterprise. Oxfordshire's world class natural and built heritage contributes significantly to our enterprise base.

Countywide Investment - Innovative Enterprise

Our Local Growth Fund Offer

A world leading science and technology cluster, including the UK's synchrotron facility, the Medical Research Council and the European Space Agency the Science Vale Oxford Enterprise Zone

Proximity of major research facilities to the Universities is unique in Europe and possibly worldwide

Through the SEP and Local Growth Fund, Oxfordshire will maximise the world-class assets in the area and encourage more commercialisation from research

We will develop, and unite behind the 'Oxford/ Oxfordshire' brand as a recognised global leader in innovation ensuring those outside the region receive clear messages about our offer, and are able to easily access the people and networks that they need

At the heart of one of only three economies contributing positively to the Exchequer

A growing number of environmental and land based bodies making important contributions through research and demonstration, such as the Earth Trust's work on ash die-back, and the Trust for Oxfordshire's Environment

c£8.6m European Regional Development Funds aligned to innovation led growth

A £14.8m business support programme that drives growth in innovation, export and business start-up supported by a mature network of business support organisations generating c£10m match, including £2.5m ERDF/private

A mature network of business support organisations generating c£1.5m match funding that support SME growth

Our Local Growth Fund Ask

To work in partnership with UKTI to develop a greater awareness and understanding of Oxfordshire's offer, particularly in overseas posts with a particular focus on the key sectors of:

- Life sciences
- Space and Satellite Applications
- Advanced Engineering (automotive & motorsport)
- Creative/Media/Big Data

DEFRA and DECC to direct investment resources through the Local Growth Fund programme to enable a more integrated and innovative use of natural resources aligned to growth

A commitment from Government to work with Oxfordshire to realise potential through locating appropriate national research centres of excellence alongside and aligned to our academic excellence

£7.2m Funding to develop our Oxfordshire Business Support programme to deliver the following:

- Oxfordshire Support for Export
- Oxfordshire Support for Business
- Oxfordshire Support for Innovation

Countywide Investment - Innovative Enterprise

NaturalMotion is a leading games and technology company based in Oxford, London, Brighton, and San Francisco.

They create and publish ultra-high quality, free-to-play games that combine polished gameplay with high-end 3D graphics using their own proprietary technologies.

NaturalMotion was founded in November 2001 as a spin-out company from Oxford University. Social network gaming company Zynga acquired NaturalMotion in January 2014 for $US527 million.

www.naturalmotion.com

Objectives

Our objectives are to:

- Grow Oxfordshire's world-class technology clusters leading to a GVA uplift of £6.6bn to 2030
- Achieve a more balanced economy through fostering a dynamic private sector and new business start-ups, creating at least 85,600 new jobs by 2031
- Capitalise on the global reputation of Oxfordshire's knowledge base translating academic and research excellence into wealth generation for all our residents
- Fulfil our potential as an internationally renowned business, academic and research centre to attract a minimum of 30 new high value foreign direct investments per year

Strategic Interventions

Grow centres of excellence that are accessible to business

Our world class research facilities have been designed to support and underpin the leading edge research for which Oxford is globally recognised. We have already made strides in the City Deal creating new interfaces to drive proximity between businesses and academic researchers through the four innovation centres focused on our knowledge spine. We now wish to create sector specific centres of excellence that will further enhance the ability of businesses to engage with The Knowledge Spine. Innovative enterprises will find facilities and knowledge close to hand, allowing rapid growth. The technology start-ups that are characteristic of the Oxfordshire economic landscape will find the rich food for growth they need in the sector focused clusters we intend to build. The Witty Review[36] noted that universities are the anchors of the economy. To our two universities, Oxfordshire can add world class facilities at Harwell and Culham, a mighty anchor for technology growth in the UK economy. Key sectors we wish to address in the next phase of our growth include data analytics, superconductivity and agri-tech. We will be looking at developing specific sector focused activities, using the Oxford Innovation Support Programme funded through City Deal to directly meet the sector needs.

Increase New Business Creation

Oxford is at the heart of one of the five leading technology clusters in the world focused on universities[26]. Since Oxford Instruments spun out of Oxford University in 1959 a steady stream of high tech companies has been created and nurtured in and around Oxford. We are determined to accelerate the growth of this ecosystem by improving access to finance, creating physical spaces and providing mentors to entrepreneurs and scientists. The universities and scientific facilities are undergoing a significant culture change and supporting these activities, providing impetus and sustenance to growing high-tech companies. The City Deal Innovation Centres are key points in the landscape; we will build more and increase the services and connections that these points can offer to the business community. In parallel, through the emerging Oxfordshire Business Support Hub we will develop a streamlined and co-ordinated package of support for local business start-up and growth with a particular emphasis on supporting 7500 businesses (25% of our business base) to export export in line with government ambition.

Countywide Investment - Innovative Enterprise

Connect the Networks

Many have observed the complexity of Oxford's overlapping networks, differentiated by industry sector, proximity to market, and many other criteria. It is this richness that creates many opportunities for serendipitous innovation where networks interact. It is not our intention to create a "one stop shop" overarching network (previous attempts have failed and we will learn from this). Instead we will work with existing networks to increase connectivity and understanding of opportunities arising in different fields. The City Deal has funded Network Navigators who provide connectivity between networks and institutions, and the Oxford communities have engaged enthusiastically with this idea. We will work to continue to fund this programme, learn what works, and embed enhanced network connectivity in Oxfordshire.

Oxfordshire Innovation Support Program

The Oxfordshire Innovation Support Program is a tailored business support programme which will bring together a network of existing provision, amplify and enhance existing services to businesses and plug gaps with bespoke programmes in order to promote innovation based growth. The programme will have two parts:

- Simpler business support - the programme will simplify the support available to local businesses by bringing information together on a single website about the existing support. The network will have a single brand under the Local Enterprise Partnership and will provide marketing materials and an events calendar that will increase awareness of the national and local service offers that are available
- Investing in innovative businesses - in addition, we have identified a series of bespoke programmes that address gaps in existing provision, are tailored to the specific needs of Oxfordshire businesses and do not duplicate existing services. The programmes represent a substantial new investment in direct business support to help spin-outs and companies at key stages of their development

Attracting Inward Investment

Companies worldwide are increasingly of the view that they need to access innovative ideas in order to achieve a competitive advantage[27]. We will improve our inward investment offer by bringing our research facilities and people into the sector focused networks, enabling inward investment teams to rapidly construct comprehensive offers for hi tech firms, including links to Oxford's universities. We are already initiating joint appointments between, for example, Oxford University and the LEP and we will extend this model.

Countywide Investment - Innovative Enterprise

Local Growth Fund – Our Ask

Attracting Foreign Direct Investment

We seek to explore how we might work in better in partnership with UK Trade and Investment to develop a greater awareness and understanding of Oxfordshire's offer, particularly in overseas posts with a particular focus on the key sectors of:

- Life sciences
- Space and Satellite Applications
- Advanced Engineering (automotive & motorsport)
- Creative/Media/Big Data

We seek to explore with UK Trade and Investment how, adopting the UK first principal, we can deliver additional foreign direct investment aligned to our key sectors. Building on the global Oxford brand and by developing greater awareness of the Oxfordshire offer internationally, targeted at key locations that align to our sectors we aim to deliver a step change in foreign direct investment to drive growth.

Begbroke Grow-on space

Provision of flexible, mixed-occupancy space, for use as laboratories, offices or workshops, to support the demand for commercial tenancy from new technology companies arising in the county and for the growth of existing companies at Begbroke who wish to remain close to the knowledge base. It will provide a facility whereby business funded research can be co-located with academic research and the facilities on the science park.

Centre for Agritech Development, Begbroke, Oxford

New plant growth facilities at the Begbroke Science Park to provide key resources to engage effectively with the Agri-Biotech industrial community. The Begbroke site provides an opportunity to design and build environmentally friendly and sustainable containment facilities. The project would enable realisation of research at the forefront of areas of scientific research vital to agriculture and related technologies, through providing the infrastructure (modern plant growth research facilities) to support academia and industry in developing and applying this science and technology.

Case Study: Primary Designs, Thame

Primary Designs was established in 1998 and earned its prestigious reputation by designing and manufacturing quality exhaust systems for the motorsport industry including Formula 1 teams.

Primary Designs is a family run business and currently employs 16 highly skilled engineers with a combined experience of over 90 years working in the motorsport industry. The company designs and fabricates exhaust systems using the very latest technology and innovation, most of which is unique to Primary Designs and has been developed in-house.

Countywide Investment - Innovative Enterprise

Centre for Applied Superconductivity

95% of the UK's industrial end user activity in applied superconductivity and the underpinning cryogenics technology is located in the A34 corridor. We will create a Centre for Applied Superconductivity to coordinate the interaction between industry (Oxford Instruments, Siemens Magnet Technology, Agilent Technologies), Oxford University, cryogenics companies, and end users (including SMEs), on the Harwell Campus and Culham Centre for Fusion Research Campus.

Advanced propulsion centre

The Oxford Advance Propulsion Centre will work with the UK's leading institutions to develop technology and a stream of skilled engineers for at three of the Automotive Councils "Five Strategic Technologies for the UK Auto Industry" that represent world-leading research and development capabilities at Oxford University and within the region. Oxfordshire and neighbouring regions are home to a world-renowned cluster of advanced automotive skills and facilities, spanning Formula 1, Jaguar Land Rover, Silverstone (and its high tech auto cluster) and a myriad of support companies. The Oxford Advanced Propulsion Centre will be a regional centre of expertise for these cutting-edge automotive technologies that will leverage UK wide project funding and help secure a leading role for the region in the UK's strong automotive sector. Our vision of the Centre is that it will provide new space for the co-location of international and regional players, with university and company researchers working side by side.

Oxfordshire's part of the recently announced UK £1 billion "Advanced Propulsion Centre" and initiative is now being completed across the UK by BIS's Automotive Council. Oxfordshire proposes to base its spoke on the internationally recognised research it undertakes in the three technology areas of internal combustion engines, energy storage and electrical machines and power electronics.

Centre in Nanofabrication

Develop and provide a 1000m2 nanofabrication facility in collaboration with Samsung in Oxford. Such a centre would be utilised by world leading physical scientists from the departments of Engineering, Materials, and Physics.

Northern Gateway Innovation Area

The vision for the Northern Gateway is to create an employment area which will build on the strengths of Oxford's economy in the key sectors of education, health, research and development, and knowledge-based businesses. The development of the Northern Gateway offers the opportunity for existing and new firms to relocate and ensure that Oxford's economy continues to grow. There is scope for the provision of new residential accommodation to help meet Oxford's housing needs and also some complementary uses, which may include retail and hotel use, to enhance the sense of place and add vitality and sustainability.

Investment will provide for businesses, co-location of new and growing business in knowledge based industries. Close links to the Universities and hospitals, and a high quality working environment help foster a creative atmosphere where innovation thrives. For residents, modern new homes with access to community facilities and open spaces make this a desirable place to live. A mix of housing helps encourage a balance of

Countywide Investment - Innovative Enterprise

residents and new amenities to complement those available in neighbouring areas.

Clinical BioManufacturing Centre

Clinical BioManufacturing provides links between academic research and drug development, supporting the transition from science to technology and technology to application. Local growth funding would enable the extension of cleanroom capacity.

Innovation e-infrastructure

Oxfordshire (across the University of Oxford, Harwell and Culham) has a key area of strength in mathematics, modelling and data analytics. In order to contribute to improving national competitiveness in this critical field, Oxfordshire will include this as one of its priority sectors in the strategic economic plan, making growth funding available to support national investment in infrastructure in this region by making connected investments in our local infrastructure to enable, if the government is so minded, the foundation of a Turing Institute, a Big Data Analytics centre, and one industry on-ramp (in life sciences) to build on existing data strengths including financial services, health data and satellite applications.

Collections Research Centre

The new Centre will provide research and study rooms to facilitate research into collections and encourage interdisciplinary work between the higher education community and cultural heritage community. The strength of Oxford's collections – the three most visited university museums in the UK are in Oxford, accounting for almost half of the four million visitors to university museums annually – making Oxford uniquely suited to providing such a facility. When combined with the resources of the Bodleian Libraries, the new facility will help to establish Oxford as a global leader in the preservation of cultural heritage and the fostering of digital research in humanities. These collections are substantial (Ashmolean – 80,000 objects, History of Science - 12,000, Natural History – 425,000, Pitt Rivers – 200,000) and of international significance in their own right but are currently heavily under-utilised. All are government-Designated as of national or international importance. The associated archives also offer an outstanding record of the history of scholarship, e.g. development of archaeology as a discipline, and the history of collecting. These activities are well-suited to commercial opportunities in e.g. publishing, media (radio/film/TV), and national and international training programs in conservation and collections management.

Tourism Network Enhancements

The visitor economy brings £1.7 billion a year into Oxfordshire and employs 30,480 people. Experience Oxfordshire aims to grow the sector by twice the national annual forecast, at 2% pa. Doing so will require greater investment into marketing and development with the aim of achieving twice the forecast UK tourism growth rate, growing Oxfordshire's visitor economy by 2% a year, creating 10,000 new jobs by 2025.

This proposal focuses on generating new visitor spend from high growth, high value markets.

Business Tourism Development

The Oxford Strategic Partnership recognises the importance of business tourism in the county and has included this sector Business Tourism - improving the awareness of

Countywide Investment - Innovative Enterprise

Oxford as a conference destination and a review Oxfordshire's position in the market and identifying gaps in the city provision. Experience Oxfordshire delivers a business partnership programme to market and sell Oxfordshire as a high value, aspirational international conference destination. Oxfordshire lacks a purpose built large capacity residential venue, and most of Experience Oxfordshire's partners are independent medium sized businesses. As a result they struggle to establish a market presence on their own, and have limited marketing budgets. Yet they have the capacity to grow quickly. This project proposes undertaking destination business tourism marketing with match contributions from Oxfordshire's businesses. In the first year necessary research will be undertaken to ensure marketing is targeted and effective, and gaps in service provision are understood.

Consumer Tourism Development

The proposal is to align this project with an EARDF funded rural tourism project so that Oxfordshire is also able to field its strongest brand in the market place; Oxford. The aim is to attract new visits from high growth, high spend markets. Oxfordshire's hotels are prioritising growth in rates and yield over volume as their strategy for development and investment. High spend growth markets are therefore a priority. The United Nations World Tourism Organisation (UNWTO) cites China as the world's fastest growing outbound tourism market, with demand for luxury travel increasing most rapidly . The UK Government has committed to removing VISA barriers to spur growth in UK visits. Experience Oxfordshire and West Oxford District Council in partnership with county businesses have had successful experience of early marketing in China, leading on the Cotswolds, Oxford, Blenheim Palace & Bicester Village brands. But funds for this marketing ended in 2013. As success in China is based on having a long term consistent presence in the market, the project will enable Oxfordshire to establish a growing presence in the market, develop an attractive rural proposition for it, and position Oxfordshire to benefit from long term growth forecasts especially once VISA barriers are eased.

Oxfordshire Business Support Hub

In parallel we seek to drive indigenous business growth by developing Oxfordshire Business Support to deliver the following programmes:

- Oxfordshire Support for Business & Innovation – a holistic package of business support packaged under a single brand that drives growth in innovative, new and established business, especially those with the highest growth potential
- Oxfordshire Support for Export – aimed at increasing to 7,500 the number of businesses that trade internationally in line with governments export growth ambition
- Oxfordshire Finance for Business – developing an easy to understand and access co-ordinated finance programme that invests to drive growth in our SME businesses
- Oxfordshire Skills for Business – aimed at increasing the availability of skills required by business linked to increased numbers of traineeships and apprenticeships

Countywide Investment - Innovative People

Our aim is to develop a 'world class' Oxfordshire skills and learning eco-system that is better able to support our growth ambition, world class sectors and communities.

Our Local Growth Fund Offer

A minimum of 85,600 new jobs projected to 2030, many in high value knowledge rich sectors

The research capacity and engagement of our globally renowned Universities

A £67 million investment in people, skills and knowledge

A culturally diverse, highly skilled, innovative population that embraces knowledge

c£8.6 million European Social Funds aligned to improving socio-economic inclusion, improved skills and better employment

Build on the strong base of skills, knowledge and experience of existing Oxfordshire VCFS (voluntary, community and faith sector) to support the development of social and environmentally-orientated enterprises targeted on social and employment issues such as ageing, worklessness and NEETs

The collective experience, energy and enthusiasm of our Oxfordshire Skills Board to oversee and influence hange in skills outcomes

Increase the working age population qualified to level 2 and above to 90%

Increase the amount of Skills Funding Agency that supports STEM sectors by 15%

Deliver 1,150 more apprenticeships for young people in our priority growth sectors

Develop a strategy to retain graduate talent

Maximise our environment to encourage sustainable living, enhancing quality of life and a range of opportunities for people to learn, improve their skills and improve health and well-being

Our Local Growth Fund Ask

Local autonomy over how education funding agency and skills funding agency investments align to our growth needs

To pilot a model that seeks to embed employability and enterprise at heart of the education curriculum at all levels

The ability to ensure better alignment between publically funded education, skills and training including, as a minimum:

- Education Funding Agency
- Skills Funding Agency
- National Apprenticeship Service
- National Careers Service
- Job CentrePlus

Greater local flexibility in the apprenticeship system to encourage employers to take on apprenticeships

Funding to maximise the role our environment plays in skills and health development

c£36.6 million FE capital to ensure our further education and training infrastructure capital stock to meet the needs of 21st century learners and employers

Countywide Investment - Innovative People

Objectives

Our objectives are to:

- Increase the working age population qualified to level 2 and above to 90%
- Ensure our further education capital stock meets the needs of 21st century learners and employers
- Improve school attainment above the national average of 60.4% of GCSE students achieving at least five A* to C grades including English and Maths
- Increase the amount of Skills Funding Agency funding that supports our STEM sectors by 15% to better reflect our economic profile
- Deliver 1,150 more apprenticeships for young people with a focus on our priority growth sectors
- Retain our graduate talent
- Maximise our environment to encourage sustainable living, enhancing quality of life and a range of opportunities for people to learn, improve their skills and improve health and well-being

Strategic interventions

Increase the working age population qualified to level 2 and above to 90%

We want to maximise the levers of planned investment and growth to ensure skills and training opportunities for local residents, especially those most marginalised. Analysis of the planning pipeline – at advanced pre application and formal submission stages indicates significant employment growth in the service sectors in the short to mid-term, with four developments (retail and logistics led) potentially creating 6,500 jobs alone. We will work to ensure that employment and skills plans are embedded in major employment generating schemes, and work with developers to deliver skills and training outcomes for all, especially those most marginalised from the workforce.

In parallel and building on our successful City Deal we want to harness the collective enthusiasm and energy of schools, young people, parents and employers to motivate and enthuse young people to reach their potential.

Ensure our further education capital stock meets the needs of 21st century learners and employers

We want to ensure a higher proportion of residents have the skills required by our knowledge rich economy, both current and projected, and to develop an aligned and responsive skills and learning eco-system that provides opportunities for all. Driving up the skills capacity of the local population is linked to a more flexible and productive workforce which in turn is a key driver of productivity improvements. For young people in particular, it can lead to better employment opportunities, improved pay prospects and a better quality of life. For business, it means success with improved productivity, innovative practice and quality products. For the county, it represents sustained future prosperity.

Working with our Further Education and wider provider network we have identified a series of capital projects that will enhance our FE portfolio and provide state of the art facilities that better support our knowledge rich sectors, including STEM, and that business and young people expect.

Increase the amount of Skills Funding Agency funding that supports STEM sectors by 15%

Building on our City Deal we will develop a more integrated and responsive approach to skills training and funding that better supports the needs of employers – both current and projected. In partnership with our provider network and the SFA we seek

Countywide Investment - Innovative People

to encourage more training provision in priority sectors that support our innovation led growth ambition – our target that by 2020 we have increased the level of SFA funded support for STEM by 15%

Deliver 1,150 more apprenticeships for young people with a focus on our priority growth sectors

We will develop an integrated programme under the Oxfordshire Apprentices brand to further increase the number of young people taking up apprenticeships, with a particular focus on courses that will support our knowledge rich sectors: advanced engineering and manufacturing; space technology and biosciences, as well the service sectors of hospitality, logistics and care. Oxfordshire Apprenticeships will develop an Oxfordshire Apprenticeship delivery plan building on our successful City Deal interventions that will make apprenticeships a viable and attractive option for young people and businesses.

Retain our graduate talent

In partnership with the Skills Board, our Universities, and their graduates we will develop a graduate retention strategy and a series of interventions that seek to encourage and enable more Oxfordshire graduates to stay in our local economy and support our growth ambitions.

Maximise the role of our environment in skills and health and well-being

Utilising our significant environmental research and academic base we seek to develop activities that support and maintain our environment whilst offering skills and training and enhanced quality of life and improved health and well-being outcomes.

Local Growth Fund – Our Ask

Earth Trust Skills for the Future: enabling innovative driven sustainable growth in Oxfordshire

The Earth Trust reconnects people with their environment and encourages sustainable living, enhancing people's quality of life as well as their environment offering a range of opportunities for people to learn and improve their skills whatever their age and backgrounds:

- Innovative ways of managing the environment
- New skills and applied experiences that build confidence and understanding
- Interesting and diverse places to explore

Health Ecosystems Marketplace

There is a large body of evidence of the health benefits of nature-based projects, yet there is very little uptake of them across the country by healthcare practitioners and commissioners, largely due to a lack of visibility compared to well-marketed commercial interventions.

The Local Nature Partnership (LNP) and The Centre for Sustainable Healthcare (CSH) aim to create a world-class online Health Ecosystems marketplace for nature- based organisations to sell their projects, and the health and social sector to buy them – creating value in two sectors. The Marketplace will present benefits from nature-based interventions in a structured and accessible way to commissioners of health and social services and showcase projects that will inspire confidence, supported by research papers and cost-benefit analysis for these interventions.

Countywide Investment - Innovative Place

Our aim is to create the conditions that make Oxfordshire the location of choice for the world's leading science and technology businesses.

Our Local Growth Fund Offer

Local planning authorities will work together accelerate the delivery of planned homes and to align plans to meet the identified housing need of 93,560-106,560 homes to 2031 in the Oxfordshire Strategic Housing Market Assessment.

Work in partnership with Government to prioritise measures to address housing affordability across the county and in the city.

Deliver a further 1,095 homes on the Oxpens and Blackbird Leys sites within 10 years as part of a 3,000 home programme within the city beginning in 2015.

Oxford City Council will bring forward the Oxpens site for comprehensive redevelopment by 2015 to include a minimum of 300 residential units, together with office, leisure and other employment uses.

Work in partnership with Government and LAs to implement a system to calculate and enforce residual land value rather than hope values.

Aligned local resources to deliver a coordinated approach to S106 and to facilitate innovative sustainable design that improves the attractiveness of housing offer.

Facilitate delivery of strategic flagship gateway projects that will help improve sense of place and 'arrival' thus maximising business investment.

Develop local initiatives to help pump prime delivery of i nfrastructure to enable accelerated development.

To work with government support schemes, the Environment Agency and partners to identify funding to deliver the Oxford Flood Risk Management Strategy (£125m indicative cost).

£1.3 million of local authority money secured towards the delivery of the £1.9 million flood storage scheme in Oxford City.

Local planning authorities are developing schedules for the Community Infrastructure Levy regularly reviewing h ousing completions against plans.

Local planning authorities will review building regulations practices to ensure they do not create unnecessary bureaucracy.

Our Local Growth Fund Ask

Raise the Oxford City Housing Revenue Account debt cap by £121m over 10 years. As a first installment the Growth Fund proposals will include a bid of £30m in 2015/16 and £30m in 2016/17.

Government departments to work with Oxfordshire partners to release strategically important land for development e.g. MOD at Craven Hill and London & Continental Railways (LCR) at Oxpens.

Explore how to enable the CPO process to be a quicker, simpler & cheaper process for Local Authorities to undertake to assist with delivery of schemes/development/regeneration.

Explore with government how to prevent land being held in option agreements virtually for perpetuity without development taking place.

Work with LEP and LAs to enable LPAs to enforce true residual land value rather than hope values.

The Housing and Communities Agency to work with Oxfordshire to develop initiatives that encourage a widening of the market housing model, e.g. HCA Build to Rent scheme, including piloting a test bed for innovation in building and design (e.g. competition to deliver sustainable design at lower build cost to enable to be sold at lower prices due to savings achieved).

LGF ask of £53 million to complement the investment secured to date to facilitate delivery of flagship gateway projects in Oxford and Didcot.

Given the scale of development planned we would welcome early and strategic engagement with utilities forward planning processes resulting in a better integrated and planned approach to development.

Commitment of up to 50% to support our Oxford Flood Risk Management Strategy to alleviate flood risk.

Commitment of £600,000 from LGF towards a flood storage scheme in Oxford City to complement the wider Oxford Flood Management Strategy in the shorter term.

Countywide Investment - Innovative Place

Objectives:

Our objectives are to:

- Provide between 93,560 to 106,560 new homes by 2031
- Accelerate the delivery of new homes
- Provide accessible housing that is affordable for the people who work in Oxfordshire
- Deliver flagship gateway developments and projects that stimulate growth
- Deliver the Oxford Flood Risk Management Strategy
- Ensure new housing makes innovative use of blue and green infrastructure

Strategic interventions

Increase land available for development in line with economic potential

Through our City Deal local authorities have committed to bring forward through their local plans, land allocations based on aligned housing and economic strategy. However, we are more limited in our ability to ensure the rate of delivery on sites needed is achieved. Local authorities, particularly the rural districts, do not own land that could help deliver significant housing at a faster pace to meet need, meaning we are almost fully reliant on the private sector to deliver homes. Private developments only deliver at a rate which can be sold for optimal price.

In Oxford the market is overheating and complexities of land availability, assembly and associated high costs cause long delays. Overcrowding in Oxford is above regional/ national averages and the City is tightly constrained both in terms of flood risk, historic built environment and Green Belt, which means that it is difficult to fulfil the full demand. The City will and has released public sector land, and assembled sites for accelerated housing delivery using their own private-public sector investment model.

We consider housing as a critical part of delivering the economic potential of Oxfordshire in a sustainable way. If we are going to secure the potential of Oxfordshire we understand the importance of ensuring that people are able to live in affordable homes close to where the economic potential will be delivered.

As such, the Oxfordshire authorities jointly commissioned a Strategic Housing Market Assessment (SHMA)[28]. The SHMA clearly articulates that a range of market signals are occurring in Oxfordshire and that the market is not in equilibrium. This has occurred for a number of reasons but housing shortages are a key cause. These shortages have worsened affordability and limit the ability of those living and working in the county to access housing.

The assessment identified the amount of housing required not only to meet our trend based economic and demographic growth but to support the economic potential of Oxfordshire as identified in the planned economic forecasts produced by Cambridge Econometrics and SQW. This identified that to meet the economic potential of Oxfordshire 85,600 homes are needed to 2031. However, due acute affordable need and market signals but the SHMA concludes that across Oxfordshire, there is an identified need for provision of between 93,560-106,560 homes over the 2011-31 period. This level of housing provision is necessary

Countywide Investment - Innovative Place

to support committed economic growth; to support delivery of affordable housing; and to support an improvement in the affordability of housing over time

Improve viability of development

Viability pressures reduce the quality, mix and sustainability of the housing offer, and reduce the impact on the built and natural environment and make homes less attractive.

Financial appraisals demonstrate that the infrastructure and affordable housing needs required for our larger sites cannot all be met from developer contributions, due primarily to high land prices and landowners unwilling to reduce land costs to a realistic level and with no imperative to sell. For example, agricultural land in Oxfordshire without planning permission is valued at approximately £5,000 to £10,000 per hectare compared to £150,000 to £200,000 per hectare with consents. As a consequence development proposals stall causing significant delay. The scale of growth expected in Oxfordshire will require a significant investment in a range of infrastructure, which will put further pressure on the viability of development. In addition to this there is other infrastructure required by new development including education, leisure and community facilities.

The pressure on the viability of developments is high. Funding of some of the strategic infrastructure, which developments would not fully fund but would contribute towards, will release money to pay for the other elements of infrastructure, reduce delays in negotiations and provide the opportunity for developers to spend the money on elements of design and infrastructure that improve the quality of developments.

Oxfordshire is not renowned for innovative, high quality design of homes and none of the schemes under development or those completed in the past decade have won design awards. High quality design is important for the enhancement of the natural and built capital that helps make the county an attractive place to live but also to ensure that the homes we deliver are attractive to all. By reducing the viability pressures on developments a higher quality product that provides a choice to a diverse labour market could be achieved.

Reduce risk of infrastructure lag

We are committed to delivering additional homes on an accelerated timeline compared to previous trends in Oxfordshire. As part of doing this, additional infrastructure as well as some that is currently planned, will be needed sooner than previously programmed by the provider. We seek to secure increased flexibility in financing will be required to ensure that infrastructure can keep pace with delivery For example, utility providers operate on 5 year programmes of financing for improvements, which may not align with our accelerated delivery ambitions. We need to ensure that strategic and co-ordinated discussions with utilities providers to plan growth in a fully integrated manner.

Pump priming of improvements may enable a more strategic and co-ordinated approach to infrastructure delivery across sectors, which may lead to other benefits. For example education, particularly secondary education, can be difficult to co-ordinate

Countywide Investment - Innovative Place

across sites and deliver upfront. It can often be pushed back in S106s due to the economics of development. Pump priming of new facilities may help deliver facilities in a timely and co-ordinated way. We believe that increased flexibility in financing will be required to ensure that infrastructure can keep pace with delivery.

Delivery of the type of homes needed is restricted by the narrowness of the private housing model/offer

We acknowledge the need to provide a range of homes to meet differing needs of those living and working in Oxfordshire. We consider this a key element in continuing to attract investment from business. Employees need homes that suit their needs. One element of this is the rental sector. Rented homes in the growth areas will be an important element of the housing offer however, the private sector relies almost entirely on small private investors to deliver market rented homes. Previous schemes promoted through the Homes and Communities Agency for example the Build to Rent sought to address these types of issues. Unfortunately submissions from Oxfordshire were unsuccessful but we would support further resources into these types of schemes.

The narrowness of the housing model also affects the older population - the key challenge here being to meet the needs of an ageing population, particularly in the rural areas, with the number of people aged 65 and above expected to increase significantly in the period to 2031. However, the delivery of private homes specifically designed for older people as part of larger housing schemes have not been achieved in Oxfordshire to date.

More holistic approach to planning and development

Oxfordshire's economy is intimately associated with its geography; and its water resource has a particular influence with flooding dis-benefits currently overwhelming the positive benefits of water supply, tourism and leisure provision. We will need to work to ensure our economic growth works to enhance the environment where possible in order to increase resilience to climate change and to optimise the capacity of the natural environment to deliver a full range of ecosystems services.

Approximately 24,000 hectares of Oxfordshire is within flood zone 3 (1 in 100 year), and a further 6,000 hectares in flood zone 2 (1 in 1000 year). Investment in innovative land and water management schemes has the potential to reduce some of the current flood-risk constraints, provide ecosystems services across a range of economies and communities and thus drive growth.

Increased scarcity and cost of raw materials such as fertile soil, freshwater and fuel, disruptions to business operations caused by natural hazards, health and well-being impacts and higher insurance costs for events such as flooding are further risks in need of mitigation.

Oxfordshire's past failure to fully embrace the environmental sector to drive innovation led growth will be mitigated in future by adopting a more holistic approach to planning and development, using innovative planning strategies and the development of a strategic environmental economic plan.

Countywide Investment - Innovative Place

Committed Schemes – Our Offer

Accelerated Housing Programme

As part of the City Deal, Oxfordshire has committed to accelerate the delivery of 7,500 homes through the combined Oxfordshire Housing Programme by 2018, of which over a third (36 per cent) will be affordable. This represents 72 per cent increase in the number of homes delivered by 2018 against current forecast and will provide an immediate stimulus to the construction industry, engender confidence in investors and deliver housing for knowledge economy workers; and committed to deliver the necessary sites that will meet the housing needs outlined in the Strategic Housing Market Assessment (reporting in early 2014).

Meeting identified housing need

Oxfordshire authorities are currently in the process of reviewing plans and bringing additional sites forward to meet the identified housing need from the Oxfordshire SHMA. As part of this commitment, there is acknowledgement that Oxford is highly constrained by its administrative boundary and will require the rural districts to help meet the housing numbers. Demonstrating commitment and recognising the crucial importance of housing to facilitate economic growth in the county, all the Oxfordshire authorities have signed up to a Statement of Cooperation[28] that articulates a headline process for how the unmet housing need will be accommodated through the planning system

Local Growth Fund Schemes – Our Ask

Delivering effective Strategic Gateways for Oxfordshire

As part of the spatial strategy of the plan we have identified three key spatial gateways for growth – Bicester, Oxford and Science Vale Oxford. As part of delivering the growth in these areas we need to ensure that a high quality buildings and public realm with a strong sense of place is either created in some cases or enhanced in others.

We have identified key place making projects that will address issues in these gateway areas. Key drivers of these projects is to provide exemplary gateways to Oxfordshire that ensures that there is a high quality sense of arrival into these key areas. It is also considered that these key projects to improve these strategic gateways will be a catalyst for wider regeneration, provide a focus for further inward investment and positively impact on land values.

These projects will also help emphasise connection between rail and public transport interchanges and the town or city centres. They help to improve wayfinding, deliver high quality architectural and urban design and dovetail with planned wider development. The projects identified as to help achieve this currently include:

Oxford Station - Interchange and Gateway Development

Oxford Station Interchange and Gateway fulfils the LEP objective of improving infrastructure for growth and jobs. The project supports Network Rail's Capital Programme for Control Period 3. It also supports the delivery of Evergreen iii and

Countywide Investment - Innovative Place

the Vision for the West End of Oxford (AAP). This project will help secure the significant proposals for the regeneration of the Station area and major redevelopment of the Oxpens site, including potential provision of incubation facilities, business and tourism services, and help support development and future economic success of the Westgate Shopping Centre and supports significant transport and public realm improvements across the city centre. There is already interest from major developers and funders however this project for the Station site, linked to Oxpens, has the potential to act as a catalyst to trigger the wider redevelopment of the West End Area; which includes development proposals deferred by Christ Church College.

Didcot Station – Interchange and Gateway Development

Significant investment both in the track and services as well as in the function of the station itself as a gateway has been secured. These include improvements are already planned including electrification of the line from Paddington is due to be complete by 2016, Heathrow Western Rail link will bring major reductions in journey time and convenience from Didcot by 2021 and East West rail will link Didcot and Milton Keynes, with onward access to the north west, and will ultimately create a direct service to Cambridge. Work is also soon to be completed to improve the forecourt of Didcot station.

All these changes are very positive, but do not of themselves exploit the full potential to transform Didcot into a strategic railway hub, with a station that benefits an internationally renowned centres of science and innovation.

This project would not only strengthen Science Vale Oxford's strategic rail links but reinforce many of the other actions proposed in this strategy with a relatively small LGF ask to help deliver this £25m development. In addition to the investment in the track and services discussed as part of Connectivity we consider it imperative that these investments are complemented by rebuilding the station building, which is currently dated, will not have the flexibility to deal with the expected growth in passengers and does not provide a fitting sense of arrival and will diminish the success of the other investments in the area for example the £54m investment on the gateway site opposite the station.

Culture, Knowledge and Skills Exchange Centres in Oxford and Didcot

Both of these Knowledge and Skills Exchange centres would form part of the wider town centre developments.

Oxford is under-performing in relation to retail and this has been reinforced in a number of independent assessment. There is a significant lack of presence and scale of major retailers for whom the city and its catchment profile are one of the most attractive in the country. Yet, the city has dropped significantly in the national retail rankings over the last decade. There are effectively no vacancies in retail premises in the retail core and turnover of premises is well below national averages

In the case of Oxford it would complement the wider inward investment of the £400m Westgate development, which will create 3,400 net jobs and will capture higher spend levels from the 9 million visitors that come to the City each year.

Countywide Investment - Innovative Place

Highlights of the scheme include:

- Around 70 new shops, anchored by a 10,000 sq m John Lewis department store
- New cafes, restaurants and leisure uses
- A new roof top terrace with views over the city
- A two storey basement car park
- New cycle parking
- Between 27 and 122 new homes
- Retention of the existing Oxford Central Library

Didcot acts as a key gateway for Science Vale but currently does not provide the facilities, legibility or sense of place expected for an area home to international science facilities and businesses. To support this growth Didcot town centre is being redeveloped as a multifunctional social centre, capitalising on its excellent road and rail networks and its role as the gateway to Science Vale.

The first of the development was the £50 million first phase of the Orchard Centre opened in 2005, including the Cornerstone Arts Centre, Cineworld cinema, and dozens of new shops. A second phase of this development will be an additional £125 million investment. In addition, will be the mixed use development at the gateway site between the station and the town centre. This development will levy £54 million inward investment and include high quality landmark buildings that will offer irresistible opportunities and experiences that do not exist elsewhere in Science Vale. The master plan for this new town centre recognises that successful towns are about much more than shopping. They are about enjoyment, creativity, learning, socialising, culture, health and wellbeing and democratic engagement.

However, in both cases more can be done. A small investment from the local Growth fund will extend both developments positive impact further in line with the objectives of both place and in relation to skills and people in this plan.

The creation and exchange of knowledge is an essential part of our economy and there are growing expectations that everyone should be able to contribute to and benefit from a knowledge-based society. These centres aim to improve awareness of the opportunities available in the local economy.

Initially it will provide advice and guidance to those wanting to benefit from the investment in the Westgate and Orchard Centre –whether this is skills development of business opportunities. But research plays a crucial role in informing the development of new ideas, practices and business models and in building entrepreneurial capacity. The knowledge and Skills Exchange will grow to create a public space that facilitates interaction between research, people and the economy to realise significant benefit where individuals and businesses:

- 'Know where to go' to ask for applied research, business growth skills training
- Have applied research and support services available under one roof; rather than being referred to different locations or being referred to a range of virtual services
- Will be familiar with the location and feel comfortable in an open access environment that allows networking and collaboration,
- Identify research that responds directly to business needs

- Cultivate entrepreneurial capacity and facilitate new routes to market opportunities
- Offer face-to-face and virtual support for self-learning and self-teaching and it will provide the bridge between the community and the world-leading scientific communities.

Oxford Flood Risk Management Strategy

The Oxford Flood Risk Management Strategy (OFRMS) sets out a sustainable solution to reduce flood risk to businesses, essential transport infrastructure, people and residential properties, while conserving and enhancing Oxford's special environment. Within the Strategy's study area there are more than 4,300 properties that are at risk of flooding.

Elements of the OFRMS have already been delivered with the Environment Agency investing £2.5 million on short term flood risk measures. Since the summer floods of 2007 they have carried out channel improvements on the city's river system and have installed culverts both at Willow Walk in West Oxford, to help prevent water building up near Botley Road; and at Redbridge, to increase the flow of water through south and west Oxford. Demountable flood barriers have also been provided for Osney Island and Hinksey Park. These measures helped to reduce flood risk to homes and businesses during the 2012/2013/2014 flood events, however given the severity and increased frequency of flooding events we must do more.

In addition to the works and programs already completed, we are developing the OFRMS, including the feasibility of building an Oxford flood relief channel ('Western Conveyance Channel'). This new watercourse would allow water to pass through and around Oxford more efficiently, which would reduce water levels and backing up. The new watercourse would always contain water, but when there is a threat of flooding, control gates would be opened to allow excess floodwater to bypass Oxford. If the water rises above the banks of the new channel, the channel's floodplain would be utilised to reduce the risk of water entering homes, businesses and disrupting transport links.

The new channel would run within the area marked by the red boundary line shown in the map below would reduce flood risk to the Abingdon Road, Botley Road, Osney area and the Railway Line. When fully completed, protect up to 2120 residential properties.

Upstream flood storage scheme, Oxford City

In addition to the wider flood management strategy we are looking funding towards a flood relief scheme in Oxford City. This is a £1.9 million project with £1.3 million local authority funding secured to protect 279 residential properties at significant risk of flooding

The project involves the construction of two surface water holding areas, one at the Northway Centre playing field and the second at Court Place Farm Park. The scheme will increase the city's capacity to address flood risk and would create 0.3 hectares of new water-dependant habitat. Not addressing the issue of flood risk to the existing properties has potentially harmful social and economic effects, and may impact upon development planned in the area.

Countywide Investment - Innovative Connectivity

Our aim is to create the conditions that make Oxfordshire the location of choice for the world's leading science and technology businesses.

Our Local Growth Fund Offer

Deliver a c£815 million integrated transport improvement programme across Oxfordshire offering new, direct strategic public transport connections.

Work with DfT & TSB Transport Catapult to test bed smarter network management.

A rights of way network providing strategic opportunities to develop integrated sustainable transport routes linking communities, economic centres and the natural environment.

£20 million contribution to East-West rail western section Improve accessibility of international connections through direct rail connections from The Knowledge Spine to national hubs and airports and reduced congestion on strategic highway links, particularly the A34.

We will deliver a maximum journey time of 30 minutes across the Knowledge Spine, with a minimum frequency of public transport services of 4 per hour.

We will deliver a c£65 million broadband investment programme.

Continued support to test bed new technology and approaches including data, transport systems and 5G mobile technology.

Our Local Growth Fund Ask

£200 million contribution to delivery our integrated transport improvement programme across Oxfordshire.

Flexibility in the allocation of funding to support targeted project delivery.

Accelerate the A34 Highways Agency Route Based Strategy incorporating County Council led development work that identifies our strategic network investments for the period 2015-2020 period.

Early delivery of the Western Rail Access to Heathrow scheme (WRAtH) in advance of the projected 2021 completion.

£11 million to support the development of the OXybeles (Smart Solutions) programme.

£200,000 per annum to 2020 to jointly fund the annual costs of £2.57 million for the research team and the equipment needed to develop a test bed an innovative project 5G mobile broadband pilot - building on the unique strengths of Greater Thames Valley LEP universities and establish this area as the place for business to invest in Mobile Broadband and aligned technologies.

Countywide Investment - Innovative Connectivity

Objectives:

Our objectives are to:

- Improve accessibility of international connections through direct rail connections from The Knowledge Spine to national hubs and airports and reduced congestion on strategic highway links, particularly the A34
- Reduce the distance and barriers between our core economic areas across the Knowledge Spine through providing a minimum level of public transport services of 4 per hour and maximum journey time of 30 minutes
- Increase the capacity and improve the efficiency and resilience of our local transport network by reducing congestion on key highway links
- Spread the benefits of transport investment across wider Oxfordshire. The development of a local "catapult" or OXybeles to provide a central point through which local authorities can develop partnerships with Universities and business to develop innovative transport led approaches and technology that enhance services, manage infrastructure more efficiently and provide a basis for local business to address problems thus reducing burden on public sector finances
- Explore the potential of 5G Technologies underpinned by the development at the 5G Innovation Centre for Future Mobile Communications and Internet Technology
- Increase connectivity between people and the quality natural environment to develop integrated sustainable transport routes linking communities, economic centres and the natural environment

Transforming connectivity across and into Oxfordshire is critical to underpin the spatial aspirations that deliver the innovation based growth. Our approach combines targeted investment in new infrastructure along with information platforms and technology in a series of initiatives to deal with the identified emerging travel problems and changes in travel behaviour.

Economic growth inevitably will increase the need for trips, which will in turn increase the traffic on the roads across Oxfordshire and growth in traffic across the Knowledge Spine and those travelling through Oxfordshire on strategic routes, particularly the A34, will compound this problem. The resulting increases in congestion, if not tackled, could seriously restrict economic growth and prosperity or threaten this trend altogether.

Strategic interventions

Targeted Capacity Improvements

Targeted capacity improvements will be supported where there are clear requirements for physical capacity shown to be required to support the delivery of growth.

Better managing our Road Network Capacity and Reliability

Oxfordshire will be at the cutting edge of new innovative technology which will help better manage Oxfordshire transport network. The best leading technologies will be used to make traffic move more smoothly and efficiently on existing roads across Oxfordshire, as well as opening up new ways for people to do business and access goods or services using fast broadband connections, and providing the flexibility to work or run their business from home if they choose.

Countywide Investment - Innovative Connectivity

Oxford Science Transit: Fully Integrated and Multi-Modal Transport System

The transport system in Oxfordshire is being considered as a whole and not by form and function, we want a system that is fully integrated and allows real choice for trip and connectivity requirements. The ability to do this in an historic built environment restrict this option, as well as the damage to habitats through land take, air pollution and noise could seriously affect Oxfordshire's important environmental resources, which are some of the key things that mark the area out as a special place to live and enhance the quality of life.

We will transform connectivity in the county in a way that not only supports Innovative growth along the Knowledge Spine, preserves its high quality environment, but also will reduce the amount of carbon dioxide released by moving people and goods around the area. In addition, to make the plans affordable and maximise the effectiveness of spending, we will focus on the areas and people most likely to benefit particularly considering value for money and wider benefits. It will also provide the basis for healthier lifestyles by avoiding the air pollution and noise that causes ill health while improving the opportunities and motivation to use more active forms of getting about.

Transforming our infrastructure offer to business by developing and promoting our transport networks as a single co-ordinated, multi-modal transport system – making a step change in connectivity across our economic area delivered through the Oxford Science Transit System.

Our ambition is that the Oxford Science Transit will be a fully integrated public transport system that connects our centres of innovation and economic growth with our universities; complementing the investment in our road network, it will ensure that the Oxford City Region is interconnected, linking employment, housing, retail, cultural and leisure opportunities.

Oxford Science Transit is at the heart of the growth agenda for Oxfordshire. Our vision is for an integrated public transport system that is:

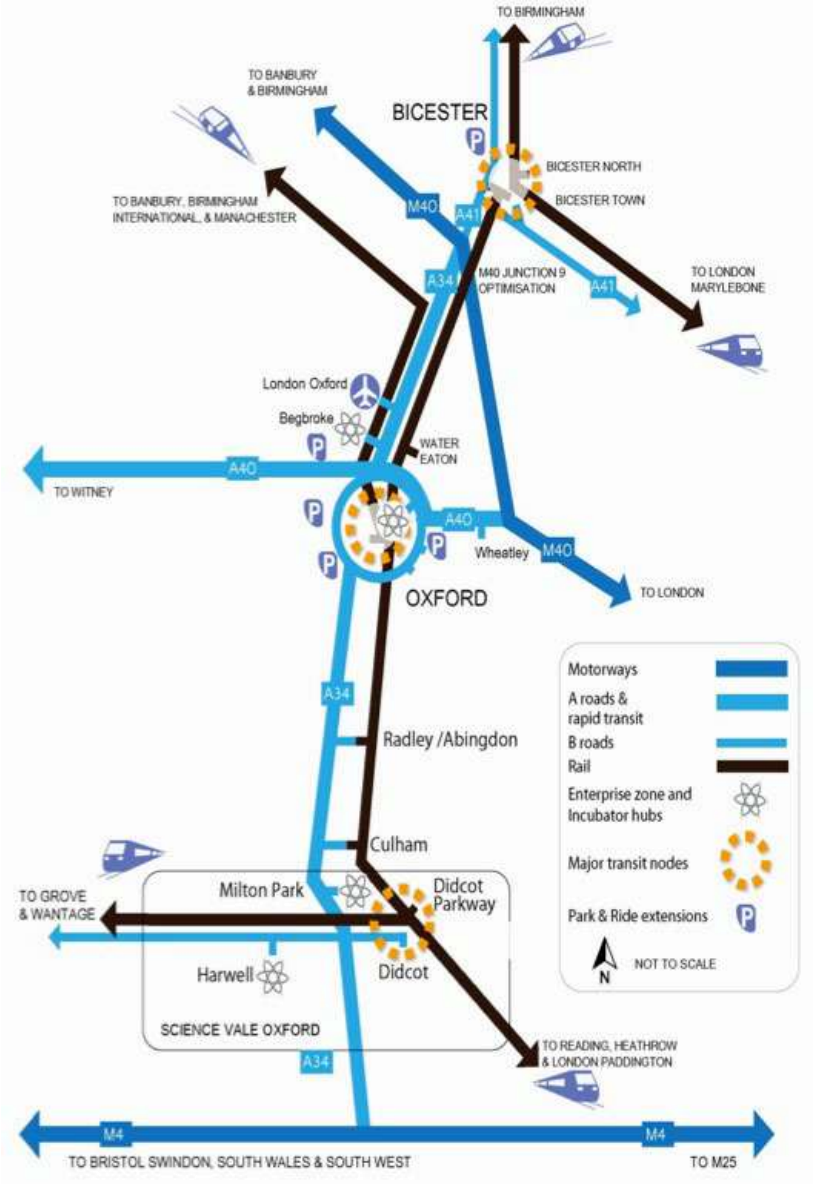
- Developed and promoted as one system using a common branding that will be recognised internationally as world class in urban/inter-urban transport systems
- Accessed by a single transaction, irrespective of the number of stages to your journey, with cashless payment enabled through the use of the latest smart transaction technology
- Supported by integrated information systems that provide the traveller with informed choices and allow the operators to manage the transport system as a whole in real-time

Our aim is that the user of the Oxford Science Transit will have:

- A minimum of 4 trains per hour along the corridor linking our core rail stations, providing fast connectivity across the Oxford City Region, as well as building upon national investment in the rail infrastructure to provide faster trains to London, to the north, south and west

Countywide Investment - Innovative Connectivity

- Our core rail stations – Bicester, Oxford Parkway, Oxford, Culham and Didcot – receiving investment to become 'state of the art' multi-modal interchanges and gateways through which existing businesses and investors can pass quickly and efficiently



- High quality, high frequency dedicated bus connections providing fast, direct connections from our core rail stations to our university campuses, the centres of innovation and economic growth
- Our Park and Ride sites around Oxford becoming true interchanges, with additional connections to our university campuses, the centres of innovation and economic growth
- Free Wi-Fi access whilst travelling aboard an Oxford Science Transit service
- In the longer term the re-opening of the Cowley branch line in order to develop a cross-Oxford rail service that connects areas of deprivation with new job opportunities
- Improving our connectivity to international gateways – in particular to Heathrow Airport – which remains a key determinant of investment decisions for businesses operating in the global market
- We will work to make London Oxford Airport our 'city airport' - with ease of access to private business aviation services and with a network of inter-regional air services to other European centres of business

Countywide Investment - Innovative Connectivity

Changing Travel Patterns and Behaviour

Travel behaviour across the county varies, which is why a balanced transport system is required to support the requirements of all residents and businesses.

Within Oxford, more people are choosing to walk and cycle to work; comparisons between Census 2001 and 2011 travel to work data, for Oxford city residents, show a reduction in car travel has been achieved with more people travelling to work by bicycle and on foot. Over the same period, the number of households in Oxford city that do not have access to a car or van has also increased. An increase in the student population will account for some of the rise but it could also be a change in behaviour and cultural attitudes; evidence suggests that economically successful cities with high incomes and growing populations have greatest reductions in car use. Good access to public transport, parking controls and the increasing cost of motoring will also play significant roles.

The travel behaviour of workers living in the county towns, such as Bicester, Didcot and Witney, is also significant, especially as a greater proportion of workers living in these areas are more likely to work outside of their home town and travel along the Knowledge spine for work (based on Census 2001 origin-destination data). A similar comparison of Census 2001 and 2011 journey to work data for Cherwell, South Oxfordshire and West Oxfordshire districts reveals that car use has increased from an average 61% (2001) to 64% (2011). Although these figures are still below national levels, this shows car use has risen outside of Oxford, so better inter-urban public transport, offering faster more comfortable journeys, and increased capacity at Park and Ride sites, is likely to become increasingly important as the county towns continue to expand.

A combination of recent economic recession, demographic factors such as the rise in personal mobility and the increased need for personalised solutions, and the associated development of suitable relevant technology, has led to a focus in managing transport needs rather than the old 'predict and provide' ethos.

Learning from innovative work on integrated transport systems and movement towards "complete mobility" Oxfordshire is quickly embracing this concept to ensure maximum value for money from its transport infrastructure, and the LEP partners are working on developing various projects on journey planning, smart ticketing and Open Data to drive forward innovation in this area, this has informed the proposal of the OXybales smart solution project, which will help to tackle these challenges using an innovative R&D approach in a partnership between the public sector, businesses and the Universities. We see this as underpinning the connectivity investment, which will help to drive efficient use of the enhanced network that we are seeking funding for while also in itself supporting the drive for innovation lead companies to develop in Oxfordshire and help deliver these ambitions.

Travel to work data for Oxford city residents show a reduction in car travel with more people travelling to work by bicycle

Countywide Investment - Innovative Connectivity

Committed Schemes – Our Offer

Super-Fast Broadband

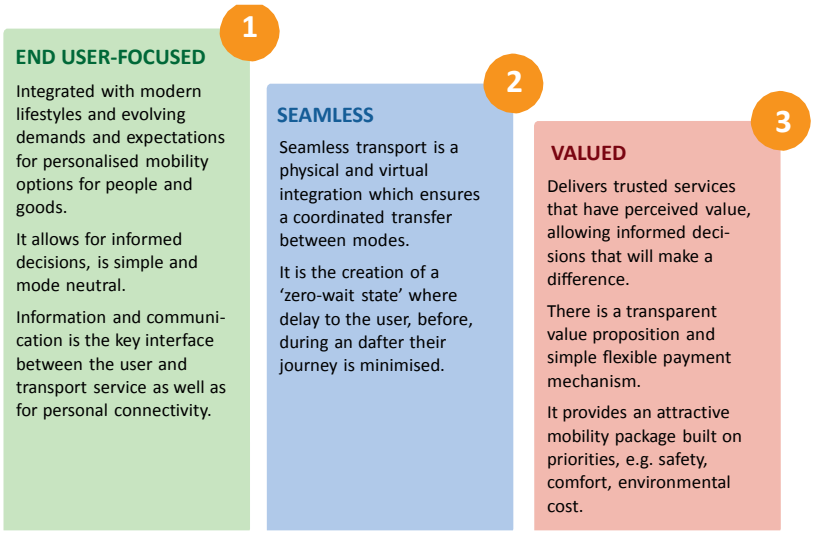
In August 2013, Oxfordshire County Council awarded a multi-million-pound contract to BT, marking the start of a two and a half-year programme to bring better broadband to thousands more homes and businesses in the county. The £25 million programme is made up of £10 million from the council, £4 million from the government and £11 million from BT. It will build on the existing commercial footprint in the county at the end of the programme at least 90 per cent, and provisional estimates suggest 92% of all premises will have access to superfast broadband speeds of 24Mbps and above by the end of 2015.

The deal will bring significant social and economic benefits to rural areas where broadband access may currently be slow. By stepping in to fill gaps not served commercially, the County Council is ensuring that more people can get online and take advantage of a wide range of services many already take for granted. Making sure that everyone has access to some form of broadband connection will boost business efficiency, streamline and reduce costs for businesses providing customer services and enrich leisure and social time. Almost everybody will benefit from this major investment.

Further projects to deliver ultrafast broadband in both the Enterprise Zone and Oxford along with public wireless across Oxford through the super-connected cities project shows that there is already a public private investment of around £40 million in the county to provide a major broadband uplift to businesses.

We also have a willingness to deploy radio and/or 4G services where this provides the best solution fit and OCC is exploring options with a national company willing to invest in leading edge 4G services within Oxfordshire, and are confident this would enable an extension of broadband coverage with any additional funding available for this purpose.

The GTV6 (a collaboration of the Greater Thames Valley LEPs, i.e. Thames Valley Berkshire, Buckinghamshire Thames Valley, Enterprise M3, Oxfordshire, Coast to Capital and Hertfordshire) is worth £193bn or 14.4% of the national economy. Contained within its boundaries are over 330,000 businesses providing 3.1m jobs. The majority of high technology and ICT businesses are in the GTV6 area and it is rightly seen as the ICT capital of Europe; a truly global player. We are collaborating on a shared digital infrastructure and skills strategy that aims to reinforce the Greater Thames Valley's credentials as the most productive sub region in which to run or establish a business in the 21st Century.



Complete Mobility – Providing Transport as a Service RAC Foundation[29]

Countywide Investment - Innovative Connectivity

The GTV6 intends to support the world-leading 5G Innovation Centre at the University of Surrey University, based in Enterprise M3 LEP area. This will enable the Greater Thames Valley to be the first to exploit the new opportunities that 5G will offer.

Maximising Transport Data

The County Council is completing innovative R&D in the integrated transport sector as part of a consortium behind a infield solution Integrated transport TSB project – this project is looking at ways to provide a major enhancement to monitoring of traffic in and around Oxford providing a basis for better interactive traffic systems and providing customer focused travel information, such as pushed messages/directions via email, text, Sat Nav, social media, to travellers to help inform their journeys in real time and guide them onto best least congested routes for their journeys.

A mobile phone responsive Journey Planning Tool for Oxfordshire has been commissioned to help people make informed decisions about their journeys and thus reduce congestion and environmental impacts from travel in the county. This will be a tool to support multi-modal journey planning both in advance of a journey and in 'real-time' i.e. at the point in time at which a user wishes to travel.

The County Council is also working with Oxford's Universities and the Oxford Digital Catapult to organise a Hackathon enabling exploration of data to be used for traffic management and smart transactions. The event will promote new ways of managing traffic data, technically and commercially. This will promote new innovative and commercially driven techniques for managing the transport network and providing improved services to customers.

The Connected Digital Economy Catapult (CDEC) have confirmed that they will be undertaking a project related to personal data, and would like it to be based in Oxford after discussions with Oxfordshire County Council, The City Council and Oxford Internet Institute. This has further potential to enhance local travel information through providing new transport data and live data feeds.

OXybeles

Innovation is essential to support the development of local authority services and manage infrastructure. This is the development of a local "catapult" or OXybeles to provide a central point through which initially Oxfordshire County Council and the City Council can use partnerships with Universities and business to develop innovative approaches and technology that will enhance services, manage infrastructure more efficiently and also provide a basis for local business to solves problems thus reducing burden on public sector finances. Building on work already established on TSB projects, CDEC and other supported research projects the OXybeles will focus on Transport systems and Personal Data at the start – developing to broaden the scope over time.

It is also envisaged that the Open data hub which will compile big data and real time feeds e.g. transport congestion, will be hosted, which will provide a basis for local business to utilise information to develop platforms to solve "problems'. Problem identification will also allow a direct interaction with public using public facing web presence, learning from early innovation in this area such as "Shift Surrey".

Countywide Investment - Innovative Connectivity

The Centre will start through with a combination of seconded and affiliate staff - hosted by one partner with the ambition to develop into a physical centre with a Capital build to establish a place where local business can be incubated and get direct support from the core team/experts while also working on tech/solutions that can be applied in a real "living laboratory" within Oxfordshire.

The output will be innovative SME business development, new IP for both local business and the partnership, while providing economic benefit through efficiency savings to things like the local transport system.

Great Western Main Line Re-signalling and Electrification

The Government has committed to the electrification of the Great Western Main Line to Didcot, Oxford and Newbury, Bristol and Cardiff. Prior to the electrification taking place, the existing signalling along the route needs to be renewed to make it compatible with the overhead electrification equipment. There are 22 road bridges that will require parapet works to protect people from reaching the 25kV AC overhead power lines and alterations to the sidings north of Oxford station so they can handle the mix of electric, bi-mode and diesel trains. When completed, most of the existing two and three carriage Thames Turbo diesel trains which service local stations will be replaced by 100mph four carriage electric trains. These trains will provide extra capacity to cater for future growth as they can run as 4, 8 or 12-carriage trains. By 2017 Network Rail plans to invest £5 billion on modernising the Great Western Main Line.

Network Rail plans to invest £5 billion on modernising the Great Western Main Line by 2017

Intercity Express Programme: New trains

Following completion of electrification along the Great Western Main Line, a new fleet of 49 Intercity Express trains will be introduced onto services between London Paddington, Oxford, Bristol and South Wales.

The fleet will comprise 308 carriages and a mix of five or eight carriage bi-mode (electric and diesel) sets and eight carriage electric sets. The bi-mode variant will be used on services that need to run through onto non-electrified routes, such as the Cotswolds & Malverns Line, and can be connected together to form 10-carriage trains busy times. It is envisaged that fast services will utilise a 5-car electric IEP, with 339 commuter seats, and services to Worcester/ Hereford will use 5-car bi-mode sets, with seating for 279 (558 for a 10-carriage train) - this compares with 550 seats on the existing HSTs. The overall programme is worth in the region of £5.8 billion and expected to be completed by 2020.

Countywide Investment - Innovative Connectivity

Didcot Parkway Station Interchange

A number of investments have been made in Didcot Parkway Station.

- **Refurbishment of concourse and installation of ticket barriers** – funded through National Stations Improvement Programme. Implemented in 2012
- **New multi-modal interchange and redevelopment of station forecourt** – we are leading the redevelopment of the station forecourt to create a multi-modal transport interchange. Funding of £5.6 million has been committed by the County Council and South Oxfordshire District Council. When completed, the station will become a high quality gateway to Science Vale Oxford, with improved interchange arrangements to enhance the sense of arrival in a major economic destination. The redesign will cater for increased demand for travel arising from significant new housing and job creation
- **Didcot Parkway Passenger Facilities** – improving the waiting area, café and toilet facilities on platforms 2 and 3. Works completed in 2013

M40 J9 and M40 J10 Pinch Point Schemes

The A34 M40 Junction 9 Wendlebury Phase 2 scheme will improve the A34 northbound approach and A41 exit/entry points at the M40 junction 9 roundabout near Bicester. These works are part of the national Pinch Point Programme. The works will cost approximately £6 million and are expected to be completed by September 2014.

A43 / M40 J10 Economy scheme includes closing the current M40 Southbound slip road from Padbury roundabout. This slip road will then be replaced with a new slip lane direct from Cherwell roundabout. The improvements will ease congestion especially at peak travel times, support economic growth, and improve safety. The estimated cost of these works is £1.3 million with a planned start date in September 2014.

A34 Milton and Chilton Interchange Pinch Point Schemes

The A34 Chilton Interchange improvements scheme will provide greatly improved connectivity of the Science Vale Oxford Enterprise Zone to the national road network by providing full access to the A34(T) for Harwell Oxford Campus. The addition of north facing slips at Chilton Interchange will provide confidence and reliability in the transport network, incentivising further business investment in the Enterprise Zone. Direct access between the two Enterprise Zones of Milton Park and Harwell Oxford, via the A34 will be achieved, reducing pressure on the local highway network. The north facing slips complement the capacity improvements at Milton Interchange which are currently in progress.

Countywide Investment - Innovative Connectivity

These works are part of the national Pinch Point Programme. The works will cost approximately £5 million and are expected to be completed by 2016.

The A34 Milton Interchange schemes will convert the current junction (where the roads from Didcot, Milton Park, Harwell and Wantage join the A34) into a 'hamburger' style roundabout. This will support the development of new employment opportunities in the Science Vale Oxford Enterprise Zone and new housing in the Didcot and Wantage & Grove areas. The works will cost approximately £11 million and are expected to be completed by 2015, with a £5million pinch-point grant awarded by the Department for Transport

A40 - Northern Gateway

The regeneration of Oxford's Northern Gateway and the A40 approaches to Oxford will address a critical transport barrier to the efficient economic functioning of the area and to its potential for future growth. A programme of schemes to relieve congestion and deliver growth at the Northern Gateway Development site will unlock congestion along the strategic A40 east-west corridor around the north of Oxford, and enhance connectivity to the north-south A34 corridor and remove constraints on the delivery of the Northern Gateway development area as well as reduce congestion constraints on development in the wider A40 corridor. These include a new link road between the strategic A40 east-west route to the A44 and the A34 at Peartree Interchange.

The A40 is recognised as a key artery of The Knowledge Spine and essential to the gateway into Oxford. Our City Deal will invest a total of £17.8m in highway infrastructure at the A40 Northern Gateway which will deliver improvements to the strategic road corridor and enable the employment and housing development identified at Northern Gateway to come forward.

Access to Science Vale Oxford Enterprise Zone

The package of schemes proposed collectively provides enhanced connectivity of the Science Vale Oxford Enterprise Zone to the national and local road network by increasing the capacity and improving the operation at a number of pinch points within the area. This will provide confidence and reliability in the transport network to attract and secure business investment in the Enterprise Zone and provide the good accessibility required to attract high- end employees for high-spec jobs. These schemes compliment the Milton Interchange and Chilton Slips schemes on the A34

Oxford Science Transit: Phase 1

Phase 1 of the Oxford Science Transit as provides a strong platform to deliver the wider ambition. The project focuses on one of the major pinch points in the Science Transit network Hinskey Hill Interchange: the A34 between Abingdon and south Oxford and the access into Oxford from the A34 along the Oxford Southern Bypass. The scheme comprises an additional lane constructed into the verge of the section of A34 to the south of Hinksey Hill interchange

Countywide Investment - Innovative Connectivity

– the section most frequently subject to congestion delays – together with bus priority lanes on the slip road approach to the signal controlled circulatory roundabout together with a capacity enhancement around the junction for all traffic and on the southern bypass linking the junction to Old Abingdon Road.

Infrastructure improvements at this interchange combined with committed investment on Hinskey Hill roundabout and Kennington will provide a key to unlocking the link between innovation centres in Science Vale Oxfordshire and Oxford. Providing enhanced high quality bus connections, direct services between hubs and key centres of growth, linking seamlessly into the rail network.

Science Transit package of Phase 1 infrastructure improvements will cost £13.017 million funded through a combination of City Deal and County Council investment.

East West Rail: The Western Section

East-West Rail is all about connecting people and connecting businesses, delivering significant economic, social and environmental benefits to Oxfordshire by connecting major centres of economic activity and growth. It will initially link Reading, Science Vale Oxford (Didcot and Culham), Oxford, Oxford Parkway, Bicester, Aylesbury, Milton Keynes and Bedford. Building on the initial £250m investment which has modernised the Chiltern route through Oxfordshire to London (the 'Evergreen' project), the western section of East West rail is being delivered in two stages.

Stage 1 will see a new service from Oxford to London Marylebone, operating via Bicester Town and a new Oxford Parkway Station at Water Eaton – this will provide a range of new strategic public transport connections across this side of Oxfordshire: the works involve upgrading the railway between Bicester and Oxford (including a new chord connecting two rail lines), a rebuilt and enlarged station at Bicester Town, a platform extension at Islip, a new parkway station at the existing Water Eaton Park & Ride and two new platforms at Oxford station.

Stage 1 Services are due to begin operating between Marylebone and Oxford Parkway in summer 2015, continuing on to Oxford by Spring 2016.

Stage 2 will see the line extend to Bedford and Milton Keynes, with services running through from Reading via Didcot, and for the railway to be fully electrified as part of the National 'Electric Spine' route. Passenger services are planned to be operating by 2017, with the fully electrified railway to follow. When fully open, the service will comprise two trains each hour from Reading via Oxford and Bicester to Bletchley, with one continuing to Milton Keynes and the other going to Bedford. There will also be an hourly London Marylebone to Milton Keynes service via Aylesbury to provide a connection with trains to and from Oxfordshire.

The journey time from Oxford to Milton Keynes and Bedford will be cut by 40-50% compared to travelling by road, with Milton Keynes reached in 40 minutes by East-West Rail. It is forecast that by 2021, over two and a half million journeys will be made

Countywide Investment - Innovative Connectivity

on East West Rail each year, removing 1.4 million car trips from the roads. East West Rail will also provide direct connections from key destinations within Oxfordshire and beyond to Reading for fast connection to the new Western Access to Heathrow rail service, linking Reading to Heathrow every 15 minutes from 2021. Future development on this route may see potential for direct services from / through Oxfordshire into Heathrow.

Network Rail has recognised the potential for East-West Rail in enhancing the Strategic Freight Network, and for future regional/ cross country passenger services, with service extensions beyond Reading to Paddington – once the infrastructure is in place, Oxfordshire's connectivity is constrained only by the capacity of the network. As much of this is being built as possible as part of the planning and design of the route.

Super-Fast Broadband Final 10%

The Better Broadband for Oxfordshire programme will make superfast broadband available to an additional 64,000 homes and businesses across the county by its completion.

The County Council has committed £10m to the existing Better Broadband programme. The council is working with partners and local authorities to develop the approach for tackling the "final 10%". BDUK have indicated that a further national pot of £200million will be available to support this in 2015-2017. Options are also being examined on the use of EAFRD, where permissible, to make a significant difference to addressing the growing divide between town and country within Oxfordshire, enable a more competitive agricultural sector, and bring more communities into the world of on-line skills development.

Oxfordshire has the means of using the existing BT contract where FTTC/FTTP is cost effectively extendible to more remote communities, this can be used to lever in match from local partners and BDUK against BT investment to widen the reach of the contract. We will also look to promote the use of the DEFRA £20miilion community broadband fund for delivering superfast broadband to the most isolated parts of Oxfordshire. We will look to work with local bespoke providers such as Gigaclear and Cotswold Broadband for solutions in suitable situations.

Western Rail Access to Heathrow (WRAtH)

Rapid, reliable access to London Heathrow airport is critical to Oxfordshire's economic success – both now and in the future. The benefits of a western rail access to Heathrow are to:

- Improve business access to Heathrow Airport from Reading and Oxford – it is forecast that the rail market share from Oxford will increase from 4% to nearly 20% as a result of the faster journey – equating to 250,000 new trips by rail each year
- Improve workforce mobility within the Thames Valley
- Reduce traffic congestion on the M4, M40 and M25 motorways and the A4

Network Rail has announced that it has developed proposals for a rail link from Reading and Slough on the Great Western Main Line to Heathrow which will enable

Countywide Investment - Innovative Connectivity

public consultation to begin. Network Rail considered four options for the link before proposing a junction between Langley and Iver stations and a 5 km tunnel to Terminal 5 at the airport. Subject to a satisfactory business case, agreement of terms with the aviation industry and planning consent. Network Rail could begin highways enabling work at the end of 2016, with tunnel enabling work starting in early 2018. The project could then be completed in 2021.

A34

Forming part of a wider corridor connecting the Midlands and the South Coast, the A34 through Oxfordshire connects businesses with goods and services, and people with opportunities. We have championed improvements to the A34 as demand for movement along this transport corridor can exceed capacity - giving rise to traffic jams and unreliable journey times. We are working in partnership with the Highways Agency to prepare evidence on the Oxfordshire section of the A34, to support potential future investment options for improving journey time reliability as part of the Agency's Route Based Strategy process. The Agency's Solent to Midland Route Based Strategy, which includes the A34, is due to reach its conclusion in March 2015, and its outcomes and recommendations will be considered in determining future investments for the strategic road network.

Traffic growth coupled with major planned development of approximately 55-60,000 homes along the A34 corridor within Oxfordshire will lead to degradation in network operation unless action is taken, as part of Oxfordshire County Council's own A34 RBS a baseline summary table (See Appendix A4) shows that only the Southernmost link section is running with an average daily number of vehicles to be unlikely to cause congestion. The wider connectivity of Oxfordshire is seen as one of the features that have enabled the county to become one of the main powerhouses for economic development and growth in south-east England and one of the springboards for continued success in the future. Failure to tackle the constraints imposed by the A34 is expected to result in complex and wide-ranging impacts, not least in relation to the potential for economic growth.

As traffic flows approach capacity, then there is likely to be higher susceptibility to flow breakdown due to speed variability, incident frequency is likely to increase and impact of incidents is likely to become greater. This will in turn affect the local economy and ability to attract business to the county.

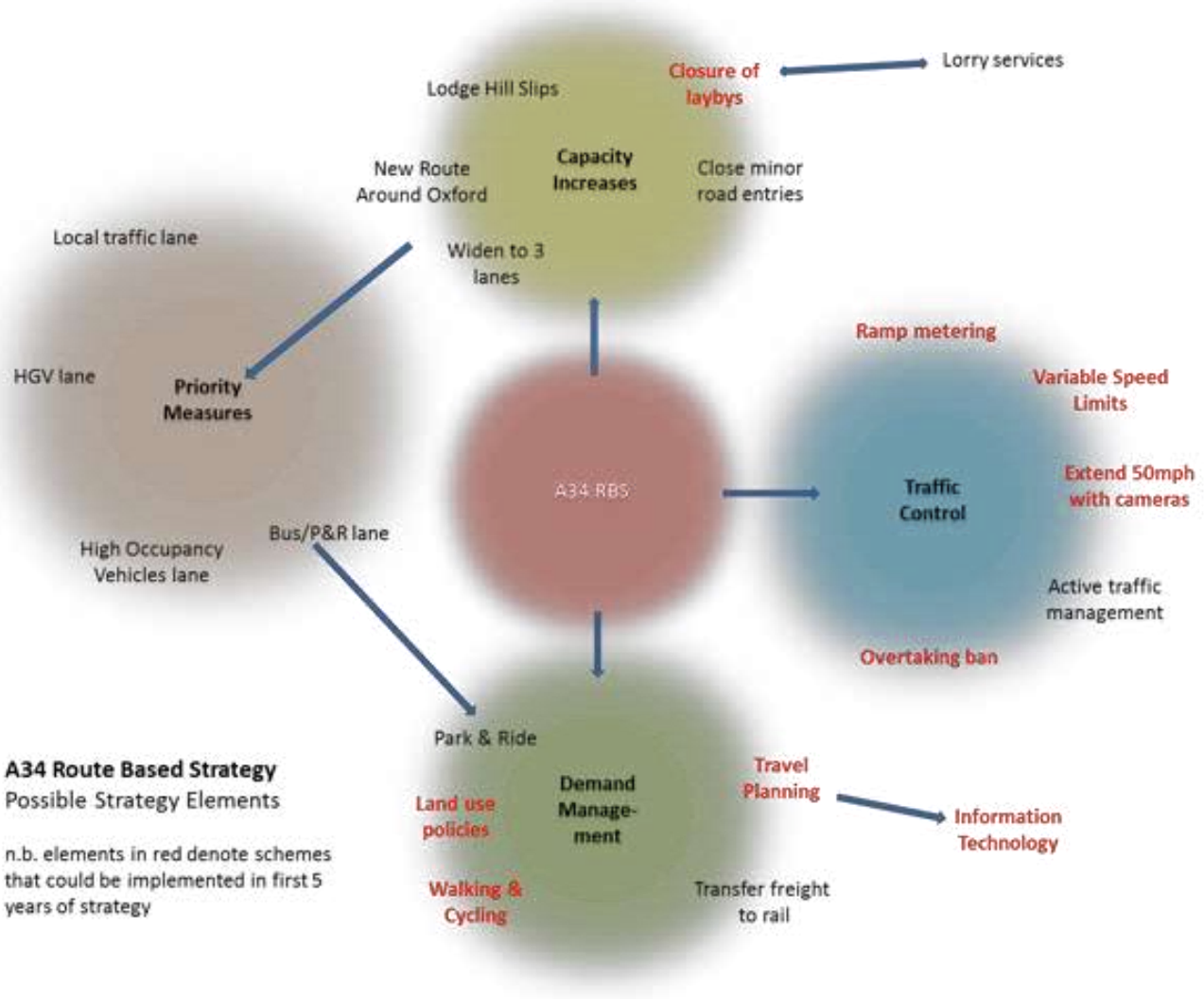
An essential element to tackling the capacity issues along the A34 is addressing local movements. Our Oxford Science Transit will provide a major upgrade in linkages to alternative transports routes along the knowledge spine, particularly the new Oxford to London route via Bicester and the new East West rail which will run from Didcot to Bicester then onto Milton Keynes. This will be complemented by enhanced interurban road based public transport routes.

However successful public transport measures are 'there will continue to be a high number of car users, and there is a pressing need to improve the strategic road network – particularly the A34, which is the highest priority for the high tech business community', particularly so in its role as a strategic connection to international markets.

Countywide Investment - Innovative Connectivity

Current estimates of traffic growth both nationally and locally suggest that the A34 will need enhancements if it is to enable the Oxfordshire economy to grow as intended.

The initial solution assessment suggests a combination of early quick wins with major intervention such as a new or enhanced route, with costs of £400 million to £800 million, and recommended that these solutions should be taken forward for detailed feasibility work in partnership with the Highways Agency and forms an integral element to the Southampton to Midlands Route Based Strategy.



Countywide Investment - Innovative Connectivity

Local Growth Fund – Our Ask

A34 Improvements Phase 1 (including Seacourt P&R)

The A34 RBS solution assessment proposed early solutions that can go through full feasibility and design within the next 1 – 5 years, we have included an ask to use Local Growth Fund support to deliver these quick win solutions ahead of HA funding arrangements being developed for the route.

Early projects include Ramp Metering – the report suggests this is suitable for feasibility testing on 10 slips (see table below) without upgrade works to the ramp. Evidence suggests that this type of scheme can provide a journey time benefit of 5-15% for the A34 link sections they merge onto, and downstream average speed increase of around 7%. This would take some links below "red" peak time congested level, effectively increasing their capacity by managing flow onto the A34.

The report also found that all laybys are currently under DMRB standard and there have been 14 personal injury accidents, one proving fatal, between 2008-2013 within the vicinity of A34 laybys with at least nine accidents clearly associated with entering or exiting the laybys. Layby upgrades and re-designation, possibly as emergency refuge only, would improve a cause of major delay incident through reduced accidents and also the shockwave, (caused by the dramatic speed reduction to the online flow of vehicles), that vehicles, particularly HGV's, can cause from entering and exiting below standard laybys.

LOCATION	North-bound (Slip Flows		South-bound (Slip flows)	
	AM	PM	AM	PM
Pear Tree – A44	146.5	369.5	622.5	968
Botley – A420	418.5	514	155	279
Hinksey – A423	365.5	685.5	850	936
Lodge Hill – A4183	314.5	328.5	-	-
Marcham – A415	141	184	601	727.5
Milton – A4130	818.5	680.5	41	158.5
Chilton – A4185	189	295.5	816.5	192.5

Suitable A34 junctions for consideration for ramp metering (highlighted in green)

The LGF scheme will also look to provide increased capacity at Seacourt Park and Ride to intercept journeys into Oxford, while linking into existing study looking at the future potential for new P&R sites in Oxfordshire. The project will deliver a capacity enhancement of 500 spaces, taking capacity to 1300 spaces, while also upgrading the access into the P&R site to provide a quicker transition from the A34 to the site.

Oxford Science Transit - A40 Public Transport Enhancements

City Deal investment will kick-start the Oxford Science Transit proposals. The aim of the Local Growth Fund support will be to expand science transit and support the linkages into the knowledge spine.

Science Transit A40 is an ambitious scheme to deliver major enhancements to the A40 strategic route between Oxford, Northern Gateway and Witney. This schemes will provide direct support in delivery of 3,000 homes around Witney that rely on the A40 as well as supporting the Northern Gateway development and direct access to 5,000 jobs at this site from West Oxfordshire. The A40 suffers from major delays due to congestion and poor journey time reliability, with peak time journey time taking 50 to 60 minutes and off peak journeys as little as 25 minutes.

New development will increase the number of trips on this corridor by approximately 2,000 peak trips by 2030 further increasing the problem. This Science Transit project aims to provide dedicated space for public

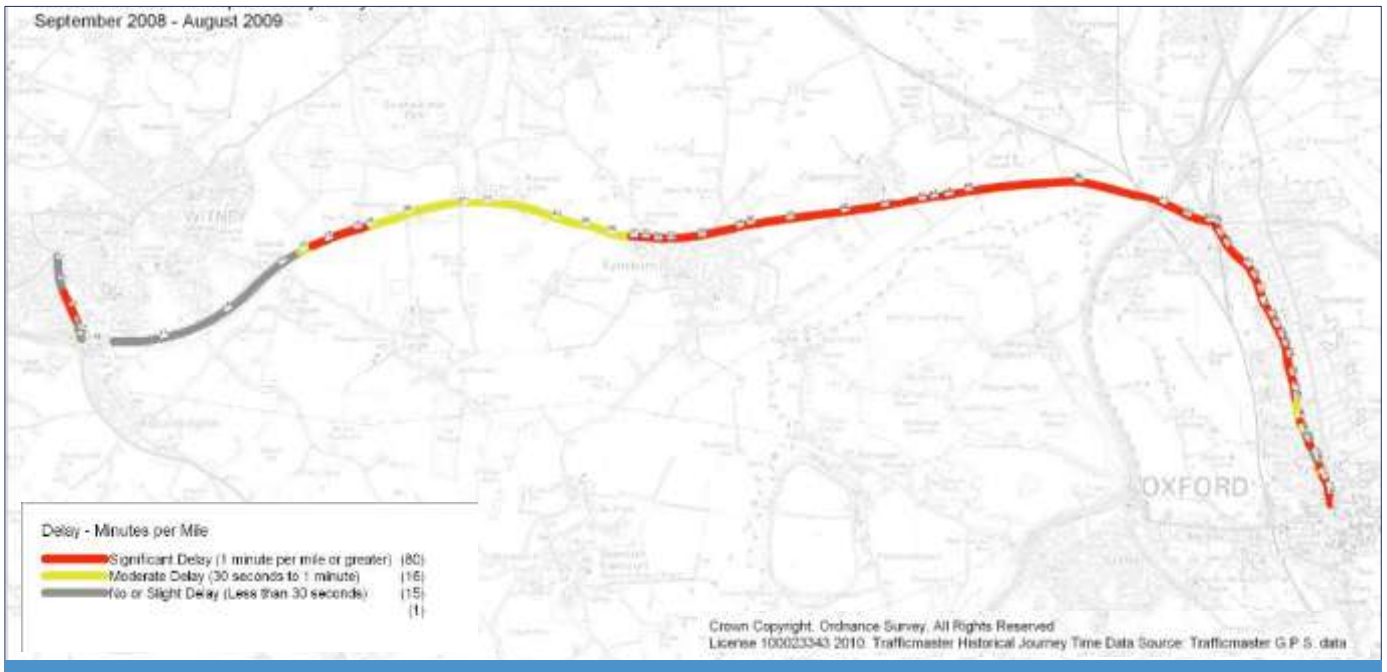
Countywide Investment - Innovative Connectivity

transport along the most congested part of the A40, this will provide a reliable public transport route between Witney and Oxford and delivery of a consistent timetable journey of 35 minutes even in the peak. It is expected that this will attract existing A40 users to use the service and will be a major attraction to new employees and residents using the A40.

Improving Access to Carterton and RAF Brize Norton

Carterton is the second largest town in West Oxfordshire with a population of about 16,000. Its rapid growth has been associated with nearby RAF Brize Norton, now the county's only air transport and air refuelling base for the armed forces. Development plans for Carterton include 1,850 new homes. The recommended scheme includes improving the capacity and alignment of the B4477 to provide a single primary route into Carterton and RAF Brize Norton from the east and implementing an off carriageway cycle route on the B4477 to provide a cycleway from Witney to Carterton/RAF Brize Norton to enable safer cycling. Upgrade the B classification road to an A classification, including signage review. Provision of west facings slips at the A40/ B4477 junction to upgrade this to an all direction interchange to provide a single junction for access to Carterton/RAF Brize Norton especially for freight.

The predicted impact of this project are: to mitigate the planned growth for Carterton by improving access on the main corridor between Carterton and Witney/A40; provide a single primary route into Carterton and RAF Brize Norton particularly for freight, which will reduce traffic through the villages of Brize Norton, Shilton and Curbridge; serve RAF specific journeys, particularly freight; while also providing a new opportunity for commuter cycling between Witney and Carterton/RAF Brize Norton.



Witney to Oxford AM Weekday Peak Journey Time Delay (mins per mile)

Countywide Investment - Innovative Connectivity

Local Growth Fund, Supported Schemes – Our Ask

Didcot Station

Generating inward investment relies on accessibility and worker mobility will bring major reductions in journey time and convenience from Didcot by 2021. There remains a need for further improvements to the station to enhance the economic competiveness of the Science Vale Oxford area and cope with the growth in population and rail patronage. Improved connectivity is important for economic and business growth, and we would like to see:

- More Main Line services calling at Didcot Parkway station - four trains in each hour to/from Bristol (1 via Bath Spa and 1 via Bristol Parkway), Cardiff (1) and Cheltenham (1)
- Reintroduction of Cross Country services is important to business in the Enterprise Zone and will provide direct access to Birmingham International Airport and the North of England – without the need to change trains at Oxford which is a major deterrent given the proximity of the motorway network. These direct trains were withdrawn in 2004
- Inter-regional service west of Didcot Parkway
- Transformation of the role and branding of Didcot station so it ceases to be an en route parkway and becomes a major interchange hub and gateway for the Science Vale area

East-West Rail: The Central Section

In parallel with the more advanced work on the Western Section, the East West Rail Consortium has been continuing to review a number of alternative routes and work is under way to re-establish definitive routes between Bedford - Sandy - Cambridge, with additional options for introducing a link and interchange with the East Coast Main Line. These aspects are currently being evaluated with particular emphasis on the link between economic activity and potential growth as impacted by possible new improvements to public rail transport links.

Crossrail

Crossrail will transform travel across London when it opens in 2018. The network will connect 37 stations, including Heathrow Airport and Maidenhead in the west with Canary Wharf, Abbey Wood and Shenfield in the east, but the effects on existing train services will extend far beyond the capital.

For Oxfordshire, Crossrail brings potential new journey opportunities but also some concern about the continuation of existing services. We will use all reasonable endeavours to protect existing commuter services.

There is uncertainty about local services east of Reading. In a worst case scenario the existing through services from Henley-on-Thames would be withdrawn, with passengers required to change trains at Twyford, and possibly again at Maidenhead. Crossrail extending to Reading allows four trains an hour and could then free one of

Countywide Investment - Innovative Connectivity

the existing stopping services from Oxford to be diverted to Gatwick Airport, thereby providing new connectivity with the Brighton Main Line avoiding the need to travel across London. We therefore strongly support the extension of Crossrail to Reading, and Reading's role as an interchange hub for the Thames Valley.

A34 Route Based Strategy Nationally Funded Highways Agency Improvements

We will continue to work closely with the Highways Agency on this wider Route Based Strategy, and look to ensure feasibility is taken forward on major investment proposals following the Route Based Strategy conclusions in 2015 and in turn access into the £15 billion Highways Agency's investment fund for 2015-2020, this will be essential in delivering and maintaining into the future the above trend growth that Oxfordshire can deliver.

The A34 RBS work shows that the current network is at or near capacity and while short term options will help alleviate some issues a solution for the whole length of the A34 in Oxfordshire is required. We are seeking a commitment from DFT and the HA to bring forward a full feasibility study for whole length capacity upgrades to the A34 ahead of the completion of the National RBS next year so that funding and delivery for the solution could come forward in the next funding period.

Bicester

One of the fastest growing areas in Oxfordshire - with major growth plans

A high level of out-commuting - many of Bicester's more highly qualified residents commute out to work. There is a need for more high quality jobs to be created locally

Relatively poor skills attainment levels compared to Oxfordshire and the wider South East, which need to be addressed by better education and training provision

A lack of readily available land and modern business premises, which deters inward investment and has resulted in some growing firms leaving Bicester in order to find larger premises

Bicester is the second largest town in Cherwell district. The town is a historic market centre and has strong links to the military, with Bicester Garrison located in Ambrosden. Bicester is home to approximately 31,000 people and is one of the fastest growing areas in Oxfordshire. It has excellent road links via the A34 and the M40, and rail links from its two stations to Oxford, London Marylebone, High Wycombe and Birmingham.

Bicester has major ambitions for growth through the development of the internationally recognised Bicester Village Shopping Centre, the recently completed £70m town centre redevelopment and the proposed North West Bicester Eco-town. Plans are for it to play a key role in the economic growth of the county given its advantageous location on the transport network which connects the town with Oxford, Science Vale Oxford and the wider south-east region.

With its major growth plans, Bicester is a significant anchor of the knowledge spine and becoming an increasingly significant location in the Oxford-Cambridge Arc, new opportunities are arising from for an increase in science and technology based businesses and exploiting innovations and spin-outs from academic research.

Enterprise

Bicester is one of the fastest growing economic centres in the county. Its economy is focused on storage, defence and distribution activities, food processing and engineering. Major employers include the Ministry of Defence, BGP (Printing), Fresh Direct and Paragon Fleet Solutions.

Of the 13,000 jobs in Bicester over 60% are accounted for B5 sectors: retail (20%), wholesale trade (14%), other business activities (12%), education (8%) and health and social work (7%).

Bicester Village retail development is a significant UK tourist attraction, drawing in over 5.8 million visitors a year, including many from overseas. It benefits from good rail connections with London. The presence of the Bicester Village has placed the town on the international map and given the town a stronger retail offering than would be expected in a centre of this size.

Local firms have identified that there is currently significant growth potential, particularly in the manufacturing sector, but this is being frustrated by the lack of high quality sites and premises. The availability of land for commercial development is very limited and firms read the existing stick of commercial space as dated an unattractive. As a result Bicester is losing the kind of high quality forms that it needs to attract and retain.

The Cherwell Local Plan[31] will enable employment development on allocated sites, with the aim of creating a

Bicester

diverse economy that attracts growth and investment from the business, manufacturing, science and hi-tech sectors. 155 hectares of land for employment uses (B use class) has been identified and land to provide approximately 15,000 jobs (including retail jobs on town centre sites) at Banbury and Bicester. Employment sites include the Bicester Business Park and South East Bicester which between them will introduce up to 7,000 new jobs. This will be supported by commensurate housing development and the Local Plan also seeks to strengthen the town centre to ensure that the town centre is vital and viable, and able to co-exist with Bicester Village in a mutually productive way) and create additional green and recreational space. The challenge is for Bicester to become a more attractive work location for many of its more-qualified and higher-earning residents.

Bicester will be able to take advantage of both materials engineering and biotechnology in its economic future, thanks to its location and the strength of those sectors already nearby. In addition, as these become more established the breadth of the towns' knowledge economy will increase to encompass other areas of innovation and creativity. Examples are in the motorsport engineering strengths of Banbury & Bicester College in Bicester and connections to local industry. Great potential exists for local Universities to lead in, for example, the transfer of green technology (Oxford Brookes University) and materials engineering (University of Oxford's Begbroke Science Park) in Bicester and across the whole district.

Bicester

Oxford - 12 miles,
London - 64 miles

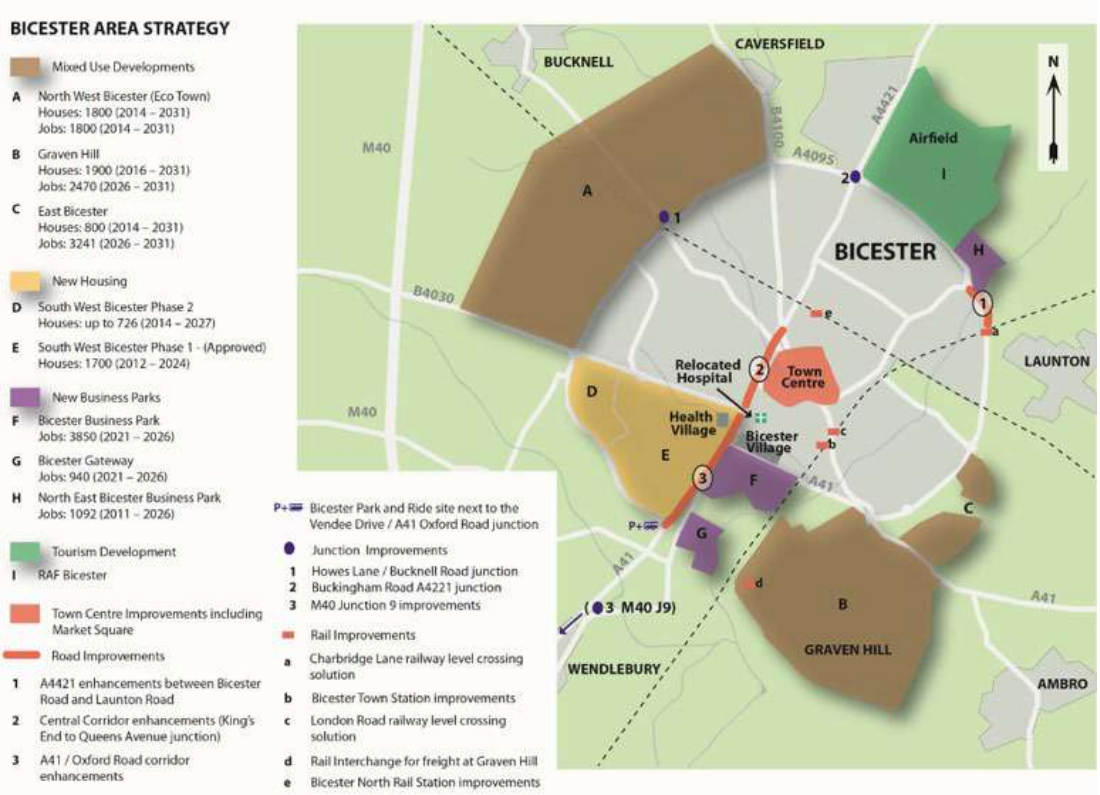
31,000 people,
forecast population
+28% (2006 to 2016)

13,000 jobs, +10,000
planned job growth

Bicester

Providing the foundations of growth Bicester is looking to encourage:

- Green technology and the knowledge based sectors, exploiting its position in the Oxford/Cambridge Corridor
- Utilise the Ex-Ministry of Defence (MoD) land and facilitate the establishment of a modern logistics hub for the MoD
- Maintain and increase the motorsport industry and other performance engineering
- New opportunities for additional retail, leisure and cultural activities in an extended Town Centre
- Retailers and visitors to Bicester Town Centre
- Promotion and expansion of Bicester Village where complementary to improving the Town Centre
- High tech companies
- Higher value distribution companies
- Sustainability and self-sufficiency



Planned development in Bicester

Bicester

People

The population of Bicester Town is expected to grow by 28% between 2006 and 2016, higher than the Oxfordshire average. Overall deprivation in the locality is low, but three parts of Bicester are among the 20% most deprived areas nationally in terms of education skills and training. Educational attainment in Bicester has improved in recent years although it is still below the county average. By Oxfordshire standards, a high proportion of the working age population has no qualifications and a relatively low proportion degree level or equivalent qualifications. Bicester has some excellent specialist training provision – most notably in motorsport – however in the whole training rates in the district fell between 2006 and 2009[32].

Unemployment in Bicester is relatively low compared to Banbury and Oxford, and is below the national and county averages. Unemployment in the Bicester hinterland is considerably below the Oxfordshire average.

The Bicester locality is one of the few areas in Oxfordshire, outside of Oxford City, that has a relatively low percentage of over 65s, even in the rural parts around Bicester town. In the more rural parts, as with other rural areas across Oxfordshire, the more sparsely populated areas of Launton, Fringford, Caversfield and Ambrosden and Chesterton have relatively poor access to housing and services.

We are fully behind SEMLEP's bid for SFA capital funds to support Banbury & Bicester College's capital scheme. A new build on the south side of Broughton Road will enable the introduction of a new vocational curriculum and the expansion of an existing curriculum to meet growing demand and deliver essential vocational skills development to support economic growth. The scheme will provide essential facilities from which to deliver emerging construction, engineering and the key sector skills development demanded to sustain economic growth; reduce NEETS and develop a skilled and entrepreneurial workforce.

Bicester

Place

The Local Plan proposes 7,000 new homes by 2031, and a further 3,500 new homes by 2040. Around 2,700 of these homes have already been completed[33]. The Local Plan acknowledges North West Bicester capacity for at least 5,000 new homes of which around 1,800 are anticipated during the Plan period although it does not preclude a faster delivery rate. The Local Plan identifies 122 ha of employment land at Bicester within the plan period.

Bicester town has relatively low house prices compared to Oxford. In October 2010 the median asking price for a house in Bicester was £220,000, below Oxford at £275,000.

The development of Bicester is centred on Eco-Bicester, a strategy to effect a town wide transition to a low carbon community as a result of the new eco-town at North West Bicester. The strategy looks to:

- Attract inward investment to provide environmentally friendly jobs and commerce, especially in green technologies
- Improve transport, health, education and leisure choices while emphasising zero carbon and energy efficiency
- Ensure green infrastructure and historic landscapes, biodiversity, water, flood and waste issues are managed in an environmentally sustainable way

ECO Bicester Ambitions

Bicester

Case Study: Bicester Eco Town – An Exemplar In Innovation In Sustainable Development

Bicester Eco town provides a showcase for sustainable living and allows government, business and the community to work together to deliver greener, low carbon living. The project focuses on innovation in sustainable growth and the transition to a low carbon economy both in new development and the existing town.

The proposed eco development will take place on a site approximately 345 hectares (800 acres) North West of the existing town. It will deliver up to 6,000 homes and jobs to eco town standards and will create a high quality living and working environment comprising forty per cent green space. The lead developer is one of the country's leading providers of housing and services, A2 Dominion Housing Group Limited. A2 Dominion has been recognised as one of the most environmentally friendly housing associations with a Bronze in the Sustainable Homes Index For Tomorrow (SHIFT) Awards.

The eco development will act as the trigger for a town wide transition to a low carbon community and attract inward investment in the emerging low carbon economy. It is estimated that over £1 billion of investment could be attracted to the town through proposed developments.

Bicester, as one of the major growth towns Bicester, as one of the major growth towns in the country, is expected to substantially expand as the eco town and other associated projects are delivered. The proposed eco development will establish a strong sustainable construction sector with the skills and supply chains to support it..

Bicester

Connectivity

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. The ambition for Bicester is to provide highway infrastructure which effectively reduces current and predicted transport congestion in Bicester, to ensure Bicester is attractive for inward investment and supports the delivery of both housing and employment lead development. 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.

Walking levels are relatively high across the town, (as the second most popular mode of travel after driving), with pedestrian trips being particularly high in the areas closest to the main employment sites and being lowest in the new residential areas to the southeast and west (which are closest to the main road network). Surveys undertaken as part of the Travel Behaviour Demonstration work identified over 40% of all journeys throughout the day being less than 3.0km (1.86 miles) in length, suggesting that there is potential for a large proportion of local journeys to be carried out on foot or by cycle.

The transport priorities within Bicester are to provide the connectivity infrastructure which tackles the challenges identified in the Bicester Movement Study which included:

- Significant out-commuting from Bicester to Oxford, London and elsewhere
- Main movements are largely between the residential areas to the west of the town and the employment areas to centre and east of the town, particularly at Launton Road and in the town centre
- Large demand for retail and particularly leisure trips outside Bicester
- Key networks for public transport within the town centre currently congested
- High potential for local trips by walking / cycling across the town with a high percentage of walking trips identified for non-work related journeys in particular
- A good base sustainable transport network, with a network of walking and cycling routes to the eastern and western edges of the town along with a circular route following the perimeter roads
- Varying attitudes to sustainable modes of transport, with support for positive measures to encourage cycling and public transport, although demand management measures less popular

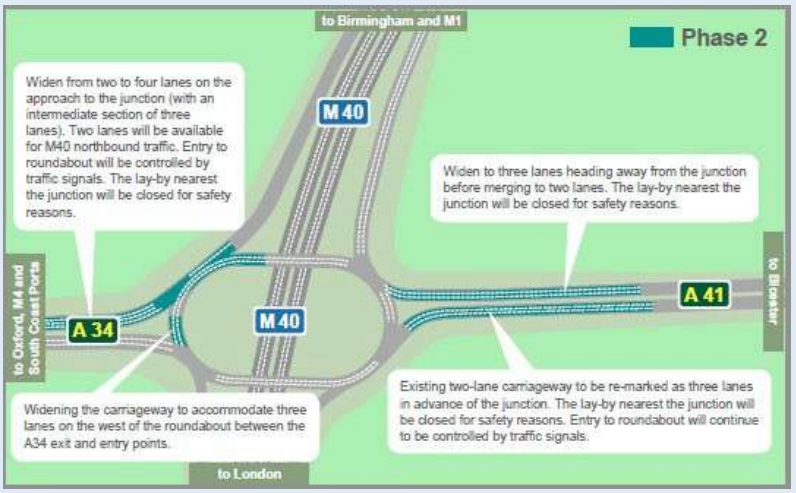
Our updated Local Transport Plan local area strategy has identified a series of improvements to increase the overall capacity of Bicester's transport networks and systems, enabling them to accommodate the additional trips generated by development; to adapt to their cumulative impact and to mitigate the local environmental impact of increased travel. It is expected that the majority of these improvements to be fully funded by development in and around the town.

Bicester

Case Study: M40 Junction 9 and Bicester Remote Park & Ride

M40 Junction 9

The proposals at Junction 9 of the M40 include widening the A34 northbound carriageway approach from 2 lanes to 3, then to 4 lanes at the roundabout, traffic signals will also be introduced on the A34 northbound approach. The A41 northbound exit will be widened from 2 to 3 lanes and the A41 southbound 2 lane carriageway will be remarked as 3 lanes in advance of the junction.



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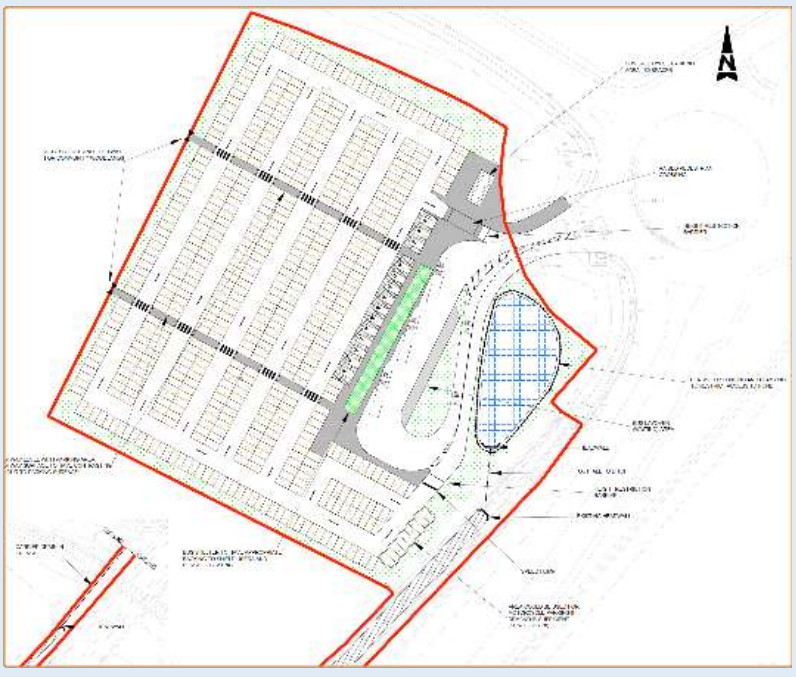
Bicester Remote Park & Ride

A new park and ride facility serving Bicester will open by December 2014. The 500-space facility will allow drivers to avoid traffic around Bicester Village shopping outlet and on the A34.



Bicester

Committed Schemes – Our Offer

East West Rail: Bicester Town Station will be rebuilt with two platforms, to allow reinstatement of double track. The platforms will be extended for 8-car long trains, and new station buildings constructed. Level access will be provided throughout, together with improved links to both the town centre and Bicester Village

Bicester Park and Ride: a new park and ride facility serving Bicester will open by December 2014. The 500-space facility will allow drivers to avoid traffic around Bicester Village shopping outlet and on the A34

Western Section of Peripheral route: This section is now delivered and provides access to N and West of Bicester which support the delivery of 2500 homes and access to future development in NW Bicester

M40 J9: (See Strategic Offer and Case Study)

Committed Schemes – Our Ask

Banbury and Bicester College - Campus Redevelopment

Given the significant scale of growth planned in Bicester, we recognise the need to invest in Bicester's further education infrastructure. We will continue to explore with Banbury & Bicester College and SEM LEP the feasibility of a new build on the south side of Broughton Road to enable the introduction of a new vocational curriculum and the expansion of the existing curriculum to meet growing demand and deliver essential vocational skills development to support economic growth. The proposed scheme will provide essential facilities from which to deliver emerging construction, engineering and the key sector skills development demanded to sustain economic growth; reduce NEETS and develop a skilled and entrepreneurial workforce.

Bicester Peripheral Road Route

Improvements Bicester Peripheral Road Route Improvements will make these routes more attractive to employment and longer distance traffic and thereby reducing the strain on the town centre and central corridor. It is estimated that this scheme will cost approximate £22 million with some sections directly delivered by development. The scheme will have a major impact on journey times across the Bicester network, predictions suggest that compared to a "do-minimum scenario these improvements will provide a journey time benefit of 9 minutes across just the key routes in Bicester, based on growth to 2030, if a higher level of growth is delivered this rises to 13 minutes journey time saving.

Bicester

London Road Rail Crossing and Charbridge Lane Rail Crossing

It is important to 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. With the level of service anticipated to deliver East-West rail, improvements are required to both London Road Rail Crossing and Charbridge Lane Rail Crossing as both current crossings are at-grade and would provide major delays forecast up to 20 minutes per hour. Charbridge Lane Rail Crossing is also essential to deliver the peripheral route journey time savings. Without this project the crossing could potentially neutralise the benefits of the peripheral route enhancements.

Work with Network Rail on a solution for London Road is underway and it is anticipated that a pedestrian and cycling grade separated crossing will be delivered in early phases. The peripheral route enhancements allow for a review of the solutions at London Road by relieving the use of this route into the town centre, this will be developed as part of the continued detailed studies.

Walking and Cycling Connectivity Project

There is also a strong ethos within Bicester on strengthening the town's walking, cycle and bus networks to ensure good links to local employment opportunities and amenities within the town, as well as transport hubs, this Walking and Cycling Connectivity project, will lay the foundation of upgrading the network across Bicester to allow the new developments to access into a high standard non-motorised transport network this scheme will be important in supporting the Bicester Eco-town ambitions of delivering a development with reduced traffic impact and one that promotes cycling and walking and is fully connected to Bicester Town.

These schemes provide an important platform for the wider transport plans for Bicester and will be critical to attracting employment growth, 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.

Oxford

Oxford

152,000 people

24% are full-time students (highest proportion in England and Wales)

111,000 jobs

40,000 people commute into the city for work

9 million tourists visit each year

Least affordable city in the UK

Oxford City is the key engine of growth for the Oxfordshire economy and a national economic asset. The city contributes £4.7bn to the UK economy each year and has a GVA per capita of £30,800 - the fifth highest GVA per capita of any city in the UK and significantly higher than the national average of £20,300.

One of the key reasons for the city's success is its diversity. Oxford is an international brand, a global seat of education, learning and research, a centre of engineering and scientific excellence, a world leader in automotive and advanced manufacturing, publishing, health care and life sciences and an iconic tourist destination. This diversity has helped Oxford remain resilient throughout the global economic recession.

The city is located in the heart of the county, housing world class universities, research facilities and businesses that create an epicentre for the regional economy. Located on the A34 and A40, Oxford is easily accessible for the rest of the Knowledge Spine and to London, Southampton, Birmingham and international airports, including Oxford Airport 7 miles north of the city centre.

Oxford's historic core, ancient village centres and Victorian suburbs contribute to its status as an internationally recognised historic city. The nationally significant status of these areas is reflected in their designation as conservation areas, the high proportion of listed buildings and scheduled ancient monuments and registered parks and gardens. Approximately 9 million tourists visit the city each year[34] to visit a world-renowned city and its surrounding county.

The key engine of growth for the Oxfordshire economy and a national economic asset

One third of Oxfordshire's employment is in Oxford but the density of businesses is below the national and regional average

High levels of in-commuting - half the workforce are drawn from outside the city. There is a need to improve physical infrastructure to cope with an increasing demand, and virtual infrastructure to reduce the need to travel

Heavily constrained housing supply - developing more houses within/close to Oxford will reduce the pressure on existing transport infrastructure and improve housing affordability

An overall high job density and highly skilled population but a large social gap that needs to be addressed through provision of more affordable housing, and investment in education for all

Oxford

Enterprise

Oxford is a successful economy and a successful place with a long history as both a centre of educational and scientific excellence, and as a prominent manufacturing centre. Oxford has a world-class university and is an important location for national and international innovation and research. Oxford benefits greatly from the presence of the two Universities, Oxford University and Oxford Brookes University. The two Universities have a significant economic impact on the city. Higher education in Oxford accounts for approximately 21,800 jobs, or 19.6% of total employment, and the indirect economic impact is undoubtedly far bigger. The role of the Universities generating spin-out companies and knowledge transfer partnerships (KTPs) which create commercial value from academic and research expertise. There is real potential for Oxford to drive growth through the transfer from knowledge to wealth. The city is a leading focus for business enterprise and entrepreneurial activity in the region and nationally. Between 2004 and 2010 the number of active businesses in Oxford increased by 9.3%, significantly faster than surrounding areas and Oxfordshire overall (6.5%), the South East (4.6%) and England (6.2%) over the same period. For Oxford to continue to grow, it will be important to retain and support existing companies, as well as attract new businesses, entrepreneurs, start-ups and spin out companies. This will involve collaboration within the city and across the county.

The universities will continue to play a significant role in generating spin-out companies and knowledge transfer partnerships, which create commercial value from academic and research expertise. Oxford has strong links to its academic institutions and wider research community, and the city houses more than 100 publishing businesses providing over 3,500 jobs. Oxford University Press, the university's official printer, is a global leader in academic and research publishing. Other significant firms include Pearson Education, Wiley, Blackwell, Macmillan, Osprey (military history), Hart (law), and Lion Hudson. A major shift is underway in Oxford's publishing houses from printed to electronic delivery, especially in the academic and specialist sectors. For example, 70% of Oxford University Press' revenue now stems from electronic material. There is also some cross-over with the digital and computer games industry.

Oxford has a very high level of employment within knowledge intensive sectors (accounting for around 71,200 jobs, equivalent to 64.3% of total employment in Oxford). This is a key strength for the city and Oxford companies in several knowledge intensive sectors - automotive engineering, life sciences and biomedical research and publishing compete very effectively in global markets., Oxford is home to a cluster of acute and specialist medical organisations, which together employ around 14,400 people, or 13% of the total workforce, and support a further 2,700 jobs indirectly. A recent report found that the sector accounted for around £20m in local supplier purchases per annum. These assets provide significant support to healthcare research undertaken at the universities. Oxford University's plans to expand medical and clinical research will create more demand for such links and further strengthen the synergies between the two areas.

Oxford

Supporting the diverse business base of the City and wider county is a range of professional service businesses, which employ over 10,200 people in the city. The major professional firms, such as legal and accountancy, are positioned to provide a lower cost base than London practices as well as compete for local business. There are large companies in specialist sectors including market research firms SPA Future Thinking and A.C. Nielsen that provide direct support to Oxfordshire's growing industries and make the county an all-inclusive hotbed of research and innovation.

But Oxford is more than just a research based economy. It has a strong and diverse economic base which includes some very high profile manufacturing activates. Oxford sits at the centre of a £6bn automotive cluster, which has been dubbed 'Motorsport Valley', providing 4,871 jobs, or 4.4% of total employment. BMW are a major industrial employer and their Plant Oxford at Cowley accounts for nearly half of citywide industrial space. According to BMW, 80% of Minis are exported, playing an important role in the UK's exports and balance of trade. In 2011, BMW announced that it would invest £500m in its UK operations over the next three years, most of which would be invested in Oxford as the Cowley plant is reaching its capacity of 240,000 vehicles per year. This demonstrates that with progressive support the city can capitalise on economic growth opportunities. More recently, BMW have announced the creation of 1,000 new jobs building on their previous investment. Many motor manufacturers encourage the clustering of key component suppliers. There is some potential for the future growth this sector, Oxford is located in the heart of a cluster of motor sports companies in Oxfordshire and in Northamptonshire. Growth of some of the smaller businesses will be accommodated in the city itself specifically on land near the BMW site.

People

With 110,900 jobs in Oxford, equivalent to 72.2 jobs per 100 residents12 the city has a high jobs density, reflecting Oxford's importance as a regional centre of employment. There is a very significant amount of in-commuting into the city, particularly from other parts of the county. Almost half the city's workforce commutes from surrounding districts. Moreover, the city's rail connections are used by those living in the city and nearby to travel to jobs in London and the Thames Valley. This underlines the important two way relationship between the city, adjacent districts, and the rest of the county.

The majority of employment in Oxford is concentrated in three main locations: central Oxford (including the retail centre and Oxford University), Headington (including Oxford Brookes University and the hospital campuses) and the old Cowley works (including BMW, Unipart and Oxford Business Park).

Despite being generally prosperous, Oxford has local concentrations of deprivation which can be masked by wider averages: 12 of the 85 Lower Super Output Areas (LSOAs) in the city are in the 20% most deprived LSOAs in England, with one LSOA in Northfield Brook ward being amongst the 10% most deprived LSOAs in England. In general, the south and east of the city is relatively more deprived than the north

and centre of the city, with Blackbird Leys, Littlemore, Barton and Sandhills the areas of relatively high deprivation. Relative low wages and absence of sufficient affordable housing provides a barrier to attracting new business and attracting the right mix of labour to work in Oxford's enterprising economies.

Overall Oxford has a very highly skilled workforce. In 2010, 53.7% of Oxford residents aged 16 – 64 held degree level qualifications or higher, much higher than in Oxfordshire (40.3%), the South East (33.9%) or England (31.1%). However, whilst the proportion of working age residents with no skills in Oxford (9.6%) is lower than in England (11.1%), it is higher than in Oxfordshire (8.7%) or the South East (8.5%).

Oxford has below average educational attainment amongst young people in state schools. Pupils in Oxford perform significantly worse than the regional and national average across all age groups. At GCSE level, 67% of Oxford pupils attain five or more A* to C grades compared with 75.8% across the South East and 76.1% across England as a whole. Oxford also has relatively high rates of unauthorised absence from school and higher proportions of persistent absentee pupils at both primary and secondary school level.

The disparity between the city-wide trends and more localised realities indicates that Oxford performs highly in terms of jobs and skills, but requires investment in education and connectivity to narrow the gap between job opportunities and the labour pool, and deliver opportunities for all.

Place

Successful places help to create successful businesses. There are economic benefits to be achieved from ensuring the vibrancy of City is enhanced. Investment in infrastructure to combat congestion will enable businesses to improve their market competitiveness. Similarly, maintaining and enhancing the environment and social infrastructure of Oxford will ensure it remains an attractive place to visit, invest in and do business. The strong sense of place and heritage in Oxford is a key feature of the area's economic appeal; equally the functions, social fabric and physical infrastructure is vulnerable and investment is needed to secure the City's future competitiveness and attractiveness.

In Oxford the housing market is overheating because of the lack of available housing land and complexities of land assembly. Overcrowding is above regional and national averages Oxford and the City is now widely recognised as the least affordable place in England. There is insufficient supply of housing in Oxford, which is acting as a barrier to growth and exacerbates housing affordability issues. Lack of available housing land and complexities of land assembly prohibit the city to grow and force house prices up. Oxford is tightly constrained in terms of flood risk and the historic built environment, which means that it is difficult to fulfil the housing demand. In order to fulfil Oxford's housing needs confirmed in the Oxfordshire Strategic Housing Market Assessment, the Oxfordshire local authorities will consider options for addressing the City's need, which will

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include consideration of a strategic review of the Green Belt policy around the City, which currently limits its expansion.

The delivery of an adequate supply of homes to meet a range of needs is a major challenge for Oxford. The housing requirements of the City can only be delivered through sustainable urban extensions. Sites of several thousand homes have been identified Error! Reference source not found., but often have significant infrastructure requirements that need to be in place during the early phases of construction, or before properties are even built. There are issues around delivery alongside the financing of these projects that need to be overcome for the area to meet its growth aspirations.

Business productivity improvements are a pre-condition for a stronger City economy. Infrastructure provision that enables investment in new business space is important, whether in traditional business park locations, innovation centres or science parks or, increasingly, "space-less" growth through home-based working and in shared "work hub" spaces. In particular Oxford needs to develop the physical infrastructure for advanced manufacturing and knowledge intensive growth linked to its particular opportunities in science led research.

Planned development in Oxford city centre

Oxford

Connectivity

Accessibility and connectivity are key enablers of growth and prosperity. The compact nature of the City's boundary means that without effective communications between settlements, it is difficult to maximise the benefits of businesses working together and getting enough people to work in the business located in the City. Over 25% of workers commute into the City. Similarly, our tourism economy is dependent on the quality and reliability of transport access from other parts of the country. But we are not well served by road and rail links. The A34 has significant capacity constraints, the A40 is no longer fit for purpose and the road network around the City is woefully outdated.

Given that the requirement for increased connectivity to national and international markets and resources is likely to represent a key means by which the City can improve its long term economic performance, both the physical and virtual infrastructure to enhance the capability of businesses in the area to connect externally (i.e. outside the local economy) must be put in place. Improved external connections that could bring improved levels of economic growth must be balanced with negative impacts on the capability for internal connection, as manifested by high levels of congestion and long journey times.

Local Transport Infrastructure plays an important role in supporting economic growth, through minimising congestion and unlocking land for development of employment and housing. Improving access to employment and essential services by providing infrastructure which will enable employees to have a choice of travel modes, and reducing reliance on the private car. An emerging Transport Strategy for the City developed by the County Council will highlight the role of enhanced cycle networks. Around three-quarters of Oxford's residents in employment work within the city, and Oxford residents travel on average less distance to their place of work than residents of other towns within the county. The inherent sustainability of Oxford is illustrated by 2011 census data which shows that more of its residents travel to work by cycling or walking than by driving a car. Infrastructure projects that improve accessibility to and from the city are clearly important to support economic growth, but if Oxford is to fulfil its ambitions to become an exemplar low carbon city there is also a need to invest in projects that improve the safety and convenience of travel within the city by foot, cycle and public transport.

A particular challenge for the City is the disconnect between development sites and existing areas of economic activity and housing caused by the River Thames bisecting the City. Construction of a quality bridges across the River Thames for cyclists and pedestrians at Jackdaw Lane and at the Oxpens site would achieve significantly improved access to the West End and wider City centre from the east and greatly accelerate the regeneration of the West End and Oxpens. It would also ease congestion, and improve safety and flexible non-car access on key corridors in and around central Oxford. Achieving superfast broadband connectivity will be essential in providing efficient collaboration between research and businesses, support existing and new ventures and providing

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the population with better access to job opportunities. It can also relieve the strain on the transport network by facilitating remote working. A county-wide scheme has been committed to, but further investment in Oxford's broadband will be required to maintain national and international competitiveness.

The A34 that connects Oxford with the rest of the Knowledge Spine and south to Southampton, the A40 and local road network throughout the city have significant capacity constraints and suffer from congestion. Balancing public and private transport and peak commuting flows into the city will require increasingly sophisticated management and investment.

Oxford station will be the focus of significant redevelopment and is a major opportunity to deliver a first class multi-modal interchange that meets the aspirations of the city and supports economic growth through improved connectivity.

The resilience of major transport networks is a key issue for the economy of Oxford which is currently vulnerable to disruption on strategic road and rail transport networks. This is a particular concern given the trend towards more frequent incidences of extreme weather, particularly intense rainfall and consequent flooding. The disruption and loss of business caused by the flooding in Oxford, as well as Didcot, which severed mainline train links to London and the rest of the UK, is a recent example of this.

Oxford

Committed Schemes – Our Offer

Oxford City is uniquely placed to contribute to the growth of the LEP and national economy. Oxford already has a strong strategy in place that will:

- offers unique strengths which can provide the foundation for further growth
- faces significant barriers to growth which must be overcome
- has the opportunity to ensure that in future all of Oxford's residents can better share in the benefits of economic growth

In contrast with many other areas Oxford offers immense strengths and the city's diverse economy provides a strong foundation for growth. Oxford's Universities and companies compete very successfully in world markets. Oxford City is the engine of growth for Oxfordshire and the wider subregion with a high proportion of the county's employment based in the city.

Growing the city's knowledge economy will be driven by the two Universities, Oxford's large private sector employers, and existing smaller science and technology based companies. These Universities, and companies, often working together will continue to invest in research, continue to develop innovative products and services, and continue to focus on global markets. This growth will be further enhanced by new companies starting up and spinning out from the Universities.

But Oxford's growth aspirations – and those of the LEP - will not be realised without addressing the serious constraints imposed by Oxford's infrastructure. Workable solutions must be found to accelerate the pace of house completions – including allocating additional sites, ensuring that there is a long term supply of land to accommodate employment growth, and on-going investment to improve the performance of the transport networks serving the City.

There are already a number of projects underway that will unlock the growth potential of the City.

Hinskey Hill and Kennington junctions (Science Transit Phase 1)

Improvements to Hinksey Hill interchange and Kennington roundabout have been identified as the first phase of Science Transit and provide critical improvements in access into Oxford as well as providing a reduction in congestion on the ring road and A34[35].

Oxford

Local Sustainable Fund Projects

The LSTF programme for Oxford includes the following elements:

- **London Road bus lane extensions:** following consultation we are now looking to improve bus priority on the approach to Green Road Roundabout to link up with existing bus lane from Thornhill P&R, anticipated start of construction in January 2014
- **New bus services:** Three new Headington Connect bus services started operation in September 2013: 700 Kidlington - Water Eaton P&R – Summertown - JR Hospital - Churchill Hospital; 800 Thornhill P&R – Headington - JR Hospital; and 900 Thornhill P&R - Old Road Campus - Churchill Hospital. The services are operated by Stagecoach Oxford
- **Walking and cycling improvements from Thornhill to Headington:** pedestrian/ cycle path from Thornhill to Green Road Roundabout completed April 2013, Green Road Roundabout to Nuffield Orthopaedic Centre and Churchill Hospital anticipated completion Spring 2014
- **Travel planning – promoting travel choices for Headington residents and employees:** started Spring 2013

Local Growth Fund Ask

Headington Phase 1

The package of transport schemes to Access to Science, Health and Innovation is an essential element to supporting the Bioescalator element of the City Deal package.

The Headington scheme will provide enhanced connectivity to Oxford's medical, science and research cluster in Headington – an area that includes the Bioescalator, and existing University of Oxford Old Road Medical Research Campus, Headington Hospitals, and Oxford Brookes University – both improving access by public transport and the operation of the local highway network, focusing on key junction upgrades for public transport services.

Oxford Station - Interchange and Gateway Development

Oxford Station was used by 6.3 million people in 2011/12 compared to 5.8 million in 2010/11. Over the next few years, a huge programme of investment is planned for the railway infrastructure in and around Oxford including electrification, re-signalling and the opening of new rail routes, which will provide new journey opportunities.

We are working in partnership with Network Rail and DfT to develop a wider masterplan for the Oxford Station area that makes provision for future growth on the railway, achieves transformational change in the passenger environment and a vastly improved passenger experience. Along with multimodal interchange facilities at this primary gateway to Oxfordshire, the work will ensure that the new station

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and surrounding development forms an inspirational entry point to the city and presents a world class image to investors and visitors. It also complements our planned investment in Frideswide Square (see below) and contributes to wider transport benefits across the city centre

A masterplan for improved station and interchange facilities with associated appropriate commercial development to provide an exemplary gateway into Oxford City centre is currently under development. The site area includes the Oxford station area, forecourt and Becket Street car park. The work links closely with the Frideswide Square redesign scheme and also the redesign of Botley Road Bridge to address the increased number of tracks and underbridge highways issues including road width and segregation of pedestrians/ cyclists/vehicles for improved safety.

Key Objectives of the Masterplan are:

1. To provide an exemplary gateway to Oxford that:

- emphasises key links with the city centre and reinforces historic street patterns and character
- improves wayfinding
- facilitates multi-modal interchange opportunities to ensure seamless integration with strategic and local transport networks
- enables high quality architectural and urban design
- dovetails with planned wider development

2. To meet operational demands for expected rail growth over the next 30 years and offer an improved passenger experience, helping Oxfordshire deliver economic and housing growth.

3. To act as a catalyst to encourage wider regeneration in Oxford

- Maximising appropriate commercial and economic development opportunities
- Providing a focus for investment
- Positively impacting on land values

4. To be deliverable, flexible and represent good value for money, protecting and enhancing revenue streams.

Following completion of the masterplan, an architectural competition is planned to design a concept for the station building, and the City Council will prepare a Supplementary Planning Document for public consultation during 2014. Detailed design of Frieswide Square is underway with delivery commencing in 2015. The injection of significant capital funding through the LEP will enable more timely and comprehensive delivery of this scheme that will have a greater stimulus on the sub-regional economy and the growth of the Oxford area

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Oxford Station Interchange and Gateway fulfils the LEP objective of improving infrastructure for growth and jobs. The project supports Network Rail's Capital Programme for Control Period 3. It also supports the delivery of Evergreen iii and the Vision for the West End of Oxford (AAP). This project will help secure the significant proposals for the regeneration of the Station area and major redevelopment of the Oxpens site, including potential provision of incubation facilities, business and tourism services, and help support development and future economic success of the Westgate Shopping Centre and supports significant transport and public realm improvements across the city centre. There is already interest from major developers and funders and this project for the Station site, linked to Oxpens, has the potential to act as a catalyst to trigger the wider redevelopment of the West End Area; which includes development proposals deferred by Christ Church College

Oxford City Transport - West End

The regeneration of Oxford's West End is an ambitious project set to revitalise the western quarter of the city centre, creating an environment that properly reflects the area's historic and social value. Oxford's West End has just entered an exciting stage in its evolution with several major regeneration projects coming forward simultaneously: the Westgate Centre, Oxpens, Oxford Station and Frideswide Square.

- The transformation of Frideswide Square from a cluttered, congested junction to a welcoming and imposing public space is a key priority for the West End Partnership and Oxfordshire County Council

Oxford City Transport – West End

Oxford

Transforming Frideswide Square is a key priority for the West End Partnership and Oxfordshire County Council.

- The redevelopment of the Westgate Centre and surrounding areas, including Bonn Square, Queen Street, New Inn Hall Street and St Ebbe's Street, is a key platform of the regeneration of Oxford's West End. Plans see the existing centre significantly extended and refurbished, delivering new shops, restaurants, cafes and public areas within an open and vibrant shopping environment, connected by a series of public spaces and pedestrian-friendly streets
- The Oxpens site, between Oxford Railway Station, the Westgate Centre and the River Thames, represents one of the most significant development opportunities in the city centre and has the potential to make a valuable contribution to the life and economy of the local area and Oxford as a whole

Westgate Knowledge and Skills Exchange

Retail needs assessments undertaken by the City Council has consistently concluded that there is a significant under supply of retail provision in the city with many residents (of the city and county) preferring to travel to Reading, Swindon, High Wycombe or London for their retail and leisure activities. Every independent assessment undertaken has shown that city centre retailing is under-performing and there is a significant lack of presence and scale of major retailers for whom the city and its catchment profile are one of the most attractive in the country. Yet, the city has dropped significantly in the national retail rankings over the last decade. There are effectively no vacancies in retail premises in the retail core and turnover of premises is well below national averages.

Recognising this Land Securities has permission for a £400m investment to refurbish and extend the Westgate Centre with work planned to start in 2015. It is a conscious investment decision by the

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private sector to create a step change in the retail and leisure activity in the City. It will help rebalance the outward migration of retail activity. Increased retail provision will not only attract actively from the resident population. As a major tourism destination an increased retail and leisure offer in the city centre will capture high spend levels form the 9million visitors that come to the City each year. Independent assessments suggest an addition 3,400 net jobs will be created by this investment.

Highlights of the scheme include:

- Around 70 new shops, anchored by a 10,000 sq m John Lewis department store
- New cafes, restaurants and leisure uses
- A new roof top terrace with views over the city
- A two storey basement car park
- New cycle parking
- Between 27 and 122 new homes
- Retention of the existing Oxford Central Library

Working in partnership with the LEP the developers are committed to maximising the impact on the local labour market. A skills and employment plan is being developed that will equip local people to access the full range of construction, retail and customer service careers that this development will deliver.

However, more can be done. A small investment from the Local Growth fund will extend the Westgate development from good to great. The City Library and public spaces adjacent to the Westgate Centre need significant improvement and upgrading to align them with the ambitions for oxford to be a world class, knowledge driven City at the heart of the LEP. The current Library and public realm create a poor first impression of Oxford. The redevelopment of the Westgate Centre and surrounding areas, including Bonn Square, Queen Street, New Inn Hall Street and St Ebbe's Street, is a key platform of the regeneration of Oxford's West End. Bonn Square is one of the few public spaces in the centre of Oxford, and is located within the historic core of the city, not far from the Castle and within the line of the medieval city walls. Continued investment in Public realm will continue the transformation of Bonn Square and adjoining streets into a dynamic public space, which also respects and enhances the history of the square and its historic setting.

Working with the Private sector there is an opportunity to refurbish the existing library and extend its service to create a 'Knowledge and Skills Exchange' that sits within a welcoming and functional public space. The Arts Council has set out number of priority areas for library development which have been tested and corroborated by stakeholders:

- place the library as the hub of the community
- make the most of digital technology and creative media
- ensure that libraries are resilient and sustainable

Refurbishment of the City Library into a Knowledge and Skills Exchange directly contributes to these priories. Public libraries are trusted spaces, open to all, in which people continue to explore and share reading, information, knowledge and culture. The creation and exchange

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of knowledge is an essential part of our economy and there are growing expectations that everyone should be able to contribute to and benefit from a knowledge- based society. The Westgate Knowledge and Skills Exchange aims to improve awareness of the opportunities available in the local economy. Initially it will provide advice and guidance to those wanting to benefit from the investment in the Westgate centre –whether this is skills development of business opportunities. But research plays a crucial role in informing the development of new ideas, practices and business models and in building entrepreneurial capacity. The knowledge and Skills Exchange will grow to create a public space that facilitates interaction between research, people and the economy to realise significant benefit where individuals and businesses:

- 'know where to go' to ask for applied research, business growth skills training
- Have applied research and support services available under one roof; rather than being referred to different locations or being referred to a range of virtual services
- Will be familiar with the location and feel comfortable in an open access environment that allows networking and collaboration,
- Identify research that responds directly to business needs
- Cultivate entrepreneurial capacity and facilitate new routes to market opportunities
- Act as an open access forum

This development will build on the Enterprising Libraries pilot launched by CLG in 2013 that aims:

- to establish public libraries as trusted centres of business support and expertise that play a key role in local economic growth, entrepreneurial activity and social mobility
- embed public libraries within their local economic and business infrastructure, partnerships and networks and create closer working with the British Library and other Business & IP Centres
- create opportunities and improved sources of support for local economic growth, entrepreneurial activity and employment for people of all backgrounds, including in the creative industries that will increase social mobility in the communities around them

Eastern Arc Transport Improvements

A package of transport measures to improve the highway network in the Eastern Arc – facilitating development in the Headington/ East Oxford area to key healthcare, business park and manufacturing sites in Cowley close to the Ring Road. Measures will include improvements to the quality, speed and reliability of orbital bus routes (including developing new services), park and ride, traffic and parking management to enable easier access and measures to encourage more walking and cycling and enhancements to local junctions and mini interchanges.

Oxfordshire Centre for Technology and Innovation

This project develops a Technology and Innovation Training Centre in Oxford. The project is located here due to (a) it invests heavily in a socially deprived area, Blackbird Leys (b) The new-build/remodelling project overcomes existing poor accommodation/ outdated equipment challenges

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(c) Activate Learning own the land and current buildings/have capacity for expansion

The project co-locates engineering, electrical, design, innovation with emerging Technology, co-located to deliver the local LEP and STEM agenda. Phase 1- supports the development of training and learning opportunities in STEM and new technologies; developing growth in employer engagement, apprenticeships, Traineeships NEET engagement and skills to meet well evidenced demand in Oxfordshire.

- Engineering, Electrical, Electronics, Robotics, CAD/CAM and IT practitioners up to level 4
- Environmental technologies and Energy Management up to level 5
- Construction and trades to Level 3
- Up-skilling, return to work courses
- Increasing apprenticeships / Higher Apprenticeships

Phase 2 expands the Technology and Innovation Centre to new areas key to the development of Oxfordshire's future jobs growth. The centre will produce larger volumes of technician level workers, able to move between different technology and engineering disciplines.

Particular roles have been identified (Levels 2 – 5):

- Maintenance Technicians able to fault find /diagnose, fix & repair across multiple skill areas: Pneumatics, Hydraulics, PLC control, Electronics, Electrical, Mechanical, CAD/ CAM, Robotics
- Electrical /Mechanical /Electronic/ Specialist Technicians
- Science Laboratory Technicians

Activate Care Suite

The project rapidly grows the volume of new entrants into the care industry supported by an exemplar industry standard innovative teaching and support facility. This will bristle with current medical and care equipment operated in a real working environment. The facility responds to the well evidenced growth in the future volume of care workers in Oxfordshire, with particular focus on private sector job demands in:

- Domiciliary Care
- Dementia Care
- Palliative Nursing Care
- Safe handling of medicines
- Bespoke training for care assistants
- Advanced apprenticeships
- Traineeships to attract new entrants into the sector

City Centre for Conferencing and Leisure Training

The Tourism and Hospitality industry is a growing sector and Oxfordshire is one of Britain's most visited destinations. Meetings, conferences and events are attracted to Oxfordshire not only because it is an extraordinary place to visit. The project focuses on building the volume of skilled employees across the hospitality sector to enable businesses to respond to the increased tourist, business and retail visitors as a result of the future redevelopment in Oxford. Oxford city centre will benefit from having an accessible ground floor conferencing, eating and social space with an outstanding river frontage for both businesses and visitors.

A feasibility study evidences a capacity for a 60 cover restaurant alongside a business conferencing facility for 150 people

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supported by high specification IT multi use breakout space. This facility will sit adjacent to a commercial wellbeing centre which will specialise in sports injury recovery and rehabilitation, commercial hair and beauty salon.

Employability through up-skilling and retraining local people struggling to access the employment market, and inspiring young new entrants into the hospitality sector will be blended into the design of the facility. The commercial learning company model will be at the core of this project will develop technical skills, professional behaviours and leadership of all aspects of the hospitality and tourism sector including chefs, front of house, conferencing, event management and bar service. This will in turn supply Oxfordshire with highly skilled, work ready employees with evidence of commercial experience. With its location adjacent to the proposed John Lewis retail centre, the college is well placed to support Visit Oxfordshire in providing the requisite skills for the existing and future workforce to expand the success of tourism in Oxford.This project offers the opportunity to create a unique business, leisure and employability training complex in the heart of the city.

Cloud & Digital Connectivity Zone

The Cloud Connectivity Zone will bring together business and potential employees in an environment bristling with technology. It will deliver large volumes of trained people into all sectors enabling them to be more efficient in their day to day business through virtualisation.

The project sets out to provide rapid skill development of Cloud and Digital Skills in a space containing with industry standard equipment and connectivity. This includes:

- Cloud technologies – Virtualisation
- Applications development 'Apps' for Android and IOS Apple phones
- Games and animation Development
- Programming (in particular languages to support the sub-sectors listed above)
- Client Server Domain Networking
- Social Digital Media & Marketing

Upstream flood storage at Northway centre playing field and Court Place Farm Park

Construction of two surface water holding areas. One at the Northway Centre playing field and the second at Court Place Farm Park. There are 279 residential properties at significant risk of flooding. The scheme will increase the city's capacity to address flood risk and would create 0.3 hectares of new water-dependant habitat. Not addressing the issue of flood risk to the existing properties has potentially harmful social and economic effects, and may impact upon development planned in the area. The City has already developed plans for the implementation of this scheme and only requires confirmation of the final element of funding before starting work.

Development of Oxford Knowledge eco-system

The preparation of the City Deal and the commitment of the Oxfordshire institutions to work together to a common innovation agenda has provided a great impetus to the development of collaborative projects to stimulate innovation across the county. There are many projects under consideration and development, many of which will come to fruition within the 5 year timescale. The knowledge- and R&D- based institutions across Oxfordshire are working to develop our top priorities for investment to be incorporated into the SEP. As with the innovation centres in the City deal, these will come with partial funding from universities,

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facilities and private sector partners to leverage the SEP funds, although the level of commitment cannot yet be established, and generally will be contingent on the availability of match funds from the SEP to make the commitment of resources viable.

We have included our highest priority projects above the line in the attached spreadsheet, including some more aspirational, less-developed projects to demonstrate the breadth of our commitment. In reality, we expect that our prioritisation may change over the next few years, particularly as private sector collaborators make clear commitments of support.

We are conscious of the governments key sectors, as set out in the national industrial strategy, and of the importance of the eight great technologies. We feel that the projects we have listed will play into the national strengths and priorities that have been developed by the government, and we seek to develop more projects that will contribute to innovation-driven economic growth.

Advanced propulsion centre

To ensure that Oxford University and companies from the Oxfordshire region secure a major role as a spoke in the "hub and spoke" model of the recently announced UK £1 billion "Advanced Propulsion Centre" and initiative now being completed across the UK by BIS's Automotive Council. Oxford proposes to base its spoke on the internationally recognised research it undertakes in the three technology areas of (a) internal combustion engines (b) energy storage (c) electrical machines and power electronics.

Centre for Agri-tech Development

We are seeking support to build new plant growth facilities at the Begbroke Science Park to provide key resources to engage effectively with the Agri-Biotech industrial community. The Begbroke site provides an opportunity to design and build environmentally friendly and sustainable containment facilities. This would include 1000m2 glasshouse, 2 acres land for farm trials, experimental preparation, head house, cooled and humidity controlled seed storage facility, and 500m2 hard standing area for equipment.

The requested commitment of resources to develop the proposed growth facilities are necessary to enable impact both nationally and internationally with the business communities within the agritech and industrial biotech supply chain. The investment will expand the scale and application of research carried out, to support the application of the research and provide a stronger proposition to apply for Industrial support in the future.

Plant Sciences undertakes research at the forefront of areas of scientific research vital to agriculture and related technologies. Modern plant growth research facilities at this scale are key to supporting academia and industry in developing this science and technology.

Science Vale Oxford

The largest concentration of research and development activity in Western Europe

Readily available flexible space, support services and skills for innovative businesses to flourish

High quality, reliable and sustainable transport infrastructure and services which meets the new needs and movement pattern from an increasingly high level of business and housing development

A labour pool with sufficient skills in engineering, information technology, mathematics and science

An enterprise zone that provides business rates discounts to new businesses until 2018 and generates around £120m of income for investment in Oxfordshire's infrastructure

Science Vale:

Oxford - 12 miles,
London - 70 miles

66,500 people

+20,000 planned new jobs

+20,000 planned new homes

Science Vale Oxford is an area in the southern part of Central Oxfordshire, between the city of Oxford to the north and the M4 to the south. In World War 2 the area was home to defence bases which were subsequently developed into world class science research and development establishments, and which now offer space for further expansion and commercialisation.

Science Vale Oxford has the largest concentration of research and development activity in Western Europe. In total the Science Vale Oxford area contains 13% of all research and development employment in the south east (4% nationally).

The Harwell and Culham sites (260 and 80 hectares) were both former airfields. Their occupants now include the world leading Diamond Synchrotron (Harwell) and Joint European Torus (JET) nuclear fusion facility (Culham). Milton Park (150 hectares) was developed from a defence depot and has become a home for growing science based enterprises, including a leading life sciences cluster.

Milton Science and Business Park – part of the Enterprise Zone and has delivered 100,000 sq ft of additional science space since the EZ was launched.

The site of Didcot A Power Station, which is being decommissioned, opens up another major employment opportunity of around 60 hectares.

In the west of the Science Vale Oxford area the world class Williams Formula 1 team has its home at Grove. At Grove, Oxford Instruments plc, an early spin-out from Oxford University, designs and manufactures tools and systems for industry and research, is a globally significant company, listed in the FTSE 250 and employs 1500 people worldwide.

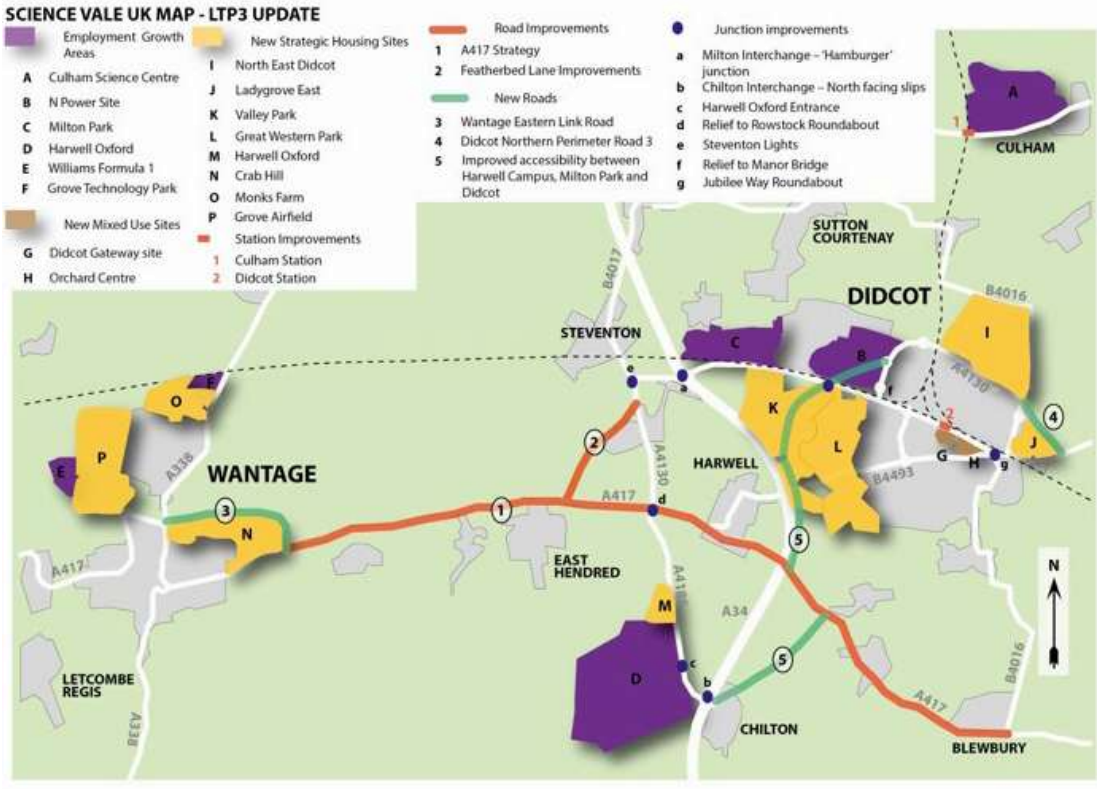
Science Vale Oxford

Milton Park is one of Europe's largest multi-use business parks, hosting more than 160 companies which employ around 6,500 people in 3,400,000 sq ft of business space. The concentration and diversity of science companies at Milton Park make it a genuine centre of excellence for research and development. Milton Park is home to the Oxfordshire BioScience Network and it has just won £7m from government to build a new biotech innovation hub, the Milton Science Centre.

Enterprise

The Science Vale Oxford area hosts some of the most innovative and prestigious science in the world and almost half the jobs in the area are knowledge based. It has large assembled sites with all the benefits of Enterprise Zone status. There are plans for over 20,000 new jobs and homes in the area, with designated land provided for both.

Harwell Oxford is a science, innovation and business campus based in South Oxfordshire. A joint venture between the UK Atomic Energy Authority and the Science and Technology Facilities Council, and Development Securities/ Prorsus the private sector partner, it is responsible for developing the Campus into a vibrant community of scientists and technologists



Science Vale: LTP3 Update

Science Vale Oxford

Case Study: World leading scientific projects at Harwell and Culham

ISIS

ISIS is a national facility for research into a broad range of physical and life sciences, using the techniques of neutron scattering and muon spectroscopy to study materials at the atomic level. ISIS supports an international community of over 2000 scientists who use neutrons and muons for research in physics, chemistry, materials science, geology, engineering and biology. It is the most productive research centre of its type in the world, and has recently been praised as innovative and world leading by an international panel. ISIS is owned by the Science and Facilities Technology Research Council

Diamond Light Source

Diamond Light Source is the UK's national synchrotron science facility. By accelerating electrons to near light-speed, Diamond generates brilliant beams of light from infra-red to X-rays which are used for academic and industry research and development across a range of scientific disciplines including structural biology, physics, chemistry, materials science, engineering, earth and environmental sciences. It is the largest synchrotron in the world powered by medium energy. The majority shareholder is the Welcome Trust. Diamond employs scientists from 40 countries

JET

JET is the world's largest and most powerful tokamak and the focal point of the Europetn fusion research programme. Designed to study fusion in conditions approaching those needed for a power plant, it is the only device currently operating that can use the deuterium-tritium fuel mix that will be used for commercial fusion power. To take fusion to the next level Culham Science Centre has plans for a design centre and materials and robotic handling research centre which would enable it to lead on Europe's first fusion demonstration plant. JET is owned by the UK Atomic Energy Authority

REL

REL is a private company formed to develop the technologies needed for an advanced combined cycle air-breathing rocket engine class called SABRE that will enable aircraft to operate easily at speeds of up to five times the speed of sound or fly directly into Earth orbit. They have achieved a breakthrough in aerospace engine technology by developing ultra-lightweight heat exchangers 100 times lighter than existing technologies that allow the cooling of very hot airstreams from over 1,000 °C to minus 150 °C in less than 1/100th of a second.

Milton Park's Life Sciences Cluster

Milton Park hosts nearly 50 life science companies, spread across biotechnology, medical devices, contract and clinical research and associated industries. Many have grown on-site and have on maturity have become part of wider international businesses.

Evotec, a world leader in the discovery and development of novel small molecular drugs, employs 250 people on the site, 40% of its global workforce. The story started when the fledgling Oxford Asymmetry International moved into two starter units in 1991. They expanded into five more buildings and in 2000 merged with the Germany-based Evotec.

Oxford Immunotec developed a novel diagnostic test for tuberculosis which has now been approved in over 50 countries with rapidly increasing global sales. They employ 40 people on site. They started originally in sub/leased space, have twice moved into larger facilities and now plan to expand again.

Oxitec are the only company in the world to use genetically sterile insects to control insects that spread disease and damage crops – avoiding the need for environmentally harmful pesticides. They employ 40 people, a quarter from overseas. Originally a spin-out from Oxford University, they have grown through venture capital and family finance.

Science Vale Oxford

which is the biggest specialist community of its kind anywhere in the UK. Over 4,500 people work in 150 organisations including key UK Research Councils, start-ups and multi-national organisations focusing on a range of commercial applications including healthcare, medical devices, space, detector systems, computing, green enterprise and new materials.

Opportunities for the continuing development of Harwell as one of the world's leading research centres abound. New initiatives being developed include:

- Industrial Applications Facility for Extreme Light: An international "first of a kind" dedicated facility for high power lasers that would offer unique and bespoke capabilities to UK industry for non-destructive testing applications
- National Science Centre – Harwell (NSCH): the first national science centre in the UK engaging and enthusing the next generation of scientists and engineers about science through the provision of an unforgettable journey through science, technology and discovery
- Sustainable Energy Research and Innovation Facility (SERIF): the creation of a sustainable energy research facility to produce and test alternatives to fossil fuels for transportation and combined heat and power applications
- Research Village at Harwell: offering short and long term spaces and amenities to facilitate interaction between visiting scientists, be they PhD students, early career researchers, senior academics or even Nobel Prize laureates

Harwell Oxford is a science, innovation and business campus based in South Oxfordshire. A joint venture between global property group Goodman, the UK Atomic Energy Authority and the Science and Technology Facilities Council, is responsible for developing the Campus into a vibrant community of scientists and technologists which is the biggest specialist community of its kind anywhere in the UK. Over 4,500 people work in 150 organisations including key UK Research Councils, start-ups and multi-national organisations focusing on a range of commercial applications including healthcare, medical devices, space, detector systems, computing, green enterprise and new materials.

Milton Park is one of Europe's largest multi-use business parks, hosting more than 160 companies which employ around 6,500 people in 3,400,000 sq ft of business space. The concentration and diversity of science companies at Milton Park make it a genuine centre of excellence for research and development. Milton Park is home to the Oxfordshire BioScience Network (OBN). Milton Park has recently received £7m grant via the Enterprise Zone to develop a much needed bio technology innovation centre, the Milton Science Centre (MSC)..

Culham Science Centre is one of the UK's most prestigious research centres with a strong focus upon cutting-edge science and technology. Culham is owned and operated by the United Kingdom Atomic Energy Authority; the centre is the home of the UK's fusion research programme, known as the Culham Centre for Fusion Energy (CCFE), and the world's largest fusion experimental facility, JET (Joint European Torus).

Science Vale Oxford

Grove Technology Park has 25 companies in its main buildings and a further 60 smaller businesses in its business centre. More than 800 people work on the Park. Grove is home to the Williams F1 team which employs around 520 people on a 40 hectare technology campus. Crown Packaging's innovation centres are based in Grove. Crown Packaging is a world leader in metal packaging technology with operations in 41 countries employing over 21,000 people.

Didcot is of particular importance: its station Didcot is of particular importance: its station is a key gateway to the wider area and around half of the planned new housing for Science Vale Oxford will be located there. It has strategic significance for the wider area, and great importance is attached to the development of its role as a transport hub and to the creation of a high quality centre and attractive place to live.

The potential for job creation and growth in the area is huge, not just for the immediate area, but for the benefit that it will bring to the wider Oxford City region and the UK economy as a whole.

For Science Vale Oxford to realise its potential the following strategic interventions are needed:

- Ensure there is readily available flexible space, support services and skills for innovative businesses to flourish.
- Place the Enterprise Zone at the heart of Oxfordshire's knowledge based economy, focusing energy and investment there to hothouse business creation and inward investment that will generate substantial income to enhance knowledge economy growth across Oxfordshire
- Improve all connectivity, particularly transport linkages; road, rail, bus and cycling within the area and beyond, ensuring that the solutions are sustainable and coordinated
- Greatly accelerate the pace of house building and provide a better, more varied offer with attractive public realm and a sense of place that appeals to people coming to work and live in the area
- Provide ultrafast broadband speeds via fibre to all science and business parks (>100mbps) and SuperFast speeds (>30mbps) via wireless offsite
- Make Didcot a more successful hub for Science Vale, including town centre regeneration, redevelopment of the station and gateway site, improvement of the new housing offer, public realm overhaul and image building
- A heavily resourced, fully integrated, end to end education, training, and workforce development programme in STEM skills is required
- Ensure that the means are in place, particularly finance and capacity, to ensure this is all delivered successfully and effectively

The key public and private sector players in Science Vale Oxford recognise the scale of development potential and the need for co-ordinated action to realise that potential. In 2010 they launched the Science Vale UK (later renamed Science Vale Oxford) Partnership.

In 2012 the Government awarded Enterprise Zone (EZ) status for Science Vale. This applies to 92 hectares of the Harwell and Milton Park sites. The main benefits of EZ status are discounts in business rates for

Science Vale Oxford

businesses coming to the sites, and the ability of the Local Economic Partnership to retain and invest business rate growth. Crucially it is possible to borrow against future business rate income so that supporting infrastructure can be developed in step with need, helping to create a virtuous circle whereby businesses are attracted to the area.

The plans for the Enterprise Zone sites envisage the development of up to 200,000 sq m, providing at least 8,400 new direct jobs and yielding £10.5m pa in additional business rates by 2025.

In addition to the actions above the following actions will be taken to develop the main business parks:

- Master plans will be completed for the Harwell and Culham sites, which will be developed and managed to provide a high quality campus environment appealing to innovative enterprises. Consideration will be given to the introduction of a Local Development Order for Harwell campus
- The pace of development on the Enterprise Zone sites will be stepped up, including through speculative building, consistent with market conditions
- An Ultrafast broadband network will be delivered for both parks, together with a link between the parks and a 4G wireless service giving Superfast speeds across the wider SVO area
- A Science Vale Oxford Area Action Plan will ensure the longer term supply, particularly on the former Didcot Power station site, of high quality employment space that is attractive to knowledge based commercial enterprise

People

Science Vale Oxford has an exceptionally high concentration of Research and Development. It has leading clusters in Space, Life Sciences, Advanced Engineering, and Cryogenics, with other strengths in Creative Industries (gaming, media and publishing) and Energy and Environment. About 18% of employees are in high tech (including R&D) jobs, well in excess of the proportions for Oxfordshire as a whole and the South East.

The Science Vale Oxford area is planned to provide 20,000 new jobs over the next 15 years and these can be expected to be largely in these high tech sectors. A step change in workforce STEM training is needed to respond to this changing landscape. 40% of Oxfordshire's workforce are graduates, second only to London, but there are skills gaps at many levels in the knowledge economy

A training needs analysis for the Science Vale Oxford area has shown that of currently vacant jobs 65% require engineering skills and qualifications; 44% require IT-related skills; 44% mathematical; 30% scientific. Take-up of engineering and manufacturing courses by young people is particularly low compared to the number of jobs available. More than half of the companies interviewed from this sector said they felt training providers would struggle to support their future training needs.

Science Vale Oxford

Place

About 66,500 people live in Science Vale, of which 25,000 live in Didcot, a former railway and defence town, 18,500 in the market town of Wantage and adjoining large village of Grove and 22,500 in the surrounding villages, which have a high quality built and natural environment and have kept their own distinctive character. While these three population totals are currently similar, that is changing fast. Didcot had a population of only 15,000 in 1981, but is planned to accommodate the majority of new homes in the Science Vale area, giving a projected population of about 50,000 by 2031.

Current plans provide for at least 15,000 new homes in the Science Vale Oxford area by 2029, including 8,780 in major sites in Didcot and Harwell and 4,960 in major sites in Wantage and Grove. Nearly two thirds of the planned allocations are to be delivered in and alongside Didcot, adding 50% to the size of the town. The new housing supply is planned to peak at 712 completions in 2015/16, and will remain well above Didcot's current annualised delivery target until 2023/24.

Current plans provide for at least 20,000 new homes in the Science Vale Oxford area by 2031, including in major sites in Didcot and Harwell and in major sites in Wantage and Grove. Nearly two thirds of the planned allocations are to be delivered in and alongside Didcot, adding 50% to the size of the town. The new housing supply is planned to peak at 712 completions in 2015/16, and will remain well above Didcot's current annualised delivery target until 2023/24.

Didcot acts as a key gateway for Science Vale Oxford but currently does not provide the facilities, legibility or sense of place expected for an area home to international science facilties and businesses. To support this growth Didcot town centre is being redeveloped as a multifunctional social centre, capitalising on its excellent road and rail networks and its role as the gateway to Science Vale. A new town centre development will offer irresistible opportunities and experiences that do not exist elsewhere. The master plan for this new town centre recognises that successful towns are about much more than shopping. They are about enjoyment, creativity, learning, socialising, culture, health and wellbeing and democratic engagement. A centrepiece of the new development will be the, Culture, Knowledge and Skills Exchange Centre where experts will help the community access organised information and culture for employment and enjoyment. It will offer face-to-face and virtual support for self-learning and self-teaching and it will provide the bridge between the community and the world-leading scientific community in Science Vale

Science Vale Oxford is located in an attractive natural environment and landscape in the heart of Oxfordshire and offers an appealing mix of homes and jobs, across both rural and urban settlements, both historic and modern. It has heritage-rich villages and immediate access to beautiful riverside and downland. The beauty of the natural environment and the richness of its heritage make a vital contribution to a balanced lifestyle that forms part of Science Vale's appeal and will help it to grow and thrive.

Science Vale Oxford

Connectivity

Science Vale Oxford needs to be served by high quality reliable and sustainable transport infrastructure and services, which:

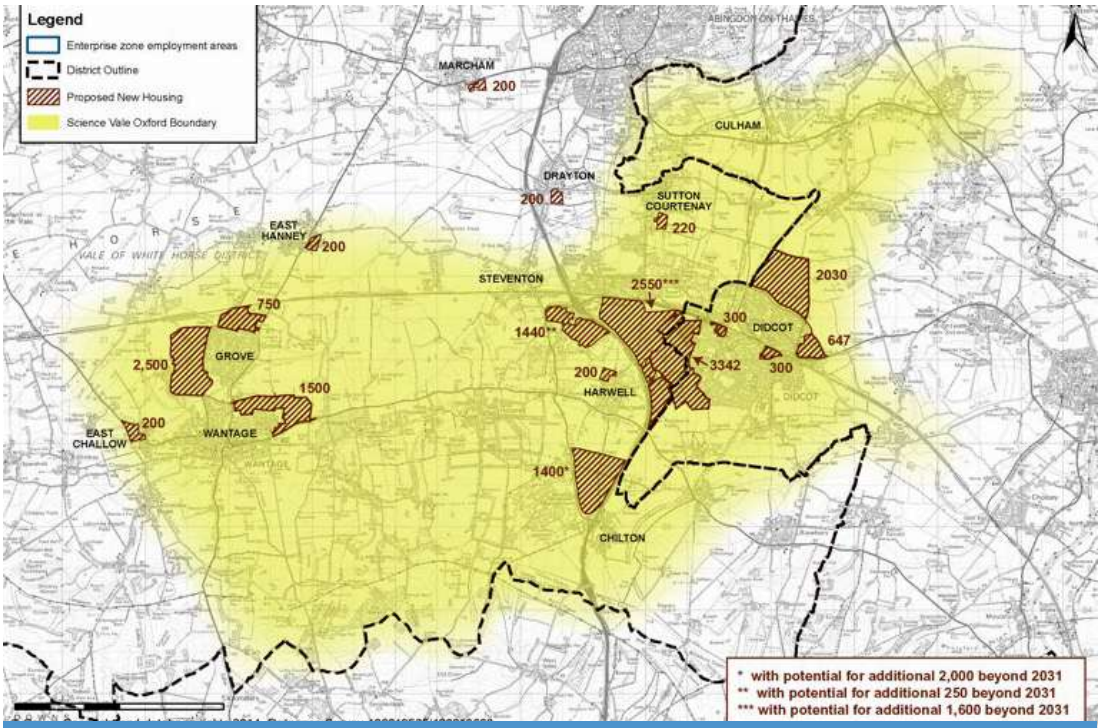
- Provide strategic connections to the wider UK and international gateways;
- Link the Science Vale Oxford area with Oxford's Universities and other innovation centres in the city region;
- Connect the main employment and development sites within the SV area;
- Contribute positively to the realm of the main settlements in the SV area, and Didcot in particular;
- Cater for the anticipated growth in people living and working in the area.

Strategic highways within Science Vale Oxford

The Science Vale Oxford area sits astride the A34 trunk road from Southampton, which to the north links with the M40 (J9) and to the south with the M4 (J13).

The A34 is however at or near capacity even with existing traffic levels, and is too easily brought to a standstill by accidents. The two A34 junctions within the SV area are due to be upgraded which will alleviate some congestion but a more comprehensive solution to the A34 capacity problems is required.

The road network within South Vale does not reflect the employment and housing growth of recent years: the routes are



Currently proposed new housing sites

Science Vale Oxford

not well aligned to connect the new and emerging sites, and their capacity is being outstripped by the scale of growth. Modelling by Oxfordshire County Council indicates that 22 highway links and 10 traffic junctions are operating at or above capacity, with a further 14 links and 42 junctions forecast to be so by 2029.

The main need is to improve east-west links so as to provide improved access for Wantage/ Grove and the Harwell Campus and to link both with Milton Park and the new housing sites to the west of Didcot. Given the polycentric character of the Science Vale Oxford area this cannot be tackled by a single fix, but needs a package of measures to upgrade roads which were not designed for their current role, to improve junctions and signals and in the case of new settlements to build some limited new links. The precise design needs to take account of the changes to movements which will arise from the more strategic changes to junctions with the A34.

Destination	Changes	Time (mins)
Heathrow Airport T5	At Paddington	89
Birmingham Airport	At Oxford	89
Southampton Airport	At Reading	72
London Paddington	Direct	43
Reading	Direct	15
Bristol Parkway	Direct	43
Cambridge	At Paddington and Kings Cross	148

Science Vale Oxford strategic rail links (from Didcot*)

*Fast trains leaving at or near 8.00am

Road access to Culham in the north- east of the Science Vale Oxford area is also constrained, in this case by the river Thames. The only two routes from the Didcot area cross narrow historic bridges which are limited to one-way traffic. It is not practicable to widen or replace these bridges, the effect of which would anyway be to move problems further north to the A415 from Abingdon. Rail and cycling are therefore particularly important.

Didcot Station – strategic railway hub

Strategic rail is in many ways the converse to road, the main strength being east-west. The Great Western service from London Paddington to Bristol and the Wales has regular stops at Didcot. The north-south Cross Country service from Southampton to the Midlands and the north, however, does not stop at Didcot so there is no direct service and no interchange. This omission appears to be the result of track configuration constraints which do not seem fundamental. There are no rail services to Cambridge or Heathrow other than via Central London. The consequence is the variable pattern of service shown below.

Some significant service improvements are already planned. Electrification of the line from Paddington is due to be complete by 2016, and this should improve journey times and quality. The Heathrow Western Rail link will bring major reductions in journey time and convenience from Didcot by 2021. East West rail will link Didcot and Milton Keynes by 2017, with onward access to the north west, and will ultimately create a direct service to Cambridge. Work is soon to be completed to improve the forecourt of Didcot station.

Science Vale Oxford

All these changes are very positive, but do not of themselves exploit the full potential to transform Didcot into a strategic railway hub, with a station that befits an internationally renowned centres of science.

About 2.8 million passengers a year currently use Didcot station. This is expected to reach 6 million by 2040 allowing for natural rail growth and the added houses and jobs. Trains run from Oxford station to Didcot every 30 minutes with most taking under 18 minutes, but this is not turn-up-and-go frequency and Didcot does not at present function properly as a transport hub enabling convenient onward travel to the main employment sites. There are also insufficient buses services direct to these sites from Oxford. Travel by car can be made difficult by the problems with the A34 discussed above, and distances are generally beyond easy cycling range.

While many of the transport issues between Science Vale Oxford and Oxford are the same as across Oxfordshire, there is a particular economic need to ensure that public transport solutions are tailored and packaged so as to provide links from Oxford that are not only offer good frequencies and journey times but are well integrated and easy to understand.

There is a compelling case for a series of linked actions adding new direct services from Didcot to Cambridge, Heathrow, Southampton and Birmingham, reconfiguring the track as need to achieve this, and rebuilding the station to allow for projected growth and to provide a fitting sense of arrival. This would not only strengthen Science Vale's strategic rail links but reinforce many of the other actions proposed in this strategy.

Public transport within Science Vale Oxford

Outside Didcot the remainder of the Science Vale Oxford area is dependant for public transport on bus. There is a very good shuttle from Didcot station to Milton Park running every 10-15 minutes at peak hours, but services between the main centres are otherwise at 30 minute frequencies. With larger concentrations of people in prospect both on the employment and housing sites, there is the opportunity to improve the frequency and attractiveness of services and to create a habit where bus use is the norm. This is likely to need pump-priming financial support in the short run before full build out of the sites is achieved, and consideration needs also to be given to different business models (for example the Milton Park shuttle is run by the business park not a commercial operator) and to the need for bus priority measures over other traffic.

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Committed Schemes: Our Offer

Featherbed Lane and Steventon Lights Improvements: Highway and junction improvements to allow this route to be promote, reducing traffic through Rowstock Roundabout.

Wantage Eastern Link Road: A link Road from A338 at Mably Way to the A417 at West Lockinge to act as a perimeter road to take traffic off the town centre routes and facilitate easier, quicker movement towards Harwell Oxford and Milton Park to the east.

Relief to Manor Bridge (Science Bridge): New bridge over the railway line along the A4130 to provide highway capacity and routing improvements to the main route through Didcot.

Didcot Station Enhancements - Gateway to Science Vale: Enhanced Station accessibility and improved facilities creating a transport hub and Gateway to Science Vale.

Signing Strategy: To update signage to reflect the new and improved network changes, helping to ensure appropriate routing of vehicles across the area.

A338 Corridor Improvements (including Frilford Lights): Highway and junction improvements to accommodate additional traffic heading towards Oxford.

Didcot Northern Perimeter Road Phase 3 (NPR3): A new road to allow extension of the perimeter road around Didcot and access for the Ladygrove East site.

Didcot new accessible pedestrian link bridge to interchange and station entrance: Works to be completed in 2015.

A34 Chilton Interchange and Milton Interchange Pinch Point Schemes:

City Deal Investment

Harwell Innovation Hub: a facility focused on promoting open innovation based at the Harwell campus, home to "big" science facilities such as the Diamond Synchrotron and the recently relocated European Space Agency and Space Catapult Centre.

UKAEA Culham Advanced Manufacturing Hub: focused on remote handling – which will have applications across a number of different industries where there are extreme environments (nuclear, space, underwater, underground).

A package of measures will improve access to the Science Vale Oxford Enterprise Zone from the national and local road network. This will increase reliability and in turn provide the confidence necessary to attract business investment and high skilled employees.

- Harwell Oxford Campus Entrance Improvements: Enhanced capacity roundabout to accommodate growth across the area and the change in traffic flow patterns as a result of other network improvements
- Harwell Link Road Section 1 (B4493 to A417): A new road between the B4493 to the A417 to provide improved access to Harwell Oxford from Didcot
- Harwell Link Road Section 2 (Hagbourne Hill): Highway capacity and safety improvements to provide improved access to Harwell Oxford from Didcot

Science Vale Oxford

Local Growth Fund Ask

Advanced Engineering and Technology Skills Centre (ASC)

The strategic aim of the Advanced Engineering and Technology Skills Centre (ASC) project is to contribute to addressing local, regional and national skills shortages in STEM subject areas.

It will:

- Supply (in part at least) the requirement for skilled technicians at Harwell Oxford and elsewhere in Oxfordshire
- Deploy the unique expertise and facilities available at and around Harwell Oxford as a learning resource for the rest of the UK, Europe and the world

In so doing:

- Concentrate more effectively than is currently the case on the needs of employers
- Enable its students to gain skills and insights into business, management and innovation in addition to technical knowledge and skills, and provide a pathway for them into employment
- Achieve a balance gender profile among its students, thereby addressing the current shortfall in female take-up of engineering and technical vocational education
- Become an open-innovation, knowledge-sharing and problem-solving resource for the businesses and organisations which participate

The core subject area for ASC will be engineering technician skills, extending into engineering design, computing/IT, laboratory skills, and potentially other related skill areas of interest to local businesses, provided this does not dilute ASC's focus on delivering education of the highest quality.

As its core business, ASC will offer:

- Advanced and higher apprenticeships, HNC/HND, and foundation degrees to young people who are either employed/ sponsored by participating employers or self-funded (including some supported via sponsorship links established by ASC)
- Specialist modules in areas of interest to participating employers for their own workforce

Animal Husbandry Centre (AHC)

The strategic aims of the Animal Husbandry Centre project are to help in addressing local skills shortages in animal husbandry and support the sustainability of rural enterprises in Oxfordshire.

It will:

- Supply the requirement for skilled animal husbandry technicians in Oxfordshire
- Develop a database of sustainable animal husbandry techniques

In so doing:

- Concentrate more effectively than is currently the case on the needs of employers
- Enable its students to gain skills and insights into business, management and innovation in addition to technical knowledge and skills, and provide a pathway for them into employment
- Achieve a balance gender profile among its students, thereby addressing the current shortfall in female take-up of technical vocational education;
- Become an open-innovation, knowledge-sharing and problem-solving resource for the businesses and organisations which participate

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National Science Centre Harwell (NSCH)

NSCH is intended to be the first national science centre in the UK. It will be forward looking (not a museum) and showcase the very best of contemporary British science, engineering and technology. This substantial (60,000 ft2) interactive science centre engages and enthuses the next generation of scientists and engineers about science through the provision of an unforgettable journey through science, technology and discovery. There are many places to go and see examples of inventions and discoveries from our country's rich past, but nowhere that really specialises in showing what we are doing right now. Through exhibits that use live data from real experiments (eg streaming observations from telescopes in Hawaii, relaying rocket launches, witnessing experiments from the Vulcan laser facility), visitors will be able to experience science in action in real time. Content for the site will encompass work going on around the country from Daresbury and Culham to Manchester to Edinburgh – most of it funded in part or in whole by UK Research Councils.

Oxfordshire is a key part of the 'golden triangle' that encompasses Cambridge and London – one that rivals any other global region for science and innovation. By placing the Centre at the heart of the Harwell Campus, surrounded by the UK National Laboratories, we will proclaim that the UK is one of the best places to carry out research and that Oxfordshire is at its very core. The NSCH, with its close proximity to Heathrow, will be an ideal location to introduce foreign investors to the UK's achievements and potential, and provide a stimulating venue for conferences. Oxfordshire will be in a prime position to capitalise on the Centre's integration of public engagement, cutting-edge enterprise and business development.

Sustainable Energy Research and Innovation Facility

This proposal is for the creation of a sustainable energy research facility, SERIF, to produce and test alternatives to fossil fuels for transportation and combined heat and power applications. The facility will act as a hub for innovative technology development and implementation on the Harwell Campus with the ultimate goal of transforming Harwell Oxford from an intensive energy consumer (due to the operational demands of the large scale science facilities, Diamond Light Source and ISIS which underpin the Campus) to a net energy producer. Establishing the Campus as a future sustainable energy paradigm will not only place Oxfordshire firmly at the heart of Cleantech research and innovation, it will also serve to attract global high technology industry to Harwell as well as making the Campus an ideal location for future international science facilities (of a similar scale to the CERN laboratory). This vision of the Campus as a self-sustaining energy island offers a blueprint for large-scale energy provision in developed countries as well as developing countries where large-scale infrastructure for energy delivery is absent. SERIF will be a flexible validation facility, accommodating new technologies for solar, wind, hydro and chemical power sources. In particular, the use of chemical storage technologies to balance out the intermittency associated with renewable energy sources, which has been one of the major barriers to their more widespread adoption, will be investigated.

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The mix of power sources reflects the lack of a single solution to long-term future energy production and storage needs by providing a "plug-and-play" platform for industry and academia to validate their innovative energy solutions in a real world environment. This unique facility offers a real competitive advantage to UK academics and industry, putting the UK at the forefront of energy research.

Over the next decade, the aim is to establish a 100MW integrated energy production and storage facility, building on the innovative energy solutions arising out of the validation studies. This novel facility will provide low-cost, sustainable power to the Harwell Oxford Campus, achieving the goal of energy independence and recognising Oxfordshire as a global leader in this field

Research Village at Harwell

The Research Village at Harwell will continue to foster the Campus environment on the Harwell Oxford site, offering short and long term accommodation solutions, a variety of catering options alongside shared spaces and amenities to facilitate interaction between the visiting scientists be they PhD students, early career researchers, senior academics or even Nobel Prize laureates. It has been proven that the most exciting, innovative ideas can come from cross-disciplinary collaboration and the Research Village at Harwell will provide the ideal environment for serendipitous networking and collaboration. The Rutherford Appleton Laboratory on the Harwell Oxford site is home to world-class scientific research infrastructure in the Diamond Light Source synchrotron, ISIS neutron source, Central Laser Facility and RAL Space. These facilities anchor a thriving research community attracting thousands of visitors to the site annually to carry out experiments and collaborate with the scientists and engineers at RAL. This research community is vital to ensure the continued world-leading position of the STFC facilities, and indeed UK science, and it is imperative that the best scientists in the world and future leaders in their fields are attracted to the Oxfordshire campus. The Research Village will recreate the feeling of a campus-based university with 5 accommodation blocks (each with up 40 bedrooms with shared kitchen facilities on each floor and 5 self-contained apartments for those visiting for longer periods) situated around a central amenities area with a café with free wifi, configurable shared space for social events, bar and post office. This amenity centre will have room to expand and grow with the Campus

Industrial Applications Facility for Extreme Light

In collaboration with the University of Oxford and other key university partners, this project would seek to establish at the STFC Rutherford Appleton Laboratory an industrial applications facility for high power lasers that would offer unique and bespoke capabilities to UK industry for non-destructive testing applications. Advanced, high power lasers have evolved to the point that they are capable of producing super bright, high resolution, penetrating sources of radiation, including X-Rays, Gamma-Rays, electrons, neutrons etc. This is not something that is possible conventionally and thus they have significant potential for industrial, security, medical and other applications. In particular, the ability to "see through" materials and image

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rapidly moving entities such as gears or turbines in housings, to detect hidden / concealed materials or to produce super high resolution 3D medical images has already been demonstrated in collaboration with national and local industrial / medical partners. This project would seek to rapidly capitalise on these developments by establishing in Oxfordshire an international "first of a kind" dedicated facility that we believe would see rapid take up by UK industry and leverage the close local synergies already established.

Road Improvements

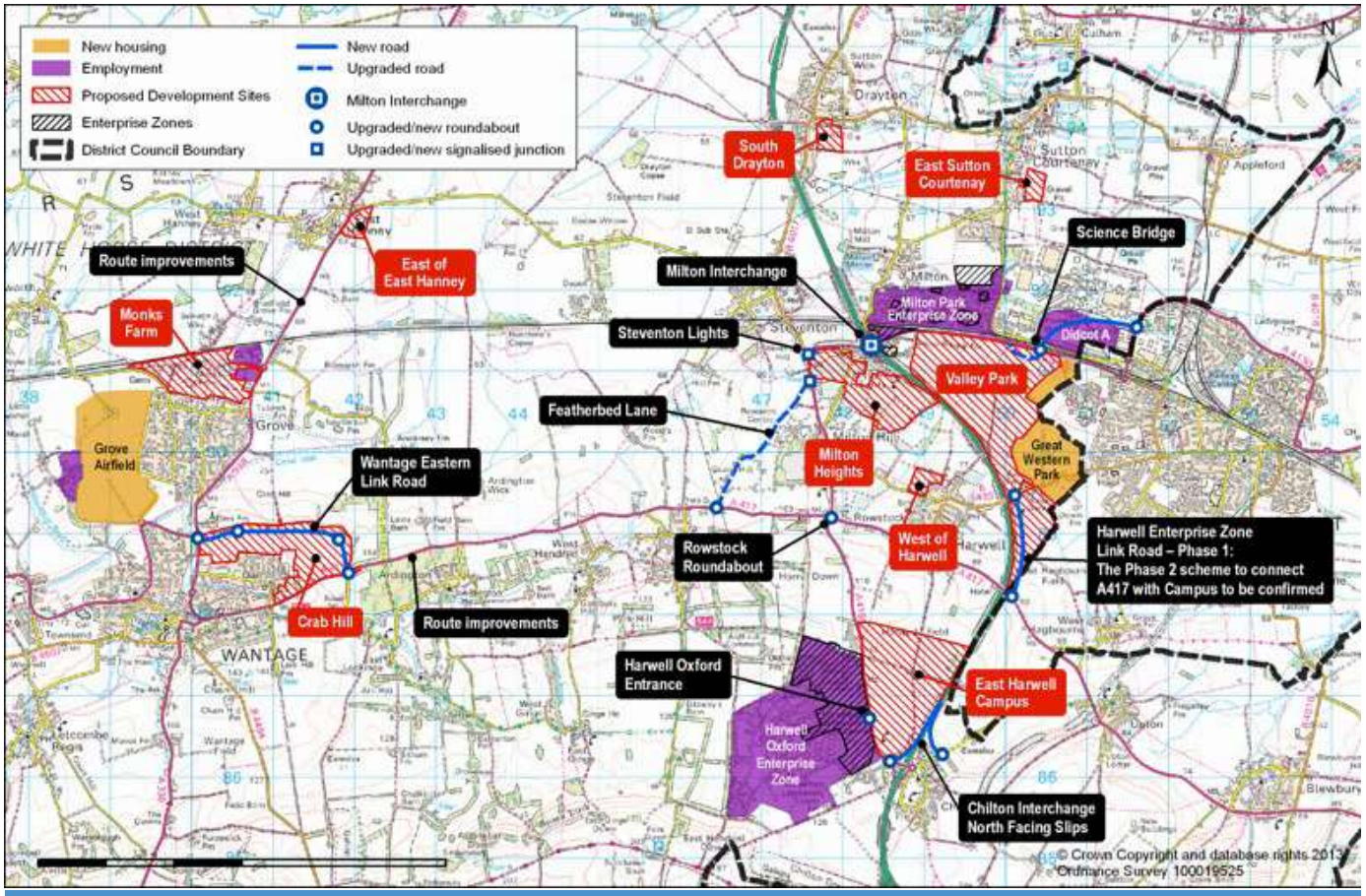
- **Jubilee Way roundabout (Didcot) Improvements:** Enhancements to the junction to provide improved access to Didcot town centre. Works include remodelling of roundabout, creating a through road to remove bottlenecks and a local access junction to the town centre
- **Didcot Science Bridge**: Part of the Didcot power station site has been decommissioned and the site is to be demolished. It is intended to develop the site, primarily for employment use. The redevelopment provides the opportunity to address a seemingly intractable problem of how to mitigate the predicted congestion on the A4130 to the west of Didcot as the housing and employment sites come forward over the next 15 years. A new bridge will be constructed over the railway line to the west of Didcot enabling traffic from the sites to the north to get to the A34 without having to go through the town centre
- **Relief to Rowstock**: The proposed scheme will deliver capacity enhancements at Rowstock Roundabout and carriageway improvements along the A417, including village junction improvements and public transport infrastructure. It will offer improved access from planned housing growth to both Harwell Oxford Campus and Milton Park. Enhancements to the junction will increase its capacity to accommodate planned growth and change in traffic movements.
- **A417 Corridor Improvements (Wantage to Blewbury)**: To improve east-west travel and ensure safe access to/from the villages
- **Access to Culham Science Centre (via B4015**): Congestion is currently experienced on the A415 which provides the main access to the Culham Science Centre and the bridge crossings of the River Thames at Culham and Clifton Hampden are at capacity and present a bottleneck on the road network. This new access could be used by vehicles travelling to and from the north via the A4074 and would remove the need for vehicles to travel through the Clifton Hampden junction and on the A415
- **Cycle Network Enhancements:** A Science Cycleways Network will be introduced linking the main centres within the SV area and also with Abingdon. This will be built to high standards of safety and convenience, ranking with continental best practice. The initial emphasis will be on routes from Didcot station to Milton Park, Harwell campus and Culham Science Centre.

Science Vale Oxford

Didcot Station improvements

A package of measures is sought as part of the Oxfordshire Strategic Economic Plan to enable Didcot station to serve as a strategic railway hub. These are;

- Construction of a deck access car park on the existing Foxhall Road car park as approximately 150 spaces will be lost shortly on the Gateway site opposite the station
- Improved connectivity to enable four stopping trains an hour between Didcot and Oxford
- Additional platform at Didcot to enable north-south trains from Southampton and Birmingham to stop at Didcot
- Underpass to provide access from the North into the station
- Firm plans for direct access to Heathrow as part of the Western Rail Access to Heathrow project without changes at Reading
- Rebuilding of Didcot station to create an appropriate fit for purpose gateway to Science Vale



Science Vale Oxford Package Road Improvements

Science Vale Oxford

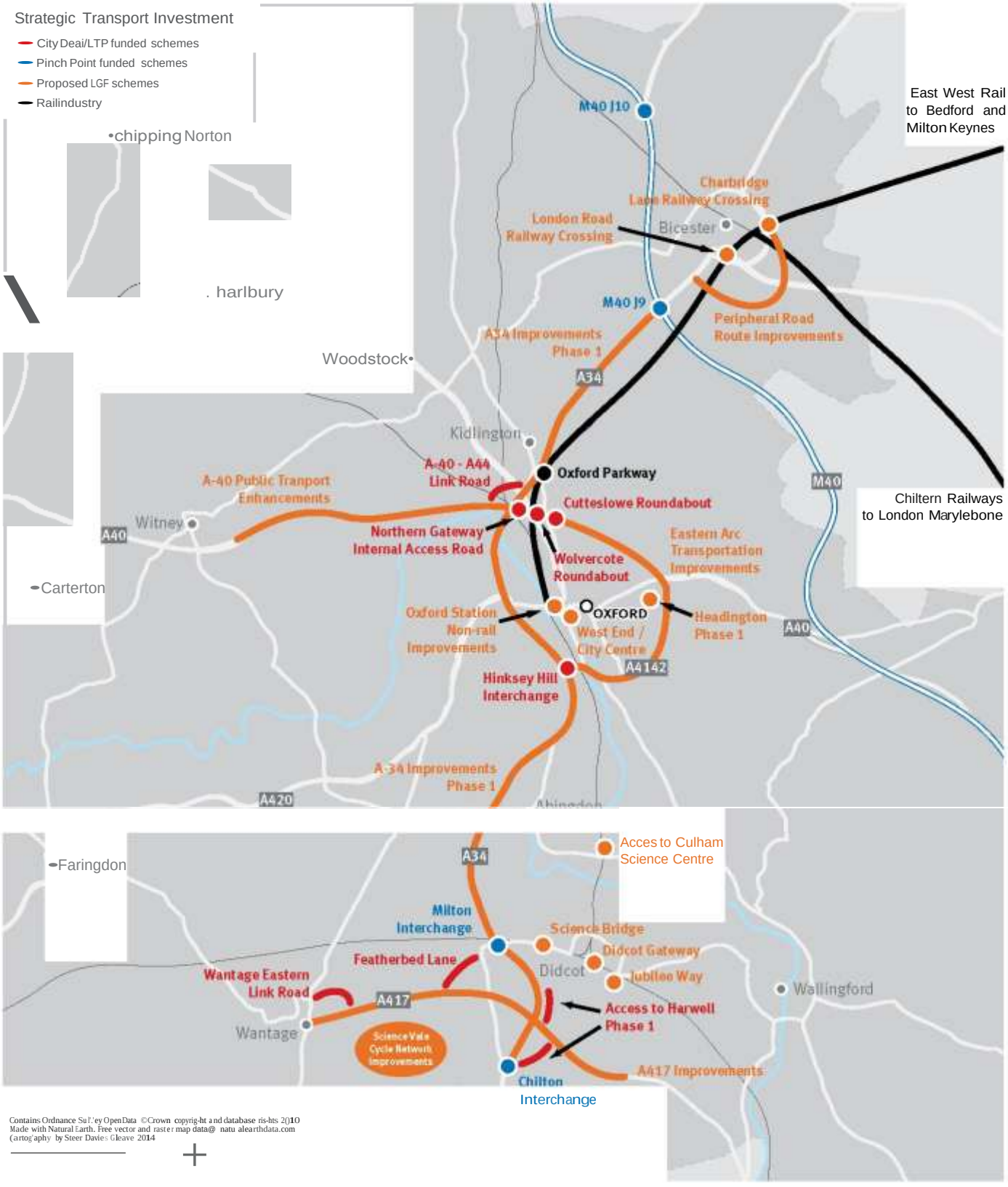
Local Growth Fund Ask, Other Supported Investment

Delivery of these measures depends crucially on dialogue with Network Rail and the Department for Transport so that the measures are built into their forward plans for infrastructure investment and for franchise requirements.

- **Interchange at Didcot with the north-south cross country service**: accompanied as necessary by track reconfiguration

Possible Re-Planning Of Didcot Station And The Surrounding Area

- **Didcot Station Gateway and capacity enhancements:** rebuilding of the station to reflect its enhanced role and patronage in a way which contributes positively to the Didcot realm, with fitting entrances on either side of the line and a new and appealing pedestrian crossing of the line
- **Improved services to Culham Station:** a major enhancement in service levels from Culham Station, enabled by measures to improve track capacity between Oxford and Didcot, and accompanied by improved access to the station from the Culham Science Centre. Culham is served by a station on the line between Didcot and Oxford, with a journey time of only 7 minutes from Didcot. The station was used by 46,000 passengers in 2011/12, three times the number 15 years before. There are however only two trains from Didcot in the six hours in the middle of the day, greatly reducing the value of what should be a significant transport asset. The problem in improving service frequency is the impact of stopping trains on faster ones. This would be cured by upgrading the Oxford-Didcot line from two to four tracks, which would be a major investment. Electrification might offer some amelioration (trains accelerate faster), as would ceasing to stop at Appleford (used by only 9,000 passengers in 2011/12)
- **Grove Station**: safeguarding the re-opening of Grove station as a future option



Committed and Proposed Transport Schemes

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5. Our Local Growth Fund Bid

Summary of Local Growth Fund Bid

Our Strategic Economic Plan will:

- Grow Oxfordshire's world-class, technology clusters leading to a Gross Value Added uplift of c£6.6 billion at constant prices
- Create 85,600 new jobs by 2031 (a 1% increase per annum) compared to 0.8% per annum achieved between 2001 and 2011
- Fulfil our potential as an internationally renowned business, academic and research centre to attract a minimum of 30 new high value international investments per year
- Enable a step change in the delivery of sufficient and sustainable quality housing that is affordable yet attractive to the market, makes innovative use of blue and green infrastructure to enhance our built and natural capital and deliver multiple benefits to our communities
- A minimum of c£2.5 billion private sector investment
- Between 93,560 to 106,560 new homes by 2031
- c£65 million investment to support Superfast (25mb/s +) and Ultrafast (100mb/s+) broadband speeds across the county that support innovative knowledge rich businesses and communities
- c£815 million of highways infrastructure improvements
- Over £500 million rail investment to unlock growth
- Increase the amount of Skills Funding Agency funding that supports our STEM sectors by 15% to better reflect our economic profile
- Increase the proportion of the working age population qualified to level 2 and above to 90%
- Commitment to raising schools' attainment to support access to apprenticeships and training
- An additional 1,150 apprenticeships for young people in our priority and growth sectors
- Grow Oxfordshire's Green Economy and Natural Capital through the development of a Strategic Environmental Economic Plan

Local Growth Fund Proposition

Interim Outputs	GVA to 2030	GVA to 2021
GVA Uplift	6,616,780,260	2,870,635,660
Jobs from construction (one-off)	159,172	69,074
Directly dependent jobs	8,953	8,297
Jobs created	168,125	77,371
Ask	**678,335,000**	**678,335,000**
Indicated funding	6,321,490,000	2,977,880,000
Capex	6,999,825,000	3,656,215,000
Multiplier £Funding : £1 Ask	9.32	4.39
£ Ask per job	8,767	8,767
Capex per job	90,471	47,256
Multiplier £GVA : £1 Ask	4.23	4.23
% Ask funding	9.70%	18.60%
% Other Funding	90.30%	81.40%

Total Strategic Economic Plan Investment

£13/14 prices million	Total LGF Ask 2015 - 2021	Match Funding 2015-2021	Total SEP Planned Investment	LGF 15/16 ask
Innovative Enterprise	275.70	421.60	697.30	**100.38**
Innovative People	26.06	24.28	50.34	**11.05**
Innovative Place	174.66	2,418.19	2,592.85	**19.54**
Innovative Connectivity	201.92	113.81	315.73	**24.14**
Total	**678.34**	**2,977.88**	**3,656.22**	**155.11**

Total Strategic Economic Plan Investment

£13/14 prices million	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total	Local Growth Fund
Innovative Enterprise	52.80	177.80	157.80	91.55	79.30	74.35	63.70	697.30	**275.70**
Innovative People	0.41	18.73	11.27	9.03	6.30	4.30	0.30	50.34	**26.06**
Innovative Place	-	439.86	592.49	486.96	360.71	355.22	357.61	2,592.85	**174.66**
Innovative Connectivity	17.91	48.31	64.06	48.98	51.98	45.50	39.00	315.73	**201.92**
TOTAL	**71.12**	**684.70**	**825.62**	**636.52**	**498.29**	**479.37**	**460.61**	**3,656.22**	**678.34**

Total Strategic Economic Plan Investment - Total Local Growth Fund Ask Funding Profile 2015 to 2021

£13/14 prices million	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Innovative Enterprise	100.38	84.12	33.04	27.23	19.56	11.37	275.70
Innovative People	11.05	6.59	5.08	2.78	0.28	0.28	26.06
Innovative Place	19.54	21.43	24.78	30.72	34.98	43.21	174.66
Innovative Connectivity	24.14	34.69	27.95	35.33	39.47	40.34	201.92
TOTAL	**155.11**	**146.83**	**90.85**	**96.06**	**94.29**	**95.20**	**678.34**

Innovative Enterprise

Schemes	Match Funding	LGF ASK	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total cost	Lead LEP
Begbroke Grow-on Space	**10.00**	**10.00**	-	-	-	-	5.00	5.00	**20.00**	Oxfordshire
Centre for Agritech Development, Begbroke, Oxford	**2.00**	**6.00**	-	-	-	-	3.00	3.00	**8.00**	Oxfordshire
Centre for Applied Superconductivity	**2.01**	**4.49**	0.88	0.88	0.88	0.88	0.97	-	**6.50**	Oxfordshire
Advanced propulsion centre	**5.01**	**4.99**	2.14	1.43	0.71	0.71	-	-	**10.00**	Oxfordshire
Centre in Nanofabrication	**25.00**	**64.00**	16.00	16.00	16.00	16.00	-	-	**89.00**	Oxfordshire
Northern Gateway Innovation Area	**274.68**	**12.02**	2.12	1.98	1.98	1.98	1.98	1.98	**286.70**	Oxfordshire
Sustainable Energy Research and Innovation Facility	**7.00**	**28.00**	14.00	14.00	-	-	-	-	**35.00**	Oxfordshire
Research Village at Harwell	**16.00**	**64.00**	32.00	32.00	-	-	-	-	**80.00**	Oxfordshire
Industrial Applications Facility for Extreme Light	**4.00**	**16.00**	4.00	4.00	4.00	4.00	-	-	**20.00**	Oxfordshire
National Science Centre	**12.50**	**12.50**	12.50	-	-	-	-	-	**25.00**	Oxfordshire
Clinical BioManufacturing Centre	**3.00**	**3.00**	3.00	-	-	-	-	-	**6.00**	Oxfordshire
Innovation e-infrastructure	**31.01**	**20.99**	8.51	8.51	3.97	-	-	-	**52.00**	Oxfordshire
Collections Research Centre	**9.00**	**9.00**	3.00	3.00	3.00	-	-	-	**18.00**	Oxfordshire
Tourism Network Enhancements	**0.50**	**0.50**	0.13	0.13	0.12	0.12	-	-	**1.00**	Oxfordshire
Centre for 5G telecommunications and its applications	**9.00**	**2.00**	0.55	0.55	0.55	0.35	-	-	**11.00**	Enterprise M3
OXYBELES - Smart Solutions Hub	**3.29**	**11.01**	0.19	0.43	0.62	1.98	7.40	0.39	**14.30**	Oxfordshire
Oxfordshire Support for Export	**1.60**	**1.20**	0.36	0.21	0.21	0.21	0.21	-	**2.80**	Oxfordshire
Oxfordshire Support for Innovation	**4.50**	**4.50**	0.75	0.75	0.75	0.75	0.75	0.75	**9.00**	Oxfordshire
Oxfordshire Support for Business	**1.50**	**1.50**	0.25	0.25	0.25	0.25	0.25	0.25	**3.00**	Oxfordshire

Innovative Enterprise

Description	Outputs
Provision of flexible, mixed-occupancy space, for use as laboratories, offices or workshops, to support the demand for commercial tenancy from existing companies at Begbroke who wish to remain close to the knowledge base and new technology companies arising in the county. It will provide a facility whereby business funded research can be co-located with academic research and the facilities on the science park.	72 direct jobs, £2.8m GVA
New plant growth facilities at the Begbroke Science Park to provide key resources to engage effectively with the Agri-Biotech industrial community.	29 direct jobs, £1.152m GVA
A Centre for Applied Superconductivity to coordinate the interaction between industry (Oxford Instruments, Siemens Magnet Technology, Agilent Technologies etc), Oxford University, cryogenics companies, and end users (including SMEs) on the Harwell and Culham Centre for Fusion Research Campus.	23 direct jobs, £0.936m GVA
Oxfordshire's part of the recently announced UK £1 billion "Advanced Propulsion Centre" and initiative now being completed across the UK by BIS's Automotive Council. Oxfordshire proposes to base its spoke on the internationally recognised research it undertakes in the three technology areas of internal combustion engines, energy storage and electrical machines and power electronics.	36 direct jobs, £1.44m GVA
Develop and provide a 1000m^2 nanofabrication facility in collaboration with Samsung in Oxford. Such a centre would be utilised by world leading physical scientists from the departments of Engineering, Materials, and Physics.	320 direct jobs, £12.816m GVA
Businesses: co-location of new and growing business in knowledge based industries in a high-quality working environment. Close links to Universities and hospitals. Residents: balanced mix of modern new homes with access to community facilities and open spaces make this a desirable place to live.	1678 direct jobs, £67.104 GVA
Creation of a sustainable energy research facility to produce and test alternatives to fossil fuels for transportation and combined heat and power applications.	126 direct jobs, £5.04m GVA
Offering short and long term spaces and amenities to facilitate interaction between visiting scientists.	288 direct jobs, £11m GVA
An international "first of a kind" dedicated facility for high power lasers that would offer unique and bespoke capabilities to UK industry for non-destructive testing applications.	72 direct jobs, £2.88m GVA
The first national science centre in the UK engaging and enthusing the next generation of scientists and engineers about science through the provision of an unforgettable journey through science, technology and discovery.	90 direct jobs, £3.6m GVA
Clinical BioManufacturing provides links between academic reserch and drug development, supporting the transition from science to technolgy and technology to application. Extension of cleanroom capacity.	22 direct jobs, £0.864m GVA
Support for a national infrastructure investment by making connected investments to enable the foundation of a Turing Institute, a Big Data Analytics centre, and one industry on-ramp (in life sciences) to build on existing data strengths including financial services, health data and satellite applications.	187 direct jobs, £7.488m GVA
Support for the cultural heritage industry by providing access to Oxford museums' artifacts and expertise by creating a shared Research and Study Centre to house research collections not on public display with facilities for research, teaching, conservation and digitisation.	65 direct jobs, £2.592m GVA
Generate new visitor spend from high growth, high value markets in; Business Tourism Development by improving awareness of Oxford as a conference destination, undertaking destination business tourism marketing, and Consumer Tourism Development.	4 direct jobs, £0.144m GVA
The GTV6 intends to support the world-leading 5G Innovation Centre at the University of Surrey University, based in Enterprise M3 LEP area. This will enable the Greater Thames Valley to be the first to exploit the new opportunities that 5G will offer.	40 direct jobs, £1.584m GVA
Development of a local "catapult" or OXybeles to provide a central point through which local authorities can develop partnerships with Universities and business to develop innovative transport led approaches and technology that enhance services, manage infrastructure more efficiently and provide a basis for local business to address problems thus reducing burden on public sector finances.	62 direct jobs, £2.491m GVA
Developing Oxfordshire Business Support Hub to deliver the Oxfordshire Support for Export programme aimed at increasing to 7,500 the number of businesses that trade internationally in line with governments export growth ambition.	10 direct jobs, £0.403m GVA
Developing an easy to understand and access co-ordinated finance programme that invests to drive growth in our SME businesses.	32 direct jobs, £1.296m GVA
Developing Oxfordshire Business Support Hub to deliver the Oxfordshire Support for Business programme – a holistic package of business support packaged under a single brand that drives growth in innovative, new and established business, especially those with the highest growth potential.	14 direct jobs, £0.432m GVA

Innovative People

Schemes	Match Funding	LGF ASK	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total cost	Lead LEP
Improved facilities for adult learning at Headington and Cowley	**-**	**0.16**	0.16	-	-	-	-	-	**0.16**	Oxfordshire
Oxfordshire Centre for Technology and Innovation	**3.10**	**3.60**	3.60	-	-	-	-	-	**6.70**	Oxfordshire
Activate Care Suite	**0.50**	**0.40**	0.14	0.13	0.13	-	-	-	**0.90**	Oxfordshire
Cloud & Digital Connectivity Zone	**-**	**1.02**	0.34	0.34	0.34	-	-	-	**1.02**	Oxfordshire
City Centre for Conferencing and Leisure Training	**0.06**	**3.94**	1.32	1.31	1.31	-	-	-	**4.00**	Oxfordshire
Harwell Oxford Education and Training hub - AMSCI bid	**2.00**	**10.00**	2.50	2.50	2.50	2.50	-	-	**12.00**	Oxfordshire
Advanced Engineering and Technology Skills Centre (ASC)	**1.90**	**4.00**	1.45	2.03	0.52	-	-	-	**5.90**	Oxfordshire
Animal Husbandry Centre (AHC)	**0.50**	**1.00**	1.00	-	-	-	-	-	**1.50**	Oxfordshire
Health Ecosystems Marketplace	**0.12**	**0.24**	0.24	-	-	-	-	-	**0.36**	Oxfordshire
Countryside Skills for the future	**0.10**	**1.70**	0.57	1.13	-	-	-	-	**1.80**	Oxfordshire
Bicester and Banbury College	-	-	-	-	-	-	-	-	-	South East Midlands

Innovative People

Description	Outputs
A package of transport schemes to support the Bioescalator element of the City Deal package.	1 direct job, £0.023m GVA
Development of a Technology and Innovation Training Centre in Oxford - co-location of engineering, electrical, design, innovation with emerging Technology, co-located to deliver the local LEP and STEM agenda.	24 direct jobs, £0.965m GVA
Growth of new entrants into the care industry supported by an exemplar industry standard innovative teaching and support facility.	3 direct jobs, £0.130m GVA
Brings together business and potential employees in an environment bristling with technology. It will deliver large volumes of trained people into all sectors enabling them to be more efficient in their day to day business through virtualisation.	4 direct jobs, £0.147m GVA
Creation of a unique business, leisure and employability training complex in the heart of the city focused on focuses on building the volume of skilled employees across the hospitality sector to enable businesses to respond to the increased tourist, business and retail visitors as a result of the future redevelopment in Oxford.	14 direct jobs, £0.576m GVA
A value network comprising of primes and SMEs, training providers, the, STFC, the Universities of Oxford, Surrey and the Open University, and the SSC Semta to lead the creation of this space curriculum and the associated skills infrastructure. with strategic support from the Satellite Applications Catapult.	43 direct jobs, £1.728m GVA
Contributes to addressing local, regional and national skills shortages in STEM subject areas by supplying skilled technicians at Harwell Oxford and elsewhere in Oxfordshire; and deploying the unique expertise and facilities available at and around Harwell Oxford as a learning resource for the rest of the UK, Europe and the world.	21 direct jobs, £0.850m GVA
Addressing local skills shortages in animal husbandry and supporting the sustainability of rural enterprises in Oxfordshire by supplying skilled animal husbandry technicians in Oxfordshire and developing a database of sustainable animal husbandry techniques.	5 direct jobs, £0.216m GVA
A world-class online Health Ecosystems marketplace for nature-based organisations to sell their projects, and the health and social sector to buy them – creating value in two sectors.	1 direct job, £0.052m GVA
The Earth Trust reconnects people with their environment and encourages sustainable living, enhancing people's quality of life as well as their environment offering a range of opportunities for people to learn and improve their skills whatever their age and backgrounds.	6 direct jobs, £0.259m GVA
A new build on the south side of Broughton Road will enable the introduction of a new vocational curriculum and the expansion of an existing curriculum to meet growing demand and deliver essential vocational skills development to support economic growth. The scheme will provide essential facilities from which to deliver emerging construction, engineering and the key sector skills development demanded to sustain economic growth; reduce NEETS and develop a skilled and entrepreneurial workforce.	

Innovative Place

Schemes	Match Funding	LGF ASK	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total cost	Lead LEP
Westgate Knowledge & Skills Exchange Centre	**395.00**	**5.00**	1.25	2.50	1.25	-	-	-	**400.00**	Oxfordshire
Upstream flood storage at Northway centre playing field and Court Place Farm Park	**1.30**	**0.60**	0.60	-	-	-	-	-	**1.90**	Oxfordshire
Oxford Station Gateway	**32.00**	**40.00**	-	-	4.44	4.44	15.56	15.56	**72.00**	Oxfordshire
Housing City - HRA	**61.00**	**60.00**	14.88	14.88	14.88	15.36	-	-	**121.00**	Oxfordshire
Didcot Station Building Enhancements	**23.00**	**2.00**	0.04	0.04	0.12	0.24	0.96	0.60	**25.00**	Oxfordshire
Didcot Town Centre Knowledge & Skills Exchange Centre	**116.00**	**4.00**	0.17	2.00	1.50	0.33	-	-	**120.00**	Oxfordshire
Oxfordshire Flood Risk Management Scheme	**62.50**	**62.50**	2.49	1.87	2.49	10.25	18.35	27.05	**125.00**	Oxfordshire
Country Houses Project	**-**	**0.56**	0.11	0.14	0.10	0.10	0.11	-	**0.56**	Oxfordshire

Innovative Place

Description	Outputs
Aims to improve awareness of the opportunities available in the local economy from the Westgate investment by providing advice and guidance to those wanting to benefit from the investment in the Westgate centre –whether this is skills development of business opportunities. But research plays a crucial role in informing the development of new ideas, practices and business models and in building entrepreneurial capacity.	3500 direct jobs, 600 jobs supported by construction, £140m GVA.
Flood relief scheme in Oxford City to protect 279 residential properties at significant risk of flooding.	54 jobs supported by construction, £2.166m GVA
Improved station and interchange facilities to provide an exemplary gateway into Oxford City centre including the Oxford station area, forecourt and Becket Street car park.	3420 jobs supported by construction, £136.8m GVA
Raise the Oxford City Housing Revenue Account debt cap by £121m over 10 years.	3449 jobs supported by construction, £137.94m GVA
A package of measures to enable Didcot station to serve as a strategic railway hub.	713 jobs supported by construction, £28.5m GVA, 14000 houses
Didcot town centre redevelopment includeing a Culture, Knowledge and Skills Exchange Centre where experts will help the community access organised information and culture for employment and enjoyment.	2100 direct jobs, 400 jobs supported by construction, £16m GVA
The Flood Risk Management Strategy identifies critical pieces of enabling infrastructure that will keep the City's key transport links clear, businesses open.	3563 jobs supported by construction, £142.5m GVA
Enhance Oxfordshire's cultural 'offer' being part and parcel of attracting innovation, as well as growing tourism by making use of the region's cultural assets by strengthening collaborations between the Universities and the Thames Valleys Country Houses.	5 direct jobs, 16 jobs supported by construction, £0.633m GVA

Innovative Connectivity

Schemes	Match Funding	LGF ASK	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Total cost	Lead LEP
Bicester Charbridge Lane Railway crossing	**1.25**	**7.50**	3.75	3.75	-	-	-	-	**8.75**	Oxfordshire
Bicester improvements to peripheral routes	**12.50**	**22.50**	3.21	-	-	-	6.43	12.86	**35.00**	Oxfordshire
Bicester London Road - Level Crossing - phase 1 Cycle/Ped Crossing	**2.30**	**1.30**	0.83	0.47	-	-	-	-	**3.60**	Oxfordshire
Bicester - Pedestrian/Cyclist Connectivity	**2.40**	**2.00**	0.36	0.36	0.36	0.92	-	-	**4.40**	Oxfordshire
Headington Phase 1	**1.30**	**3.20**	0.96	1.39	0.85	-	-	-	**4.50**	Oxfordshire
Eastern Arc Transport Improvements	**3.00**	**5.00**	-	3.12	1.88	-	-	-	**8.00**	Oxfordshire
Oxford City Transport - West End	**4.20**	**4.60**	2.72	0.94	0.94	-	-	-	**8.80**	Oxfordshire
Oxpens pedestrian and cycle bridge	**0.40**	**3.60**	-	3.60	-	-	-	-	**4.00**	Oxfordshire
Didcot Station Car Park Expansion (Foxhall Rd)	**13.50**	**9.50**	0.62	8.88	-	-	-	-	**23.00**	Oxfordshire
Science Vale Cycle Network Improvements	**0.39**	**4.52**	0.84	2.76	0.92	-	-	-	**4.91**	Oxfordshire
New access road to Culham Science Centre via B4015	**1.00**	**12.00**	-	-	-	1.38	2.77	7.85	**13.00**	Oxfordshire
Didcot Station Additional Platforms	**10.30**	**-**	-	-	-	-	-	-	**10.30**	Oxfordshire
Didcot Station Northern Entrance	**5.00**	**13.00**	-	-	-	0.36	4.33	8.31	**18.00**	Oxfordshire
Didcot Jubilee Way improvement schemes	**3.25**	**3.25**	-	-	-	0.25	1.00	2.00	**6.50**	Oxfordshire
Didcot Science Bridge	**15.00**	**19.90**	1.14	1.65	2.85	7.13	6.56	0.57	**34.90**	Oxfordshire
Access to EZ - A417 improvements	**1.00**	**3.00**	-	1.35	1.65	-	-	-	**4.00**	Oxfordshire
Wantage Eastern Link Road	**14.00**	**-**	-	-	-	-	-	-	**14.00**	Oxfordshire
Countywide Superfast Broadband	**40.00**	**25.00**	9.71	3.16	4.85	7.28	-	-	**65.00**	Oxfordshire
Improving access to Carterton & RAF Brize Norton	**0.22**	**5.73**	-	-	2.87	2.86	-	-	**5.95**	Oxfordshire
A34 improvements Phase 1 (Including Seacourt P&R)	**2.30**	**21.32**	-	3.26	9.03	9.03	-	-	**23.62**	Oxfordshire
Oxford Science Transit Phase 2 - A40 Public Transport improvements	**5.00**	**35.00**	-	-	1.75	6.12	18.38	8.75	**40.00**	Oxfordshire

Innovative Connectivity

Description	Outputs
Grade separation of railway crossings for the new East West Rail services to reduce the impacts of crossing closures on the highway network.	249 jobs supported by construction, £9.975m GVA
Capacity improvements to the Bicester peripheral routes to support employment and longer distance traffic and reducing the strain on the town centre and central corridor.	998 jobs supported by construction, £39.9m GVA
Grade separation of railway crossings for the new East West Rail services to reduce the impacts of crossing closures on the highway network. Phase 1 is a bridge for non-car modes.	125 jobs supported by construction, £5.016m GVA
Walking and Cycling Connectivity project lays the foundation of upgrading the network across Bicester to allow the new developments to access into a high standard non-motorised transport network. This scheme will be important in supporting the Bicester Eco-town ambitions.	100 jobs supported by construction, £3.99m GVA, 11000 houses
Package of transport schemes to Access to Science, Health and Innovation is an essential element to supporting the Bioescalator element of the City Deal package.	128 jobs supported by construction, £5.130m GVA, 800 houses
A package of transport measures to improve the highway network in the Eastern Arc – facilitating development in the Headington/East Oxford area to key healthcare, business park and manufacturing sites in Cowley close to the Ring Road.	228 jobs supported by construction, £9.120m GVA
Transport improvements to support the regeneration of Oxford's West End which is an ambitious project set to revitalise the western quarter of the city centre, creating an environment that properly reflects the area's historic and social value.	251 jobs supported by construction, £10.032m GVA
Construction of bridges across the River Thames for cyclists and pedestrians at Jackdaw Lane and at the Oxpens site to improve access to the West End and wider City centre from the east and accelerate the regeneration of the West End and Oxpens.	114 jobs supported by construction, £4.560m GVA
Packages of measures for car park expansion including construction of a deck access car park on the existing Foxhall Road car park as approximately 150 spaces will be lost shortly on the Gateway site opposite the station.	656 jobs supported by construction, £26.220m GVA, 14000 houses
A Science Cycleways Network linking the main centres within the Science Vale area and also with Abingdon. The initial emphasis will be on routes from Didcot station to Milton Park, Harwell campus and Culham Science Centre.	140 jobs supported by construction, £5.597m GVA
New access to avoid vehicles travelling through the Clifton Hampden junction and on the A415.	570 jobs supported by construction, £22.8m GVA
New northern entrace and access for Didcot Station.	294 jobs supported by construction, £11.742m GVA, 14000 houses
Remodelling of Jubilee Way roundabout, creating a through road to remove bottlenecks and a local access junction to the town centre.	513 jobs supported by construction, £20.52m GVA, 14000 houses
A new bridge will be constructed over the railway line to the west of Didcot enabling traffic from the sites to the north to get to the A34 without having to go through the town centre.	185 jobs supported by construction, £7.410m GVA, 14000 houses
A link road from A4130 east of Milton Interchange to the A417 providing improved access from Harwell SIC to the strategic road network and improving connections between settlements in the Science Vale UK area.	995 jobs supported by construction, £39.786m GVA
Further investment in Oxfordshire's supefast broadband network.	114 jobs supported by construction, £4.560m GVA, 14000 houses
Improving the capacity and alignment of the B4477 to provide a single primary route into Carterton and RAF Brize Norton from the east and implementing an off carriageway cycle route on the B4477 to provide a cycleway from Witney to Carterton/RAF Brize Norton to enable safer cycling.	399 jobs supported by construction, £15.960m GVA
A series of shirt term sollutions to be delivered in advance of the longer term works by the Highways Agency for the A34. Provision of increased capacity at Seacourt Park and Ride to intercept journeys into Oxford, while linking into existing study looking at the future potential for new P&R sites in Oxfordshire.	1853 jobs supported by construction, £74.1m GVA
Enhancements to the A40 strategic route between Oxford, Northern Gateway and Witney. This schemes will provide direct support in delivery of 3,000 homes around Witney that rely on the A40 as well as supporting the Northern Gateway development and direct access to 5,000 jobs at this site from West Oxfordshire.	170 jobs supported by construction, £6.783m GVA, 1850 houses
The A34 RBS solution assessment proposed early solutions that can go through full feasibility and design within the next 1 – 5 years, we have included an ask to use Local Growth Fund support to deliver these quick win solutions ahead of HA funding arrangements being developed for the route.	673 jobs supported by construction, £26.927m GVA
City Deal investment will kick-start the Oxford Science Transit proposals. The aim of the Local Growth Fund support will be to expand science transit and support the linkages into the knowledge spine	1140 jobs supported by construction, £45.6m GVA, 800 houses

6. Development of Our Strategic Economic Plan

Our Approach

We recognise that the political, economic, technological, environmental and social drivers of change affecting all parts of Oxfordshire are such that any strategy will inevitably be overtaken by changing circumstances as unexpected opportunities and barriers arise. The aim of the strategy therefore is to provide the basis for on-going responses to those changes based on good data, sound analysis and reflection leading to increased capacity of the entire economic ecosystem.

Our approach is underpinned by the following values:

- Using clear analysis of prevailing socio-economic conditions and opportunities for medium and long term growth and development to substantiate what we plan to do;
- Seeking to integrate all the different strands of planning, action, and funding initiatives, programmes and strategies, with the intention of complementing and adding value to those with the strongest growth and employment potential;
- Concentration and targeting of funds to those areas and sectors with the greatest potential for delivering better value to the public purse; and
- Contributing to the conservation and enhancement of the natural environmental assets of the county, with a focus on identifying and supporting innovation based responses to environmental challenges and opportunities to support transition to a low carbon economy.

Smart Specialisation

Smart Specialisation is a strategic approach to economic development through targeted support to Research and Innovation (R&I). It will be the basis for European Structural and Investment Fund interventions in R&I as part of the future Regional and Cohesion Policy's contribution to the Europe 2020 jobs and growth agenda.

More generally, smart specialisation involves a process of developing a vision, identifying competitive advantage, setting strategic priorities and making use of smart policies to maximise the knowledge-based development potential of any region, strong or weak, high-tech or low-tech. Smart Specialisation therefore has been at the forefront of the development of our Strategic Economic Plan.

Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth

The purpose of the Witty Review[36] was to focus on how universities can drive growth in their areas and for the benefit of the wider UK and to disseminate knowledge and best practice.

Given the significant strength of Oxfordshire's university offer, the review and its recommendations are particularly pertinent to Oxfordshire and have strong implications for local and sub-regional economic development. The review supports the 'innovation led growth' focus and approach to our Strategic Economic Plan.

Government Policy

The development of our Strategic Economic Plan has taken into consideration government policy on economic growth, Lord Heseltine's Review 'No Stone Unturned' and a number of influential reviews that have shaped our evidence base and the range of interventions. In developing our evidence base we have taken into account the government's Plan for Growth and Industrial Strategy which identifies a number of key sectors on which it will focus to encourage business competitiveness.

In particular, the development of our Strategic Economic Plan, through the review of our opportunities and challenges, specifically identifies areas, and subsequent identification of schemes, which relate to the Plan's ambitions and measurable benchmarks:

- Improving the UK's ranking in major international indices of competitiveness
- More finance for start-ups and business expansion
- An increase in the proportion of planning applications approved and dealt with on time
- Ensure the UK remains one of the top destinations for foreign direct investment (FDI)
- An increase in exports to key target markets
- An increase in private sector employment
- Increased investment in low carbon technologies
- Supporting more apprenticeships than any previous government
- Home to more of the world's top universities than any other country except the USA
- An increase in the participation of 16-24 year olds in employment or learning
- Narrowing the educational attainment gap, allowing everyone to meet their potential

The Government's Industrial Strategy to a large extent mirrors the sectors that we have identified as key drivers for delivering economic growth across Oxfordshire including advanced manufacturing: aerospace, automotive and life sciences and knowledge intensive traded services, including professional and business services, the information economy and traded aspects of higher and further education.

Economic Forecasting

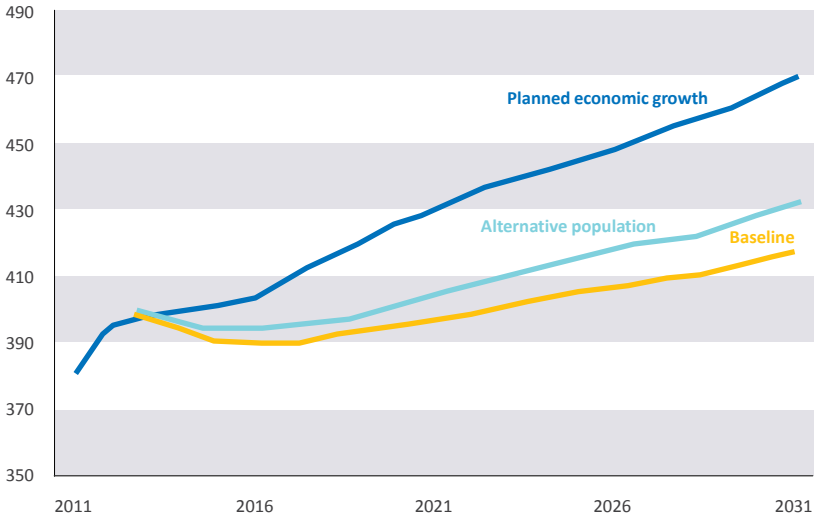
We are committed to ensuring that our current assets and successes are enhanced further and all partners are committed to delivering what is needed to enable our potential to be delivered. To do this we have undertaken work to quantify what and where our potential is to help develop effective strategies that enable the delivery of above trend growth in a targeted way that provides the best value for money.

Our economic forecasting report[25] was commissioned to analyse our economic potential given the investments that are taking place in the county and to inform the Strategic Economic Plan. It identifies that Oxfordshire is already above regional trends in many sectors and demonstrates that our economic growth baseline will continue to obtain higher growth rates per annum than the South East and national averages to 2031 (Oxfordshire 0.8%p/a, South East and UK both 0.7%p/a). The report identifies that 'Financial and Business services', which includes many of the knowledge based, high technology industries, is the key sector where Oxfordshire is above regional and UK trends.

The baseline forecasts suggest that if historical trends in the relative growth performance of the Oxfordshire economy

were to continue, employment in the county would increase by 36,400 jobs by 2031 (approximately 0.4% p/a growth between 2011-2031.

The report also assessed a 'Planned Economic growth scenario' which considered influences on economic growth such as proposals relating to the Science Vale Oxford Enterprise Zone, Oxfordshire City Deal, NW Bicester Eco Town and other planned infrastructure investment. This showed that Oxfordshire has significant additional potential above its already strong trends for growth in key sectors due to the unique opportunities on offer for growth in Oxfordshire. The Planned Economic Growth Scenario suggests that a further 25,000 direct jobs and 10,000 indirect jobs could be created in the county by 2031. This would mean a total increase in employment of around 80,000 over 2011-31, or 4,000 pa (1% pa). This compares with growth of around 3,000 pa (0.8% pa) seen over 2001-11. Sustained employment growth of 1% pa over a 20 year period would be an achievement, especially in the current economic environment, but is by no means unprecedented. Two thirds of the additional growth is expected to be in the period to 2020, largely because this reflects the impact of investments that are currently at planning or implementation stages. It is assumed that other investment including those outlined in this plan will come forward over the next 10 years and may boost expectations for growth in the period 2020-30.



Oxfordshire Employment Growth Forecasts

The Planned Economic Growth analysis directly relates to specific development assumptions and is therefore directly related to specific geographical locations and employment sectors within Oxfordshire.

Growth Plan Development

In the summer of 2013 the Oxfordshire Local Enterprise Partnership established a Steering Group to drive the preparation of the Strategic Economic Plan. This Steering Group grew out of a similar grouping brought together for the purposes of developing the successful Oxfordshire City Deal.

The Steering Group is made up of a wide range of local partners with a breadth of experience of the economic, social and environmental issues, challenges and opportunities in Oxfordshire. In particular the Steering Group comprises representatives from:

- All six local authorities in Oxfordshire
- Oxford University an Oxford Brookes University
- Federation of Small Businesses and the Institute of Directors
- Oxfordshire Local Nature Partnership and the Earth Trust
- Oxfordshire Community for Voluntary Action and the Oxfordshire Rural Community Council
- Environment Agency
- Ministry of Defence
- Trades Union Congress and the National Farmers Union

- Homes and Communities Agency
- Oxfordshire Skills Board
- Southern Oxfordshire Local Action Group
- Experience Oxfordshire
- Oxfordshire Rural Community Council
- Science and Technology Facilities Council

The agreed Terms of Reference for the group includes:

- Acting as a catalyst for their 'theme' by consulting with partners and stakeholders in order to reflect their views into discussions at key stages in the preparation of the Oxfordshire Strategic Economic Plan
- Providing data and other evidence as appropriate to underpin the emerging Strategic Economic Plan proposals
- Agreeing a list of projects to be included
- Contributing to the development of the Strategic Economic Plan document

Other Initiatives to inform the development of the Strategic Economic Plan

The Strategic Economic Plan Steering Group agreed to hold a Local Environment & Economic Development (LEED) toolkit workshop. Defra are encouraging all LEPs to undertake a suite of three LEED toolkit workshops to aid LEPs to understand the environment in their areas, and the challenges and opportunities presented by environmental assets in helping to grow the local economy. The Oxfordshire LEP held the first of three workshops in February. The remaining two workshops will be held in the spring and summer with the aim of engaging more partners from Oxfordshire's many and diverse environmental and community groups, including Low Carbon Oxford and the network of Community Action Groups (CAGs).

The Oxfordshire Skills Board brings together a wide range of public and private employers, secondary, further and higher education skills providers and stakeholder groups. Working closely with the Oxfordshire Local Enterprise Partnership, Oxfordshire Skills Board is driven to achieve improvements in the skills available to the county's employers and the learning opportunities available to students, residents and workforce. The work of the Oxfordshire Skills Board moving forward is guided by the Oxfordshire Skills Strategy.

The Oxfordshire Spatial Planning & Infrastructure Partnership (SPIP) includes senior officers and members from all six local authorities in Oxfordshire, together with representatives from the Homes and Communities Agency (HCA), and the Local Transport Board. The purpose of SPIP is to provide a forum where strategic planning and infrastructure development can be considered within the context of the responsibilities of the lower tier local authorities' for Local Plan preparation and development control, and the county councils duties as Highways Authority. Recently, SPIP has commissioned the Oxfordshire Strategic Housing Market Assessment which informs the Strategic Economic Plan in terms of housing and economic growth up to 2013.

Scheme Identification and Assessment Process

Scheme Identification

As part of the development of the Strategic Economic Plan a list of projects was assembled that would underpin the interventions identified from the analysis of the evidence base as being required to

enable growth. The list was sourced from businesses in Oxfordshire, local authorities and universities and overseen by the Steering Group.

For each project, a template was completed which contained information about the scheme which included:

- Identified problems – what issue the scheme was aimed at resolving to enable alignment with the challenges and opportunities identified in the growth plan
- Rating 1 to 5 against:
  - » economic growth (RED-AMBER-GREEN (R-A-G) score against connectivity, resilience, reliability, delivery)
  - » carbon emissions (R-A-G score against activity, carbon use, embedded carbon, efficiency)
  - » socio-distributional impacts (R-A-G score against SDIs, regeneration, regional imbalance and economic growth)
  - » local environment (R-A-G score against air quality, natural environment, noise, urban environment)
  - » well-being (R-A-G score against severance, injuries, access, physical activity, crime, resilience)
  - » value for Money (expected Benefit to Cost ratio for transport schemes).
  - » scale of impact
  - » fit with transport objectives (for transport schemes)
  - » fit with other objectives
  - » degree of consensus
  - » cost risk
  - » affordability
  - » feasibility
  - » acceptability
  - » quality of evidence
  - » deliverability
  - » flexibility

Scheme Assessment and Short-listing

A key consideration in the development of the growth programme is the extent to which the identified scheme could be delivered within the available funding timescales. A first stage scheme assessment was based on a 'hurdle' of whether the schemes could be delivered in the timescales of the Strategic Economic Plan. Schemes were allocated in to one of 5 phases:

- Phase 1: 2014 to 15
- Phase 2: 2015 to 18
- Phase 3: 2018 to 20
- Phase 4: 2021 to 25
- Phase 5: 2025+

The next consideration was to the extent to which the schemes contributed to economic growth, including the provision of development and new employment.

We have used the DfT's 'Transport Business Case' approach to support prioritisation of schemes and utilised the Early Assessment Sifting Tool (EAST) to assess information received for each scheme submitted which was assessed against the 'Transport Business Case' criteria on a R-A-G basis.

This assessment, against the context of our vision and objectives, has led to the development of our Programme for Growth.

7. Governance and Management

Governance

The LEP's role is to set strategic priorities and direction for the Oxfordshire economy as articulated in this Strategic Economic Plan.

As well as sitting on the LEP local authorities will come together as a new Growth Board to deliver the key local authority functions needed to achieve priorities as set out in this document. This will include marshalling resources to support the necessary infrastructure for growth across housing, transport and skills.

Oxfordshire Growth Board

The Growth Board will formally function as a joint statutory committee enabling local authority powers and functions to be vested within a democratically accountable structure. The Oxfordshire Growth Board will include all Oxfordshire local authorities within the Oxfordshire LEP area, namely:

- Cherwell District Council.
- Oxford City Council.
- Oxfordshire County Council.
- South Oxfordshire District Council.
- Vale of the White Horse District Council.
- West Oxfordshire District Council.

The Oxfordshire Growth Board will bring together and subsume existing Spatial Planning and Infrastructure Partnership (SPIP) and Local Transport Board (LTB) functions. The Board will play a key role in ensuring delivery of the Oxfordshire City Deal, the Strategic Economic Plan and Local Transport Board priorities within agreed government timescales, including specific project priorities, plans and programmes; and to represent the interests of the constituent authorities when taking these investment decisions.

A Joint Statutory Committee is an established governance model for joint arrangements between two or more local authorities. The power to establish these is conferred on local authorities by section 101 of the Local Government Act 1972 and such a committee can exercise any functions delegated by the authorities in membership.

Membership

The Local Authorities will invest powers in the Board (Joint Committee) by virtue of representative membership; the Board will comprise 6 local authority and 6 private sector representatives drawn from the wider Local Enterprise Partnership Board membership including the Chairman, universities, research institutions and private sector business.

The Board (Joint Committee) will be chaired on a rotational basis by a Local Authority Leader. The Board (Joint Committee) will ensure that decisions relating to the implementation of this proposal are binding on all parties, thereby bringing confidence to Government and the business community more widely that its ambitions will be delivered. The work of the Board (Joint Committee) will be subject to public scrutiny and transparency.

Terms of Reference

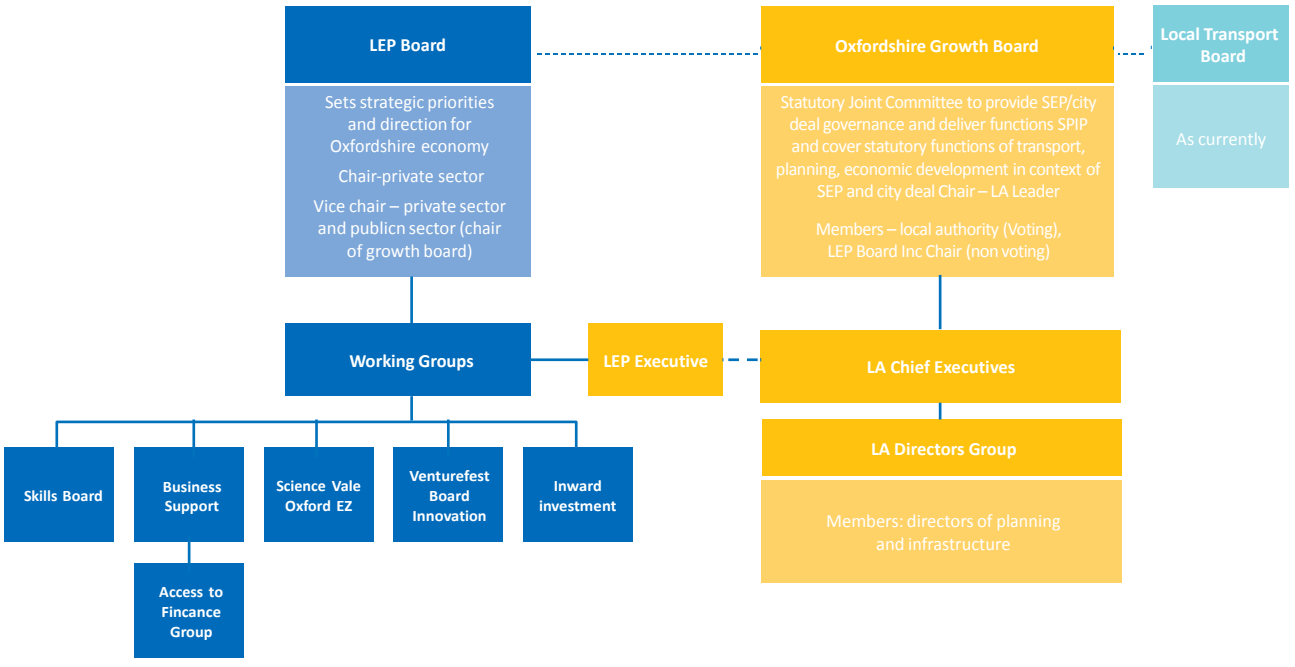
The Terms of Reference for the Oxfordshire Growth Board are currently being developed but it is envisaged that these will include:

- Approve and monitor the implementation of a detailed work programme as laid out in the City Deal and Strategic Economic Plan and any future Growth Deals or other programmes as agreed.
- LTB Objectives (as existing terms of reference - and to be subject to the Growth Board accepting the discipline of the DfT approved Assurance Framework for prioritising schemes and making investment decisions).
- SPIP Objectives (see existing terms of reference)

Local Transport Board

The LTB will retain responsibility for the delivery of the existing prioritised programmes in accordance with Department of Transport (DfT) guidance. In the future, with the transport funding allocations included within the Local Growth Fund, the Local Transport Board (LTB) will be aligned with the Oxfordshire Growth Board. The timing of the transition will be dependent on the Growth Board accepting the discipline of the DfT approved Assurance Framework for prioritising schemes and making investment decisions. The objectives of the LTB, which will be included in the Terms of Reference of the Growth Board, are:

- Responsibility for ensuring value for money is achieved.
- Identifying a prioritised list of investments within the available budget.
- Making decisions on individual scheme approval, investment decisions and release of funding, including scrutiny of individual scheme business cases.



Strategic Economic Plan Oxfordshire LEP/LA Architecture

- Monitoring progress of scheme delivery and spend, acting on project/programme evaluation.
- Actively managing the devolved budget and programme to respond to changed circumstance [scheme slippage, scheme alteration, cost increases etc.].

The LTB Assurance Framework, agreed with the Department for Transport, will be embedded with the future Oxfordshire Growth Board post 2015. The governance, prioritisation, value for money assessment, monitoring and evaluation procedures will be as set out in our refreshed Transport & Infrastructure Assurance Framework. Collaboration with other Local Enterprise Partnerships

Collaboration with the South East Midlands Local Enterprise Partnership (SEMLEP)

Oxfordshire has six Local Authority (Cherwell, Oxford City, South Oxfordshire, Vale of White Horse, West Oxfordshire and Oxfordshire) areas.

Of these Cherwell sits within both OLEP and SEMLEP geographies. This overlapping geography could present delivery and compliance issues if not effectively managed, and therefore both LEPs have worked collaboratively to develop new arrangements to effectively mitigate any risks that may arise as a result of this overlap. It has been agreed that the Local Transport Authority (Oxfordshire County Council) will lead on transport schemes and that for other projects the LEP and project delivery lead will be determined by the particular circumstances. Importantly, the new arrangements are designed to ensure clarity for businesses and individuals – a single front door, irrespective of which LEP is providing funding and support through agreed lead responsibility.

Collaboration with other Local Enterprise Partnerships

Oxfordshire's City Deal has facilitated the joint working of numerous partners across the county and led to investment in critical infrastructure that supports our offer, such as new incubator space and transport infrastructure improvements to improve connectivity and accessibility.

We are also working jointly with neighbouring LEPs across 'Motorsport Valley' in key sectors such as the promotion of our globally significant high performance engineering base via the cross-LEP High Performance Technology Group. The group is developing promotional material to be utilised by UKTI on behalf of six LEPs that form the backbone of the UK's high performance engineering base. It will be launched at a technology showcase event in the run up to the British Grand Prix in July.

We will continue to explore cross-LEP collaboration where appropriate and practical; specifically with the six Greater Thames Valley (GTV6) LEPs. GTV6LEP is a loose consortium of six Local Enterprise Partnerships in the South East of England that have come together to explore a common approach to delivering European Structural and Investment Funds Strategy, 2014-20:

GTV6LEP comprise:

- Buckinghamshire Thames Valley LEP
- Coast to Capital LEP
- Enterprise M3 LEP
- Hertfordshire LEP
- Oxfordshire LEP

Thames Valley Berkshire LEP
GTV6 is worth £193 billion or 14.4% of the national economy, and contains over 330,000 businesses that provide 3.1 million jobs within its boundaries. The majority of high

technology and ICT businesses in the UK are in the GTV6 area and it is rightly seen as the ICT capital of Europe; a truly global player.

Links across LEPS in the Thames Valley are therefore strong and reflect the importance of sub regional sectors such as advanced engineering and ICT.

We will continue to explore collaboration on a shared digital infrastructure strategy that aims to reinforce the GVTs credentials as the most productive sub-region in which to run or establish a business in the 21st Century.

The collaboration has high ambitions that go beyond digital infrastructure alone - the strategy will include a combined approach to all the mediums and media needed to ensure that individuals and businesses have access to as much bandwidth as needed, when needed, regardless of the delivery channel.

The GTV6 intends to support the world-leading 5G Innovation Centre at the University of Surrey, based in Enterprise M3 LEP area. This will enable the Greater Thames Valley to be the first to exploit the new opportunities that 5G will offer. The first step is to expand a 'test bed' that will be established by the university, through the support of the GTV6. Companies within our boundaries will be the first to test and commercialise applications on 5G, which will help to establish the UK as a global leader in mobile technologies and is just the first exciting step to our digital future.

8. Evaluation

Delivery

All partners are committed to working on a collaborative basis and will ensure that their technical resources work closely, as part of the Oxfordshire Growth Board, with the common objective of delivering the unified vision for the Oxfordshire economy. The Growth Board will be tasked with taking forward the growth ambitions of the Strategic Economic Plan, City Deal, the Local Transport Board, the Spatial Planning & Infrastructure Partnership, the LNP and the LEP through the Strategic Economic Plan.

The Growth Board will involve County Council, City Council, District Councils, the Universities and partner agencies contributing, sharing and seconding resources as appropriate to lead efforts for growing the knowledge based economy in Oxfordshire. This will formulate and proceed to deliver the SEP Implementation Plan and the Local Enterprise Partnership economic narrative for raising the profile of the location for inward investment and growth. It is anticipated that the Growth Board will facilitate co-location of identified staff working on the implementation of the SEP, City Deal and ESIF programmes, as well as seconding specific staff developing the bespoke themed programme proposals.

The Implementation Plan will follow sound programme management principles. The LEP will develop its operational plan for SEP delivery identifying;

- Programmes
- Projects
- Outcomes
- Variants and mitigation

The operational plan will identify lead officers responsible for delivery, with on-going monthly operating updates with the LEP Board receiving quarterly operating reports.

The Growth Board will monitor the programmes on a themed basis reflecting the priorities of the LEP's Strategic Economic Plan. There will be a designated lead officer within each partner organisation responsible for delivery within their remit or locality. We will use our programmes to report the totality of the SEP, City Deal and ESIF programmes, showing what contributions are made from each partner and monitor it against the implementation plans.

Where funds are available for specific programmes they will be managed by the Lead Partner responsible for the programme, e.g. through the Local Transport Board for the transport programme. Where funds require prioritisation within the overall SEP programme, they will be held by the Local Enterprise Partnership Accounting Body until such time as the prioritisation is agreed.

Each Lead Partner will act as a sub-Accounting Body in respect of SEP programmes in their locality or themed area, and they will report to the Local Enterprise Partnership Accounting Body for overall SEP reporting.

The Local Enterprise Partnership as a the lead partner in the SEP is already committed to the use a significant proportion of the revenue stream from the retained business rates in the Science Vale Oxford Enterprise Zone to finance the infrastructure investment secured through City Deal. It is worth noting that some of our programmes are already being co-funded from this programme which demonstrates partner ownership, commitment and support.

Delivery Capacity

We are producing a new delivery structure that will be dedicated to the delivery of major projects and will be responsible for managing, monitoring and reporting against the delivery of the schemes once they are handed over at the early stage of the gateway process. This team will have programme management capability as well as project management capability and will report on a regular basis. It will keep the current programme office and PDG abreast of what it is doing but the functions will be run side by side to enable us to have the correct level of capacity and challenge for these larger schemes.

We understand there is a significant commitment needed to deliver our Strategic Economic Plan aspirations through the City Deal and Local Growth Fund mechanisms. We are:

- Already setting up a fixed term team to undertake the client functions.
- Joining the Midlands Highway Alliance to enable faster procurement of schemes that cannot be delivered through our current contract vehicle and to give us further access to professional support.
- Maximising the amount of work that we can put through our existing arrangements in year 1.
- Reviewing the potential throughput in future years to identify the capacity required and identify any delivery and resource gaps.

Our biggest challenge will be the availability and capacity of delivery resources. We are already in discussion with our partners, Skanska, about establishing the level of design capability required and programming in order to secure priority delivery.

Managing Risk

Oxfordshire's risk management will follow standard, well proven protocols found throughout public authorities and in the delivery and management of Growth Board responsibilities, involving two dimensions. Firstly, we will establish a risk register, identifying and categorising risks in different parts of the programme, and setting out mitigations which will be built into programme design. This will be established in detail during the process of final negotiation of our programme with Government, and will be regularly reviewed and updated as the programme progresses.

The second key component will be strategic oversight of programme risks and responses by the LEP board, which will receive at a minimum a detailed annual risk report, setting out the extent to which identified risks have come to pass and responses, along with identification of emerging threats and evolving responses. In the interim, the board will receive monthly summary reports to highlight any issues of concern. The programme's designated risk management officer to be appointed will be responsible for categorising risks using a standard traffic light system on a continuing basis. Each board meeting will receive a risk update:

- 'green' on programme – simply listed
- 'amber' risks accompanied by a brief narrative of nature and responses
- 'red' risks accompanied by a detailed narrative and, as necessary, included in the Board agenda for discussion

At the outset, the Oxfordshire programme should have no red risks at all, these being dealt with as part of the programme design and implementation process. Amber risks (defined by the combination of probability and potential impact) may be acceptable but will be subject to management attention from the outset. Green programmes will be subject to routine monitoring against identified indicators identified in the operational plan to mitigate any potential future impact.

Overlapping geographies

Oxfordshire has six Local Authority (Cherwell, Oxford City, South Oxfordshire, Vale of White Horse, West Oxfordshire and Oxfordshire) areas. Of these Cherwell sits within both OLEP and SEMLEP geographies. This overlapping geography could present delivery and compliance issues if not effectively managed, and therefore both LEPs have worked collaboratively to develop new arrangements to effectively mitigate any risks that may arise as a result of this overlap. Importantly, the new arrangements are designed to ensure clarity for businesses and individuals – a single front door, irrespective of which LEP is providing funding and support.

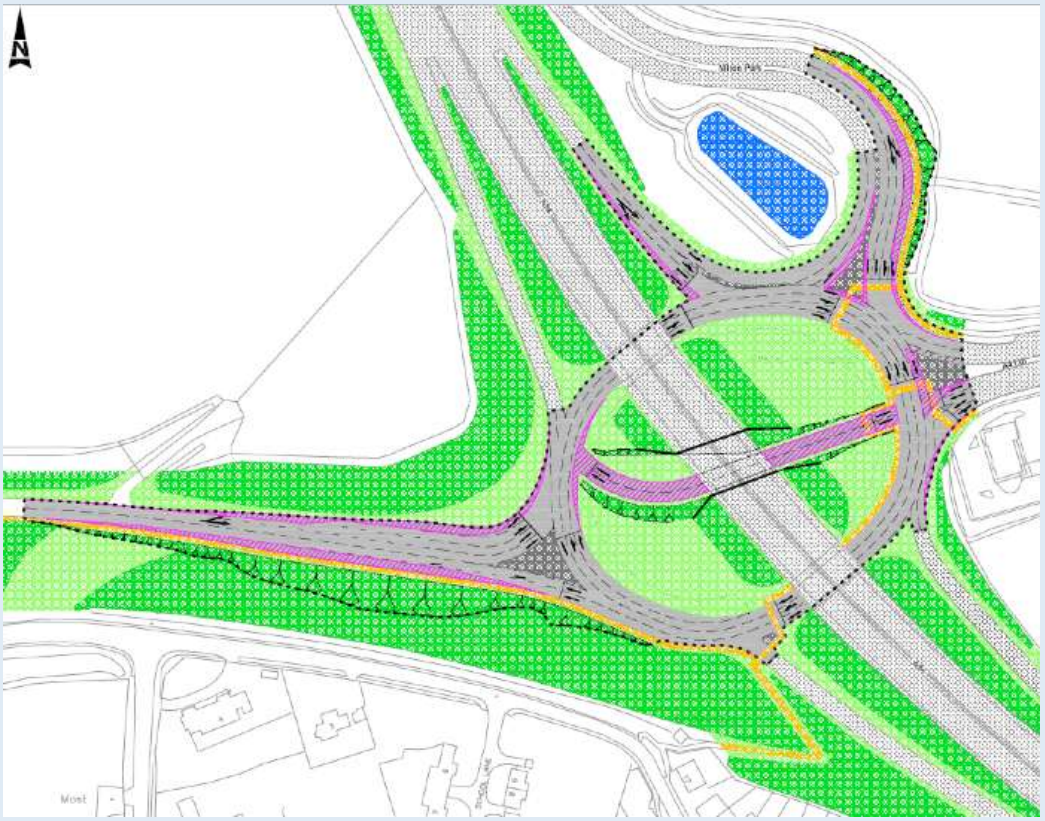
Case Study: Delivering For Oxfordshire - Milton Interchange Improvement Scheme

The Milton Interchange scheme is a key part of the Science Vale UK (SVUK) infrastructure strategy development to improve access to Science Vale Oxford and the Enterprise Zone at Milton Park in particular.

The scheme will provide a new 'hamburger' link at the existing Milton Interchange that is intended to reduce traffic congestion at this junction by separating traffic from the westbound A4130 to join the northbound A34 on-slip towards Oxford.

The proposal, which will be contained within existing highway land, also includes widening the Milton Park Link, eastbound A4130 and southbound A34 off-slip approaches to the roundabout to four lanes. This will result in the construction of a new central bridge on the A34, over a section of the hamburger link.

The detail design of the scheme is on schedule to enable the 12 month period of construction to start in October 2014. The project is valued at £10.6m which is funded by a DfT Pinch Point grant (£5m), Local Enterprise Partnership funding (£3.6m) and Developer funding (£2m). It will be delivered using the NEC Engineering and Construction Contract, Option C (Target Cost).



Evaluation and Monitoring

Our proposed investments can be classified as a series of key deliverables. Using proven benefits management techniques we have extracted a range of benefits that the deliverables will bring to Oxfordshire. Those benefits have been mapped to provide a picture of how they lead to the outcomes of economic growth to which we aspire.

Progress towards success will be monitored through the use of appropriately identified performance indicators for each benefit and outcome, phased according to predicted delivery and realisation. Monitoring in this way will provide early warning of any potential unsuccessful outcome, which will allow mitigating action to be taken.

City Deal implementation provides us with a learning opportunity, through the evaluation of the impact of different policies on the overall outcomes. We will develop an evaluation strategy with our commercial and academic partners to establish which elements of Strategic Economic Plan work well and why they are successful. This will involve the analysis of specific initiatives, with early realisation of benefit and outcome, as opposed to overall evaluation of the whole Strategic Economic Plan programme.

Tracking the outcomes of our proposed investments is the key tool to understanding the extent of the success of the Strategic Economic Plan.

Al Appendix 1:

Letters of Support

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Adrian Shooter CBE
Chairman
Oxfordsh1re Local Enterprise Partnership
2"'' Floor
Oxford Centre for Innovation
New Road
Oxford
Oxfordshire
OX11BY

31" March 2014

Dear Adrian

As Oxfordshire MPs. we strongly support the vision and strategy articulated m the 'The Oxfordsh re Strategic Economic Plan'.

Oxfordshire is dlready one of the best-performing and most innovative areas In England and has unique assets to support growth in the national economy.

Not only is Oxford alone a un1que and truly global brand,known the world over for ils dlademit excellence and historical significance but Oxfordshire as a whole,now forms part of the UK's 'Golden Triangle',competing internationally with Silicon Valley and San Francisco,Boston and Massachusetts, and greater Shanghai.

Within the UK,The University of Oxford has performed particularly strongly in recent years, receiving the highest level of industry funding in the UK in 2010/11 and generating the highest number of spin outs from any UK university in the last three years. Oxford Brookes University is one of the most successful of the newer universities, with excellent links to the automotive industry, health services and other key sectors.

However,the Strategic Economic Plan nghtly recognises that we,like other high performing LEPS, operate in a globally competitive arena where future success cannot be taken for granted. That is why it seeks to build on the excellent collaborative model of the City Dealto accelerate Oxfordshire's growth and open up economic opportunities that would otherwise be out of reach.

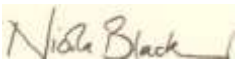
Clearly, this Plan oHE>rs Oxfordshire an exciting future with an innovative v1s1on for jobs growth, infra tructurf> invPstmf>nt, skill nd husinf>ss support and housing provision but in doing so, it also acts as the necessary catalyst for Oxfordshlrf> to play an f>ven morf> rf>ntralrolf> in thf> UK's futur(> economic success.

In particular,Oxfordshire is uniquely placed by having significant existing physicaland human resources in key innovation sectors that arc poised for growth. Government has identified 'eight great technologies': big data,space,robotics,synthetic biology,regenerative medicine,advanced materials,agricultural technologies,and energy storage.

Oxfordshire has a strong and growing capability in the first six of these 'great technologies.' The impetus provoded by the Growth Dealto these sectors would give Oxfordshire the opportunity to make a significant and world class contribution to the UK's globalcompetitiveness in these priority areas.

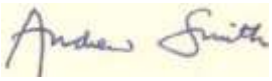
For all these reasons,we fully support the Oxfordshire Stratl'gic Fconomoc Plan.

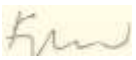
Yours sincerely



Sir Tony Baldry MP

Nicola Blackwood MP





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26 March 2014

Dear Nigel Tipple.

Oxfordshire Local Enterprise Partnership – Strategic Economic Plan

Thank you for the opportunity to comment on the Oxfordshire Local Enterprise Partnership's Strategic Economic Plan (SEP). We are delighted to see the LEP's continued commitment to working with the rail industry to improve rail's offering for the area and are keen to work with you to achieve these ambitions.

Network Rail has committed to deliver a significant package of upgrade works along the Great Western Main Line (GWML). Oxford Corridor and the route to Milton Keynes during Control Period 5 (2014-2019) as set out in the Government's High Level Output Specification (2012). This package of rail upgrade works supports key elements of the SEP and includes:

- Electrification of the GWML and the introduction of new, faster electric trains providing a significant increase in capacity at peak times;
  The Oxfordshire Corridor Capacity Improvement Project, which supports rail freight growth along the corridor in combination with the significant improvements planned in passenger services as a result of electrification of the line to London Paddington;
  East West Rail Phase 1 delvering a new rail connection to London Marylebone permitting Chiltern Railways to operate a service from Oxford to London via Bicester; and
  East West Rail Phase 2, which provides a direct rail link between Oxford and Milton Keynes \ Bedford via Bicester, transforming the connectivity abng the arc between Oxford and Bedford and enabling increased economic activity

Network Rail is working in partnership with both Oxfordshire County Council and Oxford City Council to develop a Masterplan for Oxford Station, combining the drivers for growth listed above with the opportunity to regenerate the west end of Oxford City centre in to a single strategy. Delivery of the Oxford Station Masterplan will require significant additional funding and Network Rail supports the inclusion of the Masterplan proposals in the SEP programme

for growth. The full scope of the Masterplan proposals will contribute strongly to the themes of both Place and Connectivity within the SE':P and support the development of the Oxford Corridor beyond Control Period 5.

We are keen to ur1derstand further the proposals. for Didcot statlon to maintain alignment between these and the wider rail industry strategy, Which will be necessary to allow Network Rail to support s-pecific development schemes. As further details emerge for all the rail-related schemes contained within the SEP, we look forward to discussing these furtl1er with *you* to help us collect vely achieve the best outcome for Oxfordshl re.

We note the request for early delivery of the Western Ac;cess to Heathrow project Network Rail is fully committed to the Western Rail Access to Heathrow project with funding for its developmer1t confin:ned in the High Level Output Specif cation (July 2012). We continue to work with stakeholders to develop the delivery plan for the project and to identify any opportunties for accelerated delivery however, primarily due to tl1e legislative process required to obtain powers for an infras!'ructare scheme on this scall e, we cannot commit to an
earlier delivery date than 2021.

As part of the rail industry's Long Tenn Plaflning Process. the Western Route Study is underway. lead by Network Rail. The Western Route Study builds on market research carried out in 2013 with wide stakeholder consultation to idefllify Conditional Outputs to
2043. These Conditional Outputs specify what the rail industry 'shoul\:l deliver in order to support economic growth and are conditional on aflordability, feasibility and value for money tests. A key priority of the Western Route Study process is to identify Control Pe.riod 6 (2019-2024} choices for fundefs to further enhance the rail network. We look forward to continuing collaborative working on the Western Route Study to maintain alignment between the SEP and rail industry proposals for Control Period 6 (and beyond).

We look forward to working with *you* to support your funding bids and should any further details be required, we would be happy to meet and discuss these with you.

Yo.urs
sincerely

C. J. Aldridge

Chris Aldridge
Principal Strategic Planner, Western

Copied to:

Tom Flanagan
Head of Planning,Environment and Transport.Policy
Oxfordshire County Council

A2 Appendix 2 : Supporting Documents

A34 Oxfordshire Route Based Strategy, Baseline Statement, Oxfordshire County Council, September 2013

Bicester Movement Study, White Young Green, February 2013 http://www.cherwell.gov.uk/media/pdf/9/5/Bicester_Movement_Study_February_2013_Part_1_of_4.pdf

Oxford and Oxfordshire City Deal, February 2014 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276205/Oxford-Oxfordshire-City-Deal.pdf

Oxfordshire Economic Forecasting Report, Cambridge Econometrics, February 2014 https://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/communityandliving/ourworkwithcommunities/oxfordshirepartnership/spatialplanninginfrastructure/Oxfordshire%20Economic%20Forecastng%20Final%20Report%202014.pdf

The Oxfordshire Innovation Engine, Realising the Growth Potential, SQW, October 2013 http://www.sqw.co.uk/files/2613/8690/7243/Oxford_engine.pdf

Oxfordshire Rail Strategy and Delivery Plan, Final Draft, Rail enabling living and working, Oxfordshire County Council, May 2012

Oxfordshire Statement of Cooperation, 2013 https://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/communityandliving/ourworkwithcommunities/oxfordshirepartnership/spatialplanninginfrastructure/OxfordshireStatementofCooperation.pdf

Oxfordshire Strategic Housing Market Assessment (SHMA), March 2014 https://www.oxfordshire.gov.uk/cms/content/spatial-planning-and-infrastructure-partnership

NW Bicester Economic Strategy, SQW, 2011

A3 Appendix 3:

Assessment Summary of Transport Schemes

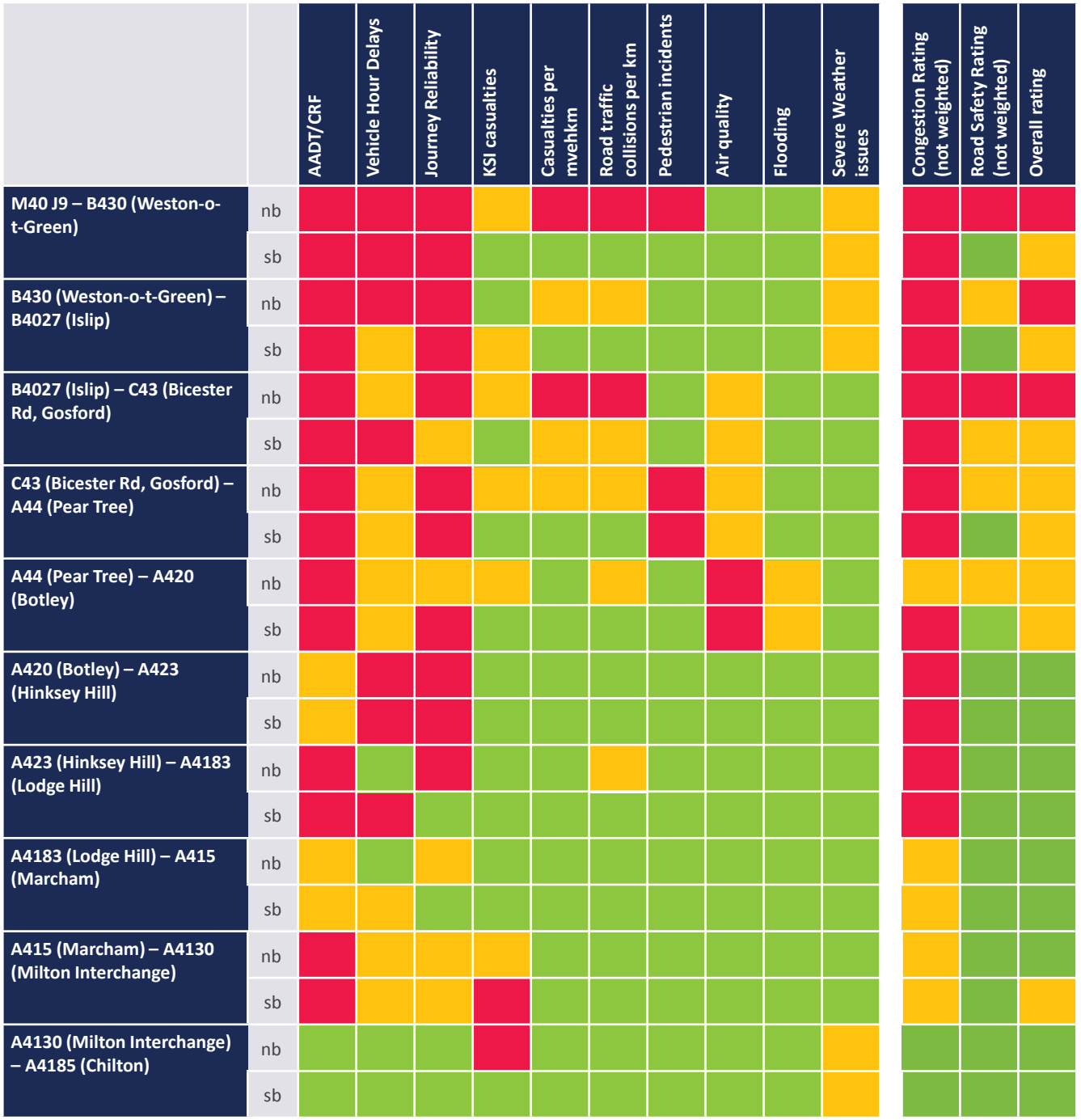
SCHEME	value for money	cost	lower BCR	upper BCR	value of benefits lower	value of benefits upper
A34 Chilton Slip Roads	3	9.96	1.5	2	15	20
A34 Improvements Phase 1	4	20.00	2	4	40	80
A34 Milton Interchange	4	10.61	2	4	21	42
Bicester Charbridge Lane Railway crossing	3	7.85	1.5	2	12	16
Bicester London Road railway crossing - all modes	2	27.40	1	1.5	27	41
Bicester London Road railway crossing Phase1	4	3.60	2	4	7	14
Bicester Pedestrian/Cyclist connectivity	2	4.40	1	1.5	4	7
Bicester Peripheral Road improvements	3	22.50	1.5	2	34	45
Improving access to Carterton	2	5.70	1	1.5	6	9
Oxford - West End-City Centre	4	8.80	2	4	18	35
Oxford Science Transit: A40 Eynsham - Oxford	3	50.00	1.5	2	75	100
Oxford Science Transit: Hinksey Hill Interchange	4	12.70	2.9	2.9	37	37
Oxford Station*	2	164.00	1	1.5	164	246
Oxford: A40-A44 Link Road	4	7.30	2	4	15	29
Oxford: Cutteslowe Roundabout	4	4.10	2	4	8	16
Oxford: Eastern Arc Transport Improvements	3	8.00	1.5	2	12	16
Oxford: Headington Phase 1	4	3.90	2	4	8	16
Oxford: Wolvercote Roundabout	4	4.80	2	4	10	19
Science Vale - Access to Culham SC	4	10.00	2	4	20	40
Science Vale - Access to Didcot Station - full programme	2	63.10	1	1.5	63	95
Science Vale - Access to EZ Phase 2 (A417)	3	3.75	1.5	2	6	8
Science Vale - Access to Harwell Phase 1	2	17.00	1	1.5	17	26
Science Vale - cycle network improvements	4	5.00	2	4	10	20
Science Vale - Didcot Science Bridge	3	35.00	1.5	2	53	70
Science Vale - Featherbed Lane	3	6.50	1.5	2	10	13
Science Vale - Jubilee Way Roundabout	4	6.50	2	4	13	26
Science Vale - Wantage Eastern Link Road	4	9.41	2	4	19	38
Science Vale - Access to Didcot Station- Additional platforms	3	15	1.5	2	23	30
Science Vale - Access to Didcot Station - car park expansion	3	9.5	1.5	2	14	19
Science Vale - Access to Didcot Station - northern entrance	3	16.5	1.5	2	25	33
TOTAL					**783**	**1204**

benefits= time savings + road safety savings + vehicle operating cost savings

A4 Appendix 4:

Assessment of Transport Schemes

A34 RBS Baseline Assessment (OCC 2013)



A5 Appendix 5:
Attributions

1. Regional Gross Value Added, Office of National Statistics, 2011
2. Annual Review of LEP-Area Economies, LEP Network, 2013
3. Localisation of Industrial Activity across England's LEPs, Michael Anyadike-Danes, Karen Bonner, Cord-Christian Drews and Mark Hart, ERC Research Paper No. 15, January 2014
4. The Economic Contribution of Oxford Brookes University, Oxford Brookes University, 2010
5. The Oxfordshire Innovation Engine, Realising the Growth Potential, SQW, October 2013
6. The Economic Impact of Tourism on Oxfordshire Estimates for 2011, County and District Results, September 2012, Tourism South East
7. Estimate from Oxfordshire Local Nature Partnership
8. Department for Work and Pensions, downloaded from Nomis, 22/1/14
9. Higher Education Business and Interaction Survey, 2010/11, Table 1b, Contract Research
10. The Praxis Unico Spin-outs UK Survey 2013
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14. Future of Farming Review Report, DEFRA, July 2013
15. Tourism: Jobs & Growth, Deloitte/Oxford Economics 2013 for VisitEngland
16. Cities Outlook January 2014, Centre for Cities
17. UKCES Employer Skills Survey in Oxfordshire 2011-2012
18. A34 Oxfordshire Route Based Strategy Baseline Report, Oxfordshire County Council, 2013 and Solent to Midlands Route Based Strategy Baseline Report, Highways Agency, 2013)
19. LEP Business Survey, 2013
20. Access to Oxford Journey Time data
21. Bicester Movement Study, White Young Green, February 2013
22. Tom Tom Congestion index 2011
23. LEP Barriers to Growth business survey December 2012
24. Economic Forecasting to Inform the Oxfordshire Strategic Economic Plan and Strategic Housing Assessment, Final report, SQW and Cambridge Econometrics, February 2014
25. MIT Skoltech Initiative: Technology Innovation Ecosystem Benchmarking Study: Key findings from Phase 1, Ruth Graham, January 2013
26. "Open innovation" is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology. Open Innovation: Researching a New Paradigm, Henry Chesbrough, 2006
27. Oxfordshire Strategic Market Assessment, 2014
28. Oxfordshire Statement of Cooperation, 2013
29. Complete Mobility - Providing Transport as a Service, RAC Foundation, MRC McLean Hazel
30. NW Bicester Economic Strategy, SQW, 2011
31. Cherwell Local Plan (submitted to the Secretary of State for Communities and Local Government January 2014)
32. About the Bicester Area, Context & Challenges, Oxfordshire County Council
33. Oxfordshire Annual Monitoring Report, Dec. 2013
34. 2013 Oxford Profile, Oxford City Council.
35. Access to Oxford project, Oxfordshire County Council
36. Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth,