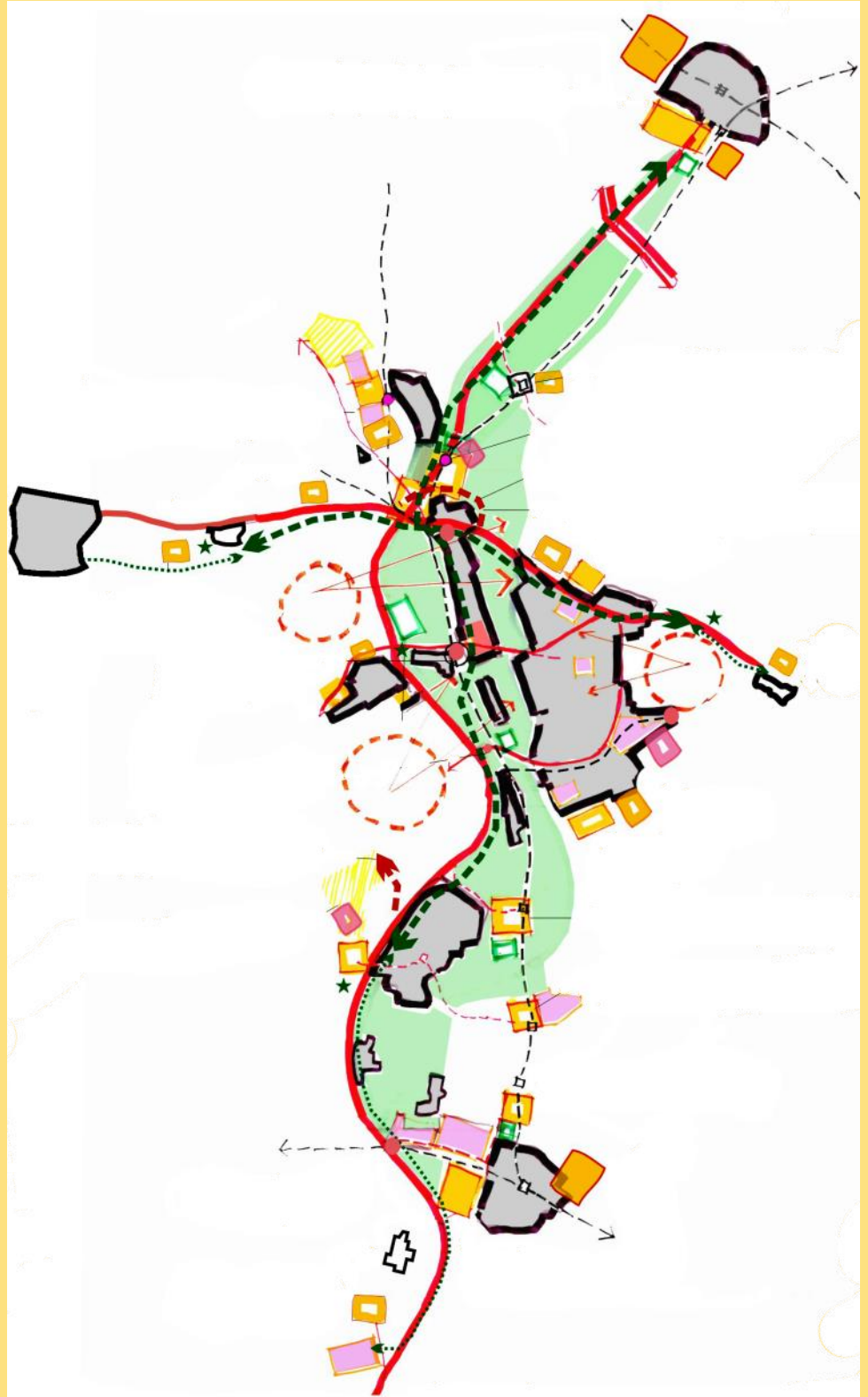# Oxford Futures

Achieving smarter growth in Central Oxfordshire

Oxford Futures

Achieving smarter growth in Central Oxfordshire

Compiled by Dr Nicholas Falk

OXFORD
CIVIC SOCIETY

About Oxford Civic Society

The Society is a citizens' membership group. Our aim is an ever-improving quality of life in Oxford by working to influence planning, building, environment, public places, travel and community issues.

New members are always welcome – see our website oxcivicsoc.org.uk

We are a registered charity no.1116739

We welcome your views

Comments on this report may be sent to comment@oxfordfutures.org.uk or can be posted on the Oxford Futures blog at www.oxfordfutures.org.uk

Cover image courtesy of Jon Rowland. See page 23

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Foreword

This report highlights the need for much closer collaboration and seamless coordination between the different agencies involved in strategic development in the region. We need a common vision supported by all: the basis for planning policy. We need effective mechanisms for delivery. We need leadership.

Nicholas Falk

Peter Thompson

What will a future Oxford look like? How will it integrate and interact with the wider region around the city? Where will the jobs be, where will the workers live and how will they get to work? Will the region be prosperous and what will drive its economy? Will Oxford be a world-class city region offering an exceptional quality of life while retaining its own special historical and cultural identity? These were the questions explored in four debates held in 2013 under the banner of 'Oxford Futures'.

The programme evolved through collaboration between Oxford Civic Society (OCS) and Dr Nicholas Falk, who has had an interest in the city since graduating from University College. OCS strives to improve Oxford as a wonderful city in which to live, work and relax. It represents the interests of current and future generations of residents as well as all those who work, visit and delight in the city. Nicholas Falk, founder of the URBED consultancy, is an urban economist and strategic planner. He was instrumental in developing the Cambridgeshire Quality Charter for Growth for Cambridgeshire Horizons and more recently has been advising the joint venture between Grosvenor Estates and Oxford City to develop a new community at Barton Park. We are most grateful to him for encouraging us to initiate the debates, for involving many expert speakers and other sponsors (acknowledged opposite), and for writing this report to widen the debate.

In 2003, OCS published *Visions for Oxford in the 21st Century*, a collection of essays setting out diverse perspectives on the development of the city. On the tenth anniversary of publication, the circumstances in which future change must be planned have altered radically, not least in economic terms, yet many of the issues raised in *Visions* remain the same.

Our challenge now is to ensure that we create a 'better Oxford'; to make sure that the city and its region continue to thrive; to recognise and protect that which is dear; and to fulfil the region's economic potential, against a backdrop of escalating issues of energy and climate change.

The Oxford Futures debates and the outcomes presented in this report analyse some of the problems and suggest solutions, with illustrations of what success might look like. They highlight the need for much closer collaboration and seamless coordination between the different agencies involved in strategic development in the region. We need a common vision supported by all: the basis for planning policy. We need effective mechanisms for delivery. We need leadership.

The challenge is thrown out to all who will determine how we, our children and grandchildren, will live our lives. Posterity will judge us: rise to the challenge!

Peter Thompson

Chairman, Oxford Civic Society

Summary and recommendations

Oxford and its wider region, referred to here as 'Central Oxfordshire', face a number of challenges and opportunities. The region has the potential to become one of the key drivers of the regional and even national economy in the 21st century, based primarily on the strength of its science-based industries. But Central Oxfordshire is struggling to capitalise on its knowledge economy.

There is a chronic shortage of housing, especially affordable housing, which will only worsen as the population grows. People are forced to live miles from their workplaces in country towns where inadequate public transport means they have to travel to work by car. This results in severe traffic congestion and a poor quality of life for commuters, higher costs for businesses and increasing levels of pollution and carbon emissions.

The city of Oxford cannot grow significantly within its own boundaries however, hedged in by flood plain and its Green Belt and surrounded by other local authorities with different priorities. It has proved very challenging for all these authorities to work creatively together to plan a sustainable future for the city region as a whole. There is an urgent need for these authorities, central government, transport providers and others to come together to plan for and fund 'smarter growth'.

The difficulties are not insurmountable. Much can be learned from cities elsewhere facing similar challenges and four examples are given in the report. Oxford, with its wealth of talent, is well placed to call on the expertise of urban planning and design specialists.

Four **Oxford Futures debates** in 2013, sponsored by Oxford Civic Society, the Academy of Urbanism with the Royal Society of Arts and others, brought together senior local government officers and local councillors from the City and County, academics and interested members of the Society to debate whether and how Central Oxfordshire should grow.

This report summarises the key issues and includes further views and insights from those unable to attend the debates but who commented on an early draft. It also draws on the findings of other relevant studies.

The report considers five key issues:

1. Why should Central Oxfordshire want further growth?
2. How should Central Oxfordshire plan for growth and where should a start be made?
3. What kinds of principles should shape growth?
4. How can the necessary investment be attracted?
5. What needs to happen to secure quality or smarter growth?

Traffic congestion is a daily occurrence as people struggle to get to a place of work that is often miles from where they live. This is an unsustainable way of life. It calls for better planning of where we live and work and how we travel

Photo courtesy of David Fleming and Oxford Mail

The two faces of our region – world class heritage and cutting-edge science at the UK's synchrotron facility at Harwell

Photos courtesy of Visit England (top) and Diamond Light Source (bottom)

There is an urgent need for local authorities, central government, transport providers and others to come together to plan for and fund smarter growth.

Much could be gained by adopting some **basic principles** to guide development and contributors to the Oxford Futures debates suggested four:

1. Develop in the right place and reduce car use
2. Create balanced and healthier communities
3. Build distinctive places of high quality
4. Minimise environmental impact.

The report indicates how each of these principles could be carried forward in practice and suggests eight **actions for a range of key players** that could pave the way for smarter growth:

1. **Set up an Oxford Futures Commission to further the debate and win support for change**
2. **Develop a spatial growth plan and a charter for sustainable development**
3. **Establish a Quality Review Panel to assess important new development proposals**
4. **Engage the public through a Development Forum**
5. **Train and develop key decision makers**
6. **Establish design competitions for key sites**
7. **Model the impact of development and transport options**
8. **Mobilise and coordinate investment through appropriate long-term mechanisms.**

This report is published as both a call to action and a stimulus to further debate. Comments may be sent to Nicholas Falk and OCS at comment@oxfordfutures.org.uk or can be posted on the Oxford Futures blog at www.oxfordfutures.org.uk

1 Introduction: The Oxford Futures debates

Central Oxfordshire stands at a crossroads in its history. The region is poised either to become one of the key drivers of the UK's knowledge economy in the 21st century or to resist change and stifle its own potential. This section provides the background to the debates and explains what this report aims to achieve.

The area in question extends beyond the city of Oxford and stretches between Didcot and Bicester, Witney and Wheatley up to the M40 (Figure 1). The starting points for Oxford Futures were acute housing shortages and pressures for further growth combined with administrative boundaries and environmental constraints which make collaboration very difficult (Figure 2 shows the administrative boundaries). At the same time the Government was planning major investment in upgrading the railways and negotiating a City Deal to make the most of the region's economic potential. The challenge is how to secure enough agreement between the stakeholders to overcome historic conflicts, avoid past mistakes and move forward together.

The Oxford Futures debates brought together speakers from a variety of backgrounds – academics from several disciplines, senior local government officers, local councillors and independent urban planning consultants. We have benefited not only from the high-level inputs of these expert contributors but also from the insights of a critical audience of local people, many of them actively engaged in planning and transport issues as members of Oxford Civic Society (OCS).

This report also taps a wealth of previous studies, many of which are still relevant. For example, ten years ago OCS, which now has around 1,000 members, published a report that highlighted the pressures for development and change already apparent then[1]. Contributors described challenges that still resonate today, showed the wealth of economic potential within the city, and expressed a concern that we could and should do better. More recently, *The Oxfordshire Innovation Engine: realising the potential for growth*, shone a light on the scale and quality of the science and high-tech business base that characterises our region and underpins our future prosperity[2]. The authors calculate that the restrictions on Central Oxfordshire's growth had cost the regional economy £0.5 billion. But studies are not enough without the capacity to implement their recommendations.

On some topics, such as improving the urban fabric, progress has been made. However, contrasts between different parts of Central Oxfordshire have widened over the decade. Population growth is exerting a real pressure on both housing and transport. Planned new housing, such as at Barton Park and Bicester, is welcome but these developments alone cannot
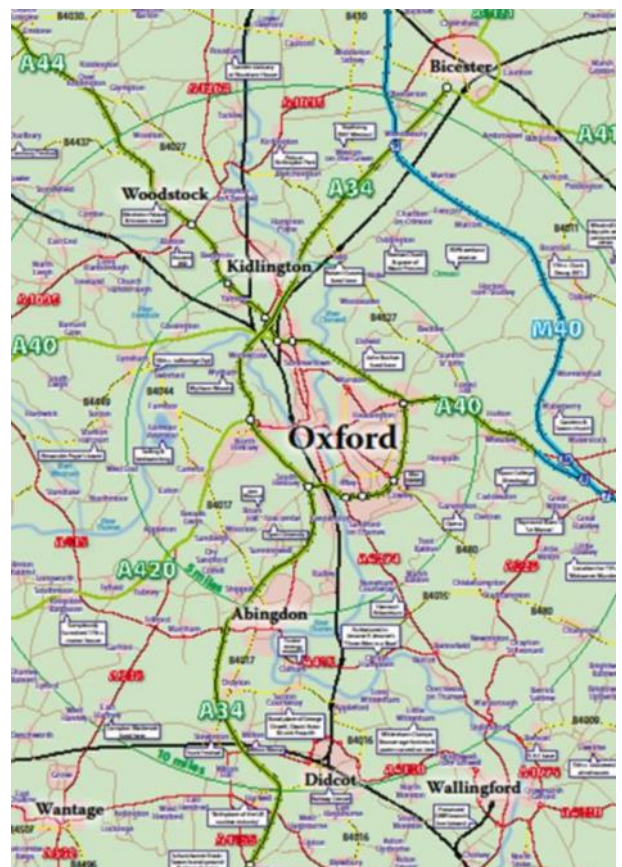
***Figure 1.** Central Oxfordshire, showing its road and rail links*   Map courtesy of Oxfordshire County Council

resolve the housing crisis. People commute over longer distances, congestion builds up and quality of life declines. Improvements such as a new railway station and a regenerated Oxpens area are still being debated. Despite a rapid increase in the pace of planning over the last two years, with masterplans for the station and Westgate, we still lack an agreed spatial strategy and plan for the region. Changes to the planning system mean that there is no longer any public forum in which the collective impact of planning policies on the whole region can be assessed and future options debated and tested.

Yet Oxford is by no means unique in facing major challenges. At the final event we heard how university cities like Cambridge and Freiburg in Germany are responding to the same pressures, as well as those of climate change. Their examples show that a change of direction is not only desirable, even inevitable, but perfectly feasible. Newer cities such as Chelmsford are fostering local leadership and creativity and breaking down barriers.

Today, the need for a change of direction is greater than ever as the UK and its universities compete with ever tougher global competition. The Government's City Deal for Oxford provides an exceptional opportunity to put political differences to one side and work together for the longer-term common good of the area[3]. The challenge is to ensure that institutional capacity is sufficient to realise the potential gains[4].

This report seeks to answer five key questions:
1. Why should Central Oxfordshire want further growth?
2. How should Central Oxfordshire plan for growth and where should a start be made?
3. What principles should shape growth?
4. How can the necessary investment be attracted?
5. What needs to happen to secure quality and smarter growth?

It also shows how smarter growth could be achieved through the adoption of eight simple recommendations. Our hope is that this report will stimulate further discussion and lead to changes in the way we plan and fund infrastructure and development in our region.

References

1. *Visions for Oxford in the 21st Century*. Oxford, Oxford Civic Society, 2003
2. *The Oxfordshire Innovation Engine: realising the potential for growth.* Oxford, SQW, 2013. See at www.sqw.co.uk/insights-and-publications/oxfordshire-innovation-engine
3. *Oxford and Oxfordshire City Deal*. Oxford, Oxfordshire County Council, Oxford City Council et al, 2014. See: www.gov.uk/government/publications/city-deal-oxford-and-oxfordshire
4. The New Institutional Economics stresses the importance of good governance in explaining why some nations or cities outperform others. Harvard economist Edward Glaeser in *Triumph of the City: how urban spaces make us human* (London, Pan Books, 2012), says "*Cities enable the collaboration that makes humanity shine most brightly*".

Figure 2. *Administrative boundaries in Central Oxfordshire. Places such as Kidlington, Botley, Kennington and Horspath are outside the city boundary*

Map courtesy of Oxfordshire County Council

The trouble with the future is that it usually arrives before we are ready for it.

Arnold Glasow

2 Why should Central Oxfordshire grow?

Many who live in Oxford or in the beautiful villages outside it treasure both the historic city and its Green Belt and naturally want to keep things as they are. These views are inevitably reflected by the Councillors who represent them. Yet sometimes over-riding considerations call for fresh ideas and strong leadership to face up to huge challenges. Today there are at least six reasons why Central Oxfordshire needs to grow.

Population trends and the demand for housing

The population is growing nationally – by seven per cent in the decade up to 2011 – but growth has been particularly rapid in and around Oxford. In the city itself, the population grew by 13 per cent while the Oxford Travel to Work Area grew by eight per cent[5]. This growth is expected to continue. Bicester expects to double in size, while Witney is still expanding. The region's strong economy along with its educational and other strengths make it inevitable that more people will wish to settle here. Many arrive as students at Oxford's two universities and then find work in the area.

The growing population fuels the demand for more housing. Richard Webber created the original Mosaic mapping system for Experian to classify local populations based on census and other data. Figure 3 shows how the Oxford region compares with other places using this system. His presentation brought out the varied population segments which are strongly represented in different parts of Oxfordshire, all of which are look- ing for different kinds of housing (Figure 4). Professor Michael Keith stressed the need to accommodate low paid workers who often need to live near their work, including a growing social care sector which is vital as the population ages. Oxford's population has a young profile in contrast with the rest of the county which has an ageing demographic.

	Mosaic group	Oxford	Cambridge	Reading	UK
A	Symbols of Success	19.0	19.4	28.2	10.7
B	Happy Families	16.7	14.5	18.2	11.0
C	Suburban Comfort	18.4	17.7	14.1	16.0
D	Ties of Community	6.9	7.5	5.6	16.8
E	Urban Intelligence	13.0	13.9	11.4	7.6
F	Welfare Borderline	1.3	1.8	1.4	5.4
G	Municipal Dependency	1.0	0.8	0.9	6.5
H	Blue Collar Enterprise	11.4	11.3	11.2	11.4
I	Twilight Subsistence	1.5	2.6	1.6	2.6
J	Grey Perspectives	5.0	5.5	4.1	6.9
K	Rural Isolation	5.8	5.1	3.5	5.1

Figure 3. *How populations in OX postal codes compare with others. Oxford and Cambridge are very alike and atypical of the UK as a whole*

Image courtesy of Experian Mosaic

Figure 4. Different sectors of the population seek different kinds of housing. 'High technologists' (top/middle left) have different aspirations from low paid service workers with unsocial hours (bottom right)   Image courtesy of Richard Webber

Economic potential

The key role of the knowledge economy to Britain's economic future makes it vital that places like Oxford, with their high concentrations of talented people and science-based industries, reach their full potential Maps in the *Oxfordshire Innovation Engine* report show how a cluster of small high-tech companies has grown up between Oxford and the scientific complex at Harwell (Figure 5)[6]. The region also has a long tradition of motor engineering, ranging from the mass-production at the BMW Mini plant to the development of high-performance and racing cars.

So Oxford is not just an ancient university city that draws coach loads of tourists but also a crucial part of the modern economy. The *Oxfordshire Innovation Engine* report stresses the importance of the knowledge economy which is clearly recognised by central government[7]. Indeed Oxford is seen as a global brand that needs to be nurtured in the national interest.

Yet as brought out in the debates and in *Cities Outlook 2013*, the city is currently over-dependent on publicly-funded employment and is therefore vulnerable[8]. Though much of the employment is in high-value research and health, there are concerns that the UK is not achieving the level of spin-offs that should be expected compared with, say Harvard and the Boston area, or Stanford and Silicon Valley.

Competing universities

Though many believe Oxford University's world-class position is unassailable, thanks largely to its splendid record of publications, its leading experts and ancient endowments and buildings, maintaining this requires continual investment. Also, as is recognised in the *Oxfordshire Innovation Engine* report, both universities need to attract not only high-quality students and lecturers, but also an army of support staff including vital post-graduate research students and lab technicians. Many have families whose needs must also be accommodated.
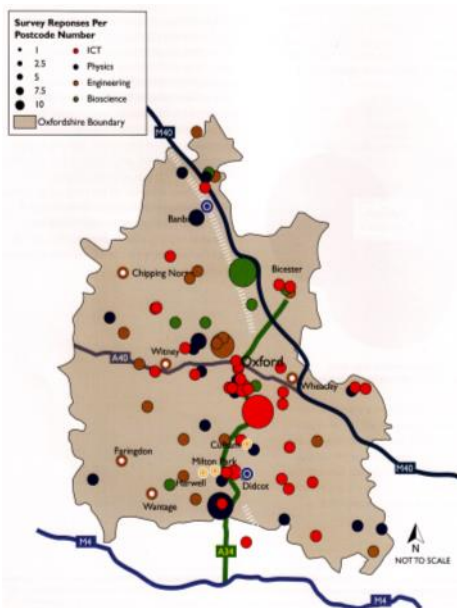
Figure 5. High-tech and science-based industries are concentrated between Oxford and Harwell/Didcot

Map from the Oxfordshire Innovation Engine report courtesy of SQW

Peter Studdert, who was Director of Joint Planning for Cambridge's Growth Areas, (working between Cambridgeshire County, Cambridge City and South Cambridgeshire Councils), described how the city has set about solving these problems. Through co-operation between the local authorities and Cambridge University, they plan to build tens of thousands of new homes between them, including many for key workers, student rooms and new research and academic space[9].

Social pressures

With very high house prices relative to incomes, Oxford has the UK's least-affordable housing. For many, there seems no chance of ever getting on the housing ladder. Those buying a home are often forced to live in cheaper areas of the county then face the expense and stress of travelling long distances to work, which makes it hard to enjoy the benefits the region has to offer. The disparities are clearly visible in the Richard Webber's mosaic maps (Figure 6).

House prices in Oxford in early 2013 averaged £360,000 compared with a national average of £242,000. Even flats averaged £227,000. Oxford City Council has over 6,000 households on its housing list, including many key workers, in health and social care for example.
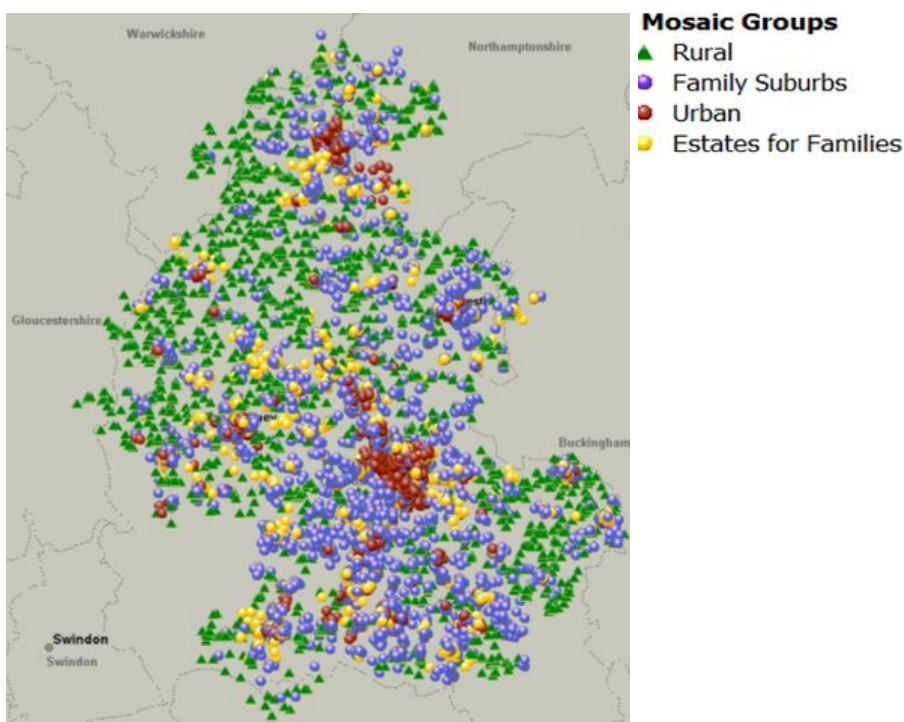
Figure 6. People select neighbourhoods, not just houses. The map shows the variety of neighbourhoods in the county   Image courtesy of Richard Webber

Webber stressed the great social and economic contrasts between the north and south of the city where the gaps, for example between levels of income and educational attainment, may even be widening (Figure 7). Such inequalities can cause communities to break down. But there is also a strong tradition in Oxford of tackling social disadvantage, and the City and County Councils are working together to improve educational attainment. New housing provides the opportunity to use new ideas about how to achieve successful communities in mixed neighbourhoods.

Environmental constraints

Oxford's geographical position makes parts of the city vulnerable to flooding, while other parts are justifiably protected for their natural beauty or their historic and architectural merit, as Jon Rowland's maps indicate (Figure 8). Vulnerability to flooding makes it hard to find development sites

Figure 7. Levels of educational attainment in Oxford show a wide gulf between the nation's best (yellow) and least well-educated populations (blue)
Image courtesy of Oxford Consultants for Social Inclusion (Ordnance Survey data as licensed to Oxfordshire County Council)
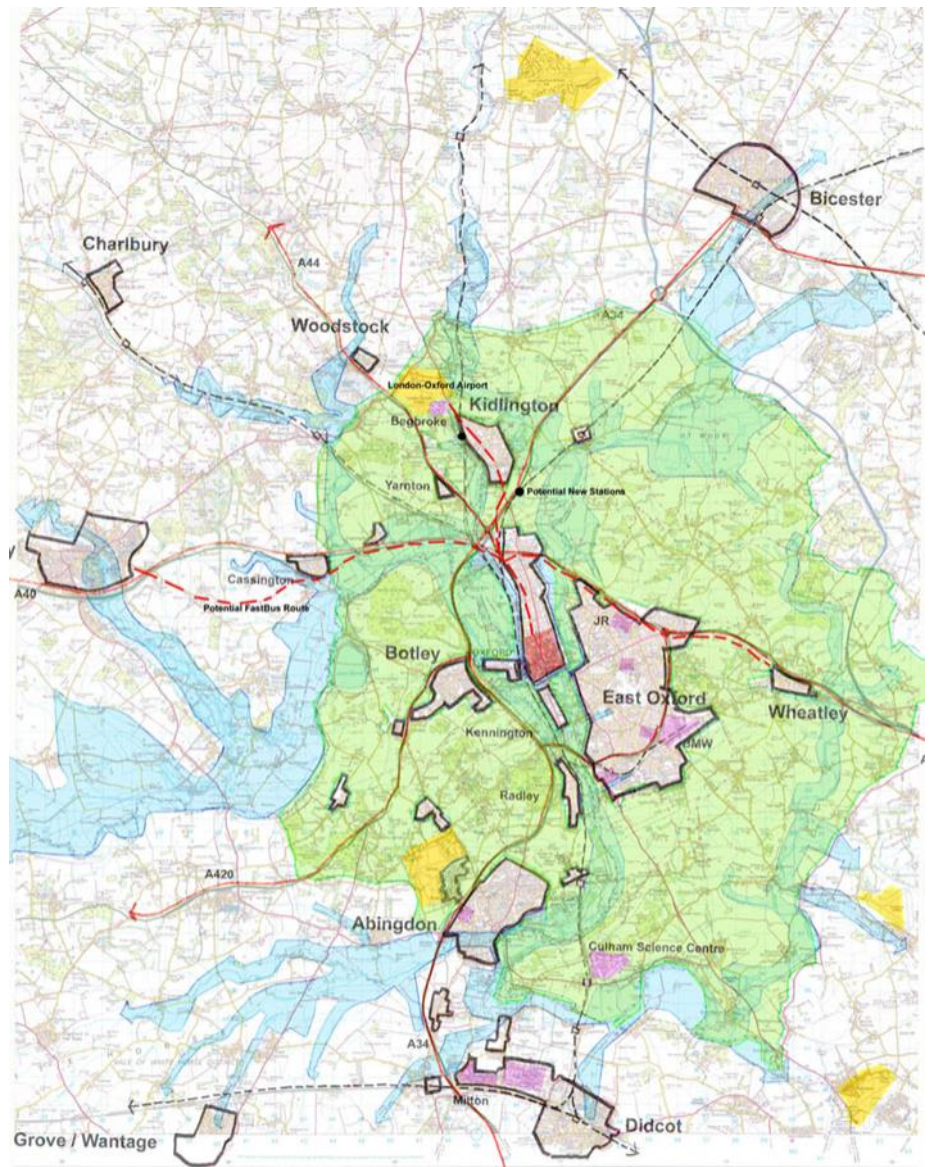
Oxford Futures: Achieving smarter growth in Central Oxfordshire. OCS, March 2014

The biggest change required now is to combat the large increases in car-based travel generated by population growth in the country towns. This leads naturally to the idea of smarter growth: concentrating development around public transport nodes and corridors in the region. New development and transport service improvements then go hand-in-hand, reducing vehicle miles travelled and carbon emissions.

within the city boundaries, while outside the Green Belt hems the city in and helps keep house prices high. Unfortunately the political and administrative boundaries do not help, as the city, like many others in the UK, is tightly bounded, its hinterland controlled by four different local authorities whose main focus of interest lies well away from the city.

Transport and the potential for smarter growth

Rising volumes of traffic are an outcome of growth but also a key reason for ensuring that growth is properly planned in the future. The A34 and A40 corridors, the ring road and city approaches at key roundabouts, are notoriously congested. Some of this traffic is passing through, but much is generated by jobs within the city and in the surrounding area (Figure 9).

The effective management of travel needs is complicated by the County Council holding responsibility for strategic transport planning, while local designated trunk roads are managed by the Highways Agency, and public transport investment and operation lies within the province of Network Rail, the franchised train operating companies and private bus operators.

Oxford is however rightly known for its record of producing leaders in tackling social and environmental problems, and is in an exceptional position therefore to provide a lead to the rest of the country on how to live well within our resources. Oxford was one of the pioneers of Park and Ride. For many years it has been a feature of the City's transport policy that growing travel demands should be met by a combination of restraint on car use (through parking control and traffic management) and promotion of more sustainable alternatives (walking and cycling, bus services and Park and Ride car parks at the city's periphery).

The biggest change required now is to extend this approach beyond the city to cope with the large increases in car-based travel generated by population growth in the outlying towns. This leads naturally to the idea of smarter growth: concentrating development around public transport nodes and corridors within the wider sub-region. New development and transport service improvements then go hand-in-hand, reducing vehicle miles travelled. A map drawn up by Peter Headicar shows some major opportunities (Figure 10). This requires stronger collaboration between all the stakeholders, as well as major shifts in attitudes on the part of the wider public.

Figure 9. Travel to work patterns show a major corridor of movement along the knowledge spine. Public transport does not serve this corridor well

Image courtesy of Tekja Ltd 2013

Figure 10. A proposed public transport network to meet travel needs in the region includes much greater use of transport hubs where commuters can switch modes   Image courtesy of Peter Headicar

References

5. Peter Headicar, What the 2011 Census tells us. *Visions*, (Oxford Civic Society), No 125, July 2013
6. *The Oxfordshire Innovation Engine*, op cit
7. *The Oxfordshire Innovation* Engine, op cit
8. *Cities Outlook 2013*. London, Centre for Cities, 2013
9. Kate Kirk and Charles Cotton, *The Cambridge Phenomenon: 50 years of innovation and enterprise*. London, Third Millennium Publishing, 2012

3 How should we plan for growth? Lessons from elsewhere

Traffic congestion, pollution and time spent on travel to work are high prices to pay for Central Oxfordshire's economic success. Are there smarter alternatives? While no place should ever be directly copied, examples from other places can provide inspiration for how growth can be planned to avoid the pitfalls.

Oxford delegates on a study tour of new Dutch settlements

A high proportion of people living in the city also work or study there, but there is a great deal of in-commuting to Oxford (40,000 people per day) from adjoining towns such as Witney, Bicester, Abingdon and Didcot. In part this reflects a historic policy of concentrating housing growth in the country towns around Oxford. Most people who live outside Oxford currently use a car to get to work. So the natural result of further expansion of the country towns, where the bulk of new housing is planned, will be to worsen congestion, pollution and carbon emissions. It is not surprising therefore that many people recoil from the idea of any further growth. And congestion makes the area less sustainable than its competitors elsewhere.

We heard evidence from three different places that are trying to grow in more sustainable ways. Delegates from Oxford have visited new settlements in the Netherlands as part of the process of drawing up the master-plan for Barton Park[10]. We discussed a series of principles that could help resolve some of the conflicts and secure higher standards of quality in future major housing schemes.

The Bicester model
Following a government competition to come up with sites for an 'Ecotown', Cherwell District Council was one of the few local authorities to rise to the challenge and to designate sites for Sustainable Urban Extensions on the edge (Figure 11).

Figure 11. *The local plan for Bicester showing the ecotown extension on the north west side (Bicester 1)*

Image courtesy of Cherwell District Council
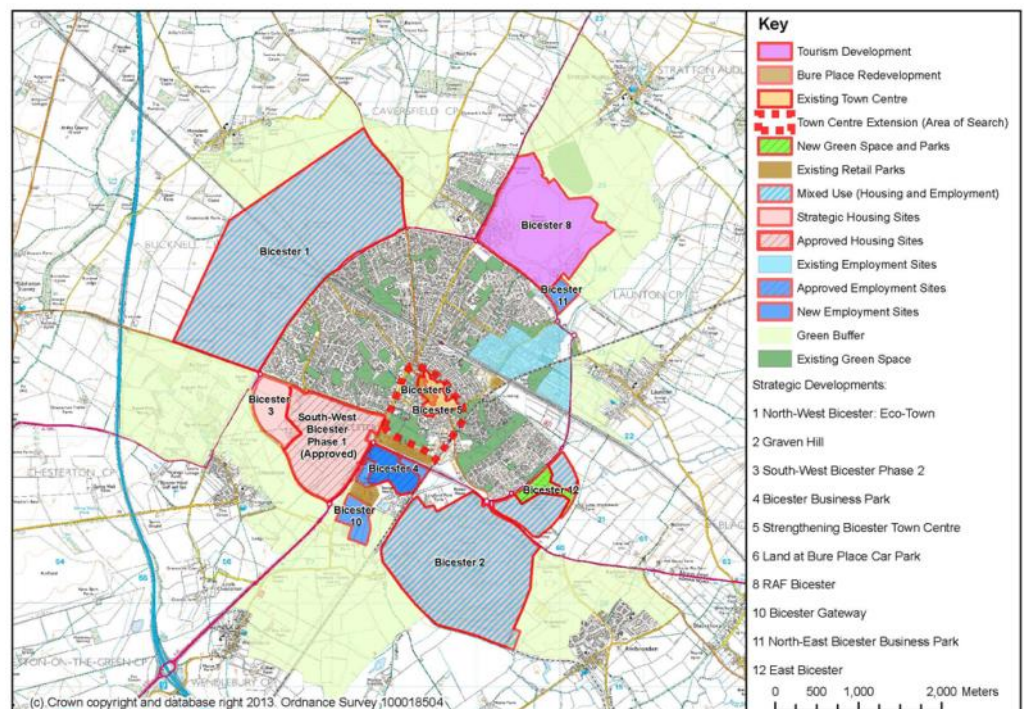
An enthusiastic Leader of the Council saw the potential for making Bicester much better and satisfying some of Oxford's unmet housing needs. The shopping centre at Bicester Village is by far the largest single visitor attraction in the county (5.9 million visitors in 2012), so attracting further private investment should be relatively easy. Plans are far advanced for a north-western extension, and discussions are proceeding with the Ministry of Defence for further land closer to the town centre to the east.

The planning process, while cumbersome, can be used to make good things happen. Adrian Colwell, Head of Strategic Planning, explained that Cherwell aims to make the most of improved rail connections with both London and Oxford (Figure 12). It will also pioneer large scale self-build housing on military land, as this could cut costs by 35 per cent. With a master-plan from Farrells, and with their own urban designers, smarter growth is well under way. Gary Young, a partner at Farrells, set out ten principles to achieve higher quality standards in the development at West Bicester. These include creating a balanced society and providing attractive alternative transport options to the car **before** homes are occupied.

Figure 12. Bicester is set to benefit from planned improvements to the rail network Image courtesy of East West Rail

The Cambridge model

The current growth strategy for Cambridge has its origins in the Cambridge Futures initiative established by the University and the City in 1998/9. This took a fresh look at the challenges facing Cambridge and enabled a sophisticated modelling and public consultation process to be undertaken. In Cambridge the different options for growth were evaluated against three sets of objectives: economic efficiency, social equity and environmental quality (Figure 13).

The consensus view was to promote a balanced approach to the location of new housing. This meant some urban densification, some urban extensions requiring a review of the inner boundary of the Cambridge Green Belt, and some development along the new public transport corridor being established by the Cambridgeshire Guided Busway (see Figure 19 on page 27). The strategy is currently being rolled forward into updated Local Plans. Of the 33,500 new homes being planned for Cambridge City and South Cambridgeshire from 2011-2031, over 55 per cent will be either within or on the edge of urban Cambridge and 40 per cent will be affordable.

Figure 13. Cambridge's 'options for growth' evaluated against three sets of objectives Image courtesy of Peter Studdert

Cambridge Futures: Comparison of Options: Bullet table		
	Economic Efficiency	**Social Equity**	**Environmental Quality**
1: Minimum Growth	•	•	• • •
2: Densification	• • • • •	• • • • •	•
3: Necklace	• •	•	• • •
4: Green Swap	• • • •	• • •	• •
5: Transport Links	• • •	• • •	• • • •
6: Virtual Highway	• •	• •	• • • • •
7: New Town	•	•	• • • •

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Oxford Futures: Achieving smarter growth in Central Oxfordshire. OCS, March 2014

Cambridge's guided busway

Looking and learning – a group of Cambridge planners, developers and councillors on a study tour in Europe

Award-winning new housing at Clay Farm, Cambridge

Above photos courtesy of Peter Studdert

To ensure that quality standards are sufficiently high, the authorities adopted the Cambridgeshire Quality Charter for Growth and its principles (the Five C's):

- community
- connectivity
- climate
- character
- collaboration.

This followed a series of study tours to relevant developments in both the UK and Europe to provide all concerned – local authorities, developers, landowners – with ideas of what was possible. The Charter sets out in a simple form for developers and their professional advisors what is expected to secure planning permission. A Quality Panel of outside experts vets all major development proposals. Award-winning results demonstrate different ways of building new housing estates that appeal to wider markets .

The Dutch model

Dutch towns and cities have been particularly successful at building new homes in neighbourhoods located on good public transport routes, with 30 per cent affordable homes. They have done what we in the UK have for the most part only talked about. Those who have visited the country town of Amersfoort and the new town of Almere, as well as well-known cities such as Amsterdam and Utrecht, have been impressed by the common-sense way the Dutch strategic planning process works. As in Germany, local authorities usually lead the process, helping to assemble sites and pool land, and in return taking over sites for social housing. Housing associations also play a leading role and account for about half the new homes that have been built in the last few decades.

As the Dutch, like the English, generally prefer to live in houses rather than apartments, and have, unlike in the UK, invested heavily in integrated transport systems, their experience is particularly relevant. However, as Dutch transport expert Dr Tim Schwanen from Oxford University's Transport Studies Unit pointed out, innovations can be hard to replicate. Any new public transport network needs to be complemented with parking controls and measures to make walking and cycling easier, so that alternatives to the private car become the preferred choice of transport. Furthermore the success of continental housing schemes has been secured through higher investment in infrastructure up front, an issue which is addressed later.

The Freiburg model

Freiburg in South West Germany is one of a number of historic university cities that have led the way in demonstrating how to plan expansion and to build housing fit for the 21st century[11]. Its growth has been planned along extensions to the tram network with the result that 84 per cent of residents live within 250 metres of a tram stop. As a result of all the publicity it has received many delegations have visited the sustainable urban extensions of Vauban and Rieselfeld. Innovations such as 'passivhaus' standards for housing that consumes no energy and 'baugruppen', where people commission their own homes, are being taken up all over Europe (Figure 14). Freiburg City Council, with very little in the way of financial resources, has been able to take the lead and provide house builders with serviced sites at affordable prices within a simple masterplan and design codes (Figure 15).

Though it may sound very foreign, the idea of living at relatively high densities with shared open space and no dependence on the car for commuting or shopping is a picture that could well be replicated in other university cities in the UK. Indeed there will be considerable demand for living in different ways in future, to save money, improve the environment, and enjoy a healthier and less stressful life. The process for achieving such a vision can be summarised as Ambition, Brokerage and Continuity. The main features of the Freiburg story are summarised in Appendix 4.

Figure 15. The masterplan for Vauban in Freiburg is simple enough to fit onto one sheet

References

10.   See *Dutch New Settlements: conclusions from the Oxford study tour 2012* on www.urbed.coop
11.   Nicholas Falk and Barry Munday, *The ABC of housing growth and infra-structure.* London, The Housing Forum, 2014

4 What should guide further growth?

Central Oxfordshire is losing out for lack of a strategic regional vision, a route map to get there and the leadership to overcome obstacles. That was the consensus at the Oxford Futures debates, where speakers and delegates alike felt too much time was being lost in skirmishes over unpopular developments. They felt the priority should be to secure agreement on the scale of growth needed over the next 20-30 years and where it should go. There was also broad acceptance of four principles that should underpin growth. These principles could be developed further to form a charter for sustainable growth against which development plans and proposals could be assessed.

Principle 1. Develop in the right place and reduce car use

Almost everyone agrees on the importance of connectivity and reducing dependence on the private car, particularly as fuel prices are bound to rise. The danger is that too much housing development in the country towns will simply add to the volume of car travel and make existing problems worse. While new housing developments such as those in Bicester plan for 60 per cent of journeys to be made by non-car modes, the salutary fact is that over 90 per cent of commuter mileage is currently travelled by car.

There is considerable scope for enhancing travel by public transport between towns and workplaces in Central Oxfordshire as well as making full use of buses for local transport. Peter Headicar has proposed a strategic public transport network for Central Oxfordshire based on existing rail and bus routes with modest extensions (see Figure 10 on page 14). This includes Park and Ride sites on the edges of country towns to enable motorists to switch mode at an earlier point in their journey, coupled with interchange hubs in and around Oxford to make it easier for people to reach final destinations which are not in the city centre. More employment could be provided at sites next to the stations, as the Dutch do, which increases usage and therefore the viability of public transport. This means that the area around Oxford station should be developed to much higher densities and in ways that exploit its prime regional and local accessibility, for example as a conference and business centre.

To capitalise on the opportunities offered by principal public transport routes, town extensions and new settlements should be conceived in the form of 'beads on a string' rather than the traditional pattern of peripheral, poorly-served rings around established built-up areas. Use of public transport can be promoted by a convenient ticketing system which rewards frequent users, as demonstrated in London with its Oyster Card. Outside London, Oxford has led the way nationally in introducing combined ticketing and smart-card systems on bus services within the city but the same principle needs to be extended to rail, bus and public parking facilities across Central Oxfordshire.

There is also scope for promoting cycling, not merely by purpose-built facilities within new developments but by low-cost measures on existing roads

Amersfoort station in the Netherlands provides office space and adjacent cycle parking and a bus station. This solution makes for efficient travel for commuters and effective use of land

To capitalise on the opportunities offered by principal public transport routes, town extensions and new settlements should be conceived in the form of 'beads on a string' rather than the traditional pattern of peripheral, poorly-served rings around established built-up areas.

and paths to form a continuous network. Cycling is also well suited as a means of access from suburban housing areas to rail stations and other interchange hubs for inter-town travel. If the need for daily car use can be overcome then car sharing and car clubs provide an economical alternative to private car ownership and can help reduce car use further.

Key principles for any major new development include:

- providing public transport **before** residents move into a new settlement and offering schemes like car sharing as part of a management plan to promote sustainable travel
- providing free travel passes to encourage new residents to use the public transport services available
- improving the cycling network in suburban areas to provide safe and clean routes
- reassessing the Green Belt in areas around public transport nodes.

To win many more users away from their cars, public transport needs to be frequent, reliable, safe, clean and affordable.

The rail network can cater for many more journeys within Central Oxfordshire. Electrification and signalling improvements will increase capacity on the Oxford-Didcot line while Chiltern Railways Evergreen project will result in greatly improved speed and frequency of services between Bicester and Oxford including an important new interchange station, Oxford Parkway, at Water Eaton. There are long-standing proposals for re-opening stations at Grove and Kidlington and further opportunities are identified in the network diagram (Figure 10).

In the longer term the former rail route to Witney and the freight line to Cowley (to provide for cross-city movement on an east-west axis) could be converted to enable some form of segregated transit to be added to the network. It would be worth considering Bus Rapid Transit as well as light rail options that work so well in Germany, as local people are now proposing (the Witney Oxford Transport Group). Transport improvements should be made a condition for developing all major urban extensions. OCS welcomes the plans emerging from the City Deal to provide better communications through the proposed Science Transit connecting Harwell in the south to the city and other high-tech workplaces northwards to Bicester.

Principle 2. Create balanced and healthier communities

The two big issues are: getting the right mix of people living together, and providing and maintaining community facilities such as schools, shops and allotments that can be reached on foot or bike. We need to recognise that we have lost a lot of institutional capacity within local authorities, as well as the leadership needed to build something better than the average housing estate. The situation calls for the creation of an agency which can demand a co-ordinated approach.

Pressures for economic growth and house-building in Central Oxfordshire should justify demanding the highest standards, for example in the provision of affordable housing. As in Cambridge, the University and colleges are key landowners with a long-term perspective and could require higher design and environmental standards. An agreed spatial strategy for Central

Car clubs, such as this one in East Oxford, reduce the number of cars on the road and discourage people from using cars for short journeys

Photo courtesy of Ed Nix and Oxford Mail

Freiburg has grown along extensions to its tram network

Oxfordshire should cover issues such as land uses, plot ratios, densities and social mix, so there is a framework to set the context for masterplans on individual sites. The professional work required could be funded from the proceeds of the Community Infrastructure Levy.

Principle 3. Build distinctive places

Central Oxfordshire should aspire to the highest standards of design to overcome the common criticisms that new housing lacks character or 'could be anywhere'. Though Oxford colleges have on occasion built some of the best modern architecture to house their students, the quality of development put up by house builders has generally been disappointing. Yet, as Roger Evans reminded us, strong demand should enable us to set the bar high. The spatial strategy needs to provide confidence and so needs to look 50 years ahead, when we may be living, working and studying very differently from now. Oxford's new Design Panel, which includes nominees of Design Council CABE (the Commission for Architecture and the Built Environment), should help.

A major problem is the missing links between the Core Development Strategy and the needs of the wider area centred on Oxford, and what is required and is feasible on specific sites. The process in the UK tends to be led by what developers and landowners come up with, unlike in Germany or the Netherlands. There is a major problem in reconciling top-down and bottom-up approaches where interests are polarised. The problems could be overcome if the interested parties could be identified and agreement secured on the big picture early on; that is agreeing on a concept design and the issues that need to be resolved before detailed design work is undertaken. Other examples could be used to help derive principles on which all the stakeholders could agree.

Greater leadership is therefore needed from the local authorities acting in concert, as in Cambridge, to set the agenda and time scales. As far as major housing schemes are concerned, there needs to be agreement on the types of proposed future occupants, particularly on what they are likely to be looking for, as well as the relation between the development and the future of the local economy. An immediate step forward would be to seek out the views of young people, who are rarely represented at public meetings.

The idea of a pop-up shop has been put forward, enabling local people to see models and plans and to record their views using modern media, in a place that is well-visited. It is also vital to enable community groups to contribute more early on, which could result in less opposition later. This might be achieved through existing – and possibly new – Town and Parish councils which could help to provide leadership at a local level. Another possibility would be to set up community trusts to take over the ownership and management of new public spaces.

There needs to be agreement on the spatial framework, before higher quality development can be secured. This could include:
- developing a vision for the area, understanding and defining the characteristics and relationships between the population centres of Central Oxfordshire
- engaging the different authorities and developers/landowners in a collaborative learning process
- appointing a chief architect or design champion to ensure that

Freiburg uses different architects to ensure distinctive streets. Housing is mixed to encourage balanced communities and, with minimal car use, children are safe to play in the street

schemes meet defined needs and standards

- using the design review process of a quality panel to examine and assess projects against the agreed briefs
- adding social as well as economic viability to assess individual applications.

Principle 4. Minimise environmental impact

If Oxford is to be seen as a world leader in tackling the effects of climate change and the rising costs of energy, sustainability and respect for our environment should be priorities in all future development. There is a strong environmental movement within Oxford, reflected in successful initiatives like the Low Carbon Hub and various low carbon groups. A range of initiatives can be used to cut carbon emissions and future energy costs. Oxford, and more widely Central Oxfordshire, should be in the forefront not just of researching but also applying best practice[12]. So, just as in Freiburg, the region could set more ambitious targets such as 40 per cent renewables by 2020, and 80 per cent by 2050 and work towards greater self-sufficiency.

Similarly Central Oxfordshire could ensure that green space is conserved and made accessible to all, thus improving the quality of life for those who may not enjoy private gardens. The views of the countryside are treasured by many, but there is also scope for increasing biodiversity through carefully designed new developments that do not sacrifice wildlife, and that extend the countryside into the town (as in some new Dutch settlements or Freiburg's urban extensions).

Sustainable development and conservation of energy and natural resources mean paying attention to housing stock, densities and transport options. A good balance between types of housing and population is required, while the stock should be made more efficient not just by building better new homes, but also by redeveloping some of the poorer stock and insulating the remainder.

Given the key role of transport in sustainable development, delegates at the Oxford Futures events suggested that the best pattern of growth is north-south along the main transport corridor (Figure 16).

References

12. David MacKay, www.withouthotair.com

High quality new housing at Faringdon

Ideas for new communities are being gathered through the Wolfson Economics Prize 2014. This essay competition aims to explore how garden cities could be developed which are "visionary, economically viable, and popular".

Green homes in Graylingwell Park, Chichester, include carbon-neutral houses with solar panels and 'edible gardens'
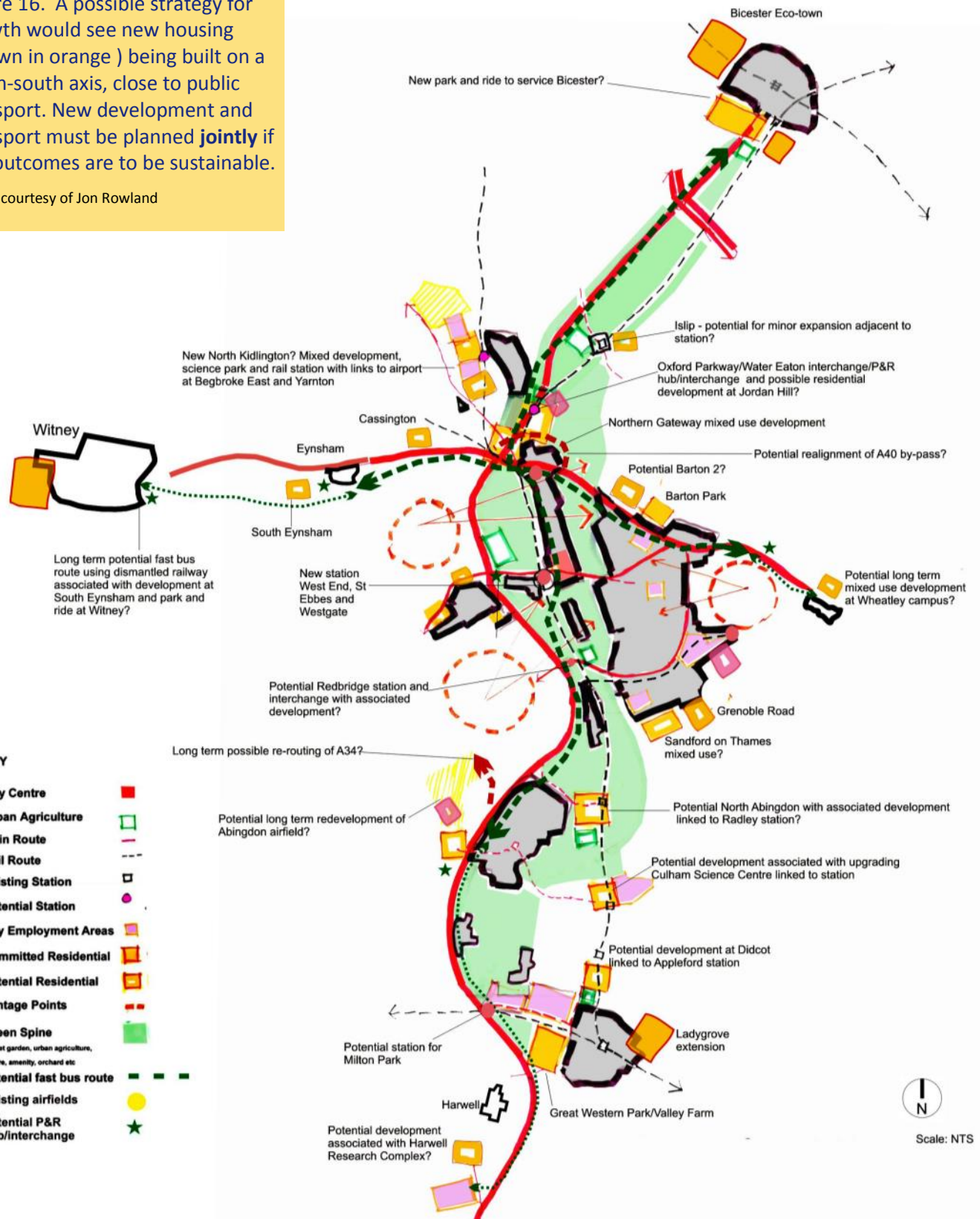
Figure 16. A possible strategy for growth would see new housing (shown in orange) being built on a north-south axis, close to public transport. New development and transport must be planned **jointly** if the outcomes are to be sustainable.

Image courtesy of Jon Rowland

Oxford Futures: Achieving smarter growth in Central Oxfordshire. OCS, March 2014

5 How should smarter growth be funded?

The development required to realise the potential of Central Oxfordshire begs the question of how the responsible local authorities are to fund improvements. The Oxford Futures debates highlighted sources of funds, some already secured, and identified innovative ways of keeping development costs in check.

Through the Oxford City Deal, the Government has agreed substantial public investment in improving accessibility and the public realm along a knowledge spine that would link a number of key sites (Figure 17)[13]. Major public investment is going into upgrading the rail links from Oxford to London, with lines that will be electrified and re-signalled as well as a new link to London Marylebone via Bicester. There are plans for an extended Westgate and the development of the Oxpens area.

Other priorities include the Science Vale at Culham and Harwell: indeed the area from Harwell to the south of the railway line at Didcot has been given Enterprise Zone status. In other words, public and private money is moving into Central Oxfordshire. Capital funding will come from several different sources, which poses a challenge for those responsible for its management.

Driving down costs

The value created when land is used more intensively or for higher-value purposes could fund many of the improvements that are being requested. Achieving the twin goals of housing quality and affordability makes it essential to get control over both land values and infrastructure costs. The only way of financing the level of affordable housing required is to reduce the cost of serviced land. Possible ways of doing this are:

- making better use of public land, including areas within existing housing estates that would benefit from redevelopment
- taking advantage of existing and planned infrastructure, for example the area around the new stations in the city centre and at Water Eaton
- raising finance for new local infrastructure at lower cost than a private developer would have to pay, for example by issuing bonds to be repaid out of the uplift in land values, or tapping into finance from the European Investment Bank.

An interesting alternative approach to financing affordable housing at Cambridge has been the establishment of a new bank, Cambridge and Counties Bank, set up by the local authority pension fund and Trinity College[14].

Another way to reduce the cost of new housing is through selling off serviced sites or plots to smaller developers and co-partnerships – this has been successful in other parts of Europe. Providing such sites would not only reduce risk, as proposed residents already have equity they can put in, but co-housing would also reduce demands on the social services, as members of these 'intentional communities' generally support each other well. Small development sites in an area like Oxfordshire are very hard to obtain. Hence their value could be just as high as if they were sold to a volume

Figure 17. *The knowledge spine identified in the City Deal for Oxford*

Map courtesy of Oxfordshire County Council

house builder who would expect a much higher rate of profit. Another option is for some of the housing to be rented at first and sold to occupiers later. It should also be possible to reduce lifetime housing costs by investing more upfront in measures such as efficient energy systems.

By catering for specific groups of occupants such as nurses or post-graduate students, or even 'empty nesters' and households looking to downsize, development risks can be reduced and marginal projects made viable. The key is securing appropriate development sites where land values are relatively low.

Joining up development and infrastructure

Because decisions on transport and development in the UK tend to be taken separately, full value has not been obtained from public investment in infrastructure and much of our infrastructure is worn out. Creating a more integrated system and matching continental standards will require not only much more investment but also a more proactive attitude to development to ensure high levels of usage. Some of the Oxford Green Belt may need to be reallocated, as in Cambridge, to remove constraints and allow the development of not just better transport infrastructure but also housing, including homes for those who need to live near their work. This would reduce the cost as well as the stress of urban living and attract private investment.

A multi-modal transport system needs to have barrier-free interconnections and to be promoted much more imaginatively. This is an area where Oxford could use the expertise in its universities to lead the way. The City's intrinsic appeal is that it is relatively compact, making it possible to achieve levels of cycling and walking similar to historic continental cities. But while a great deal has been achieved since the days when it was proposed to cut a relief road through Christ Church Meadow, and when businesses required parking everywhere, there is still a long way to go, which will require sustained investment. By concentrating as much activity as possible at transport nodes, such as railway stations and Park and Ride sites, car use can be reduced. Similarly by ensuring that cyclists, pedestrians and children in major developments can readily cross main roads and roundabouts, the quality of life can be raised. As a consequence the costs of congestion and air pollution will fall, and some of the opposition to development can be overcome.

Figure 18. The Mosaic system can be used to indicate market segments for different types of housing and to re-balance local areas

Image courtesy of Experian Mosaic

	Top Sub-urbs	Happy Families	Suburban Comfort	Older Terraces	Liberal Opinion	Social Housing	Rural
ABINGDON	19.1	21.7	20.5	4.5	6.7	16.2	2.3
BANBURY	5.9	19.9	16.2	11.8	6.3	19.5	11.4
BICESTER	3.8	50.7	11.1	5.9	2.5	10.2	7.5
CHINNOR & WATLINGTON	16.2	24.9	23.9	1.2	0.2	1.6	14.7
DIDCOT	9.0	38.3	16.9	7.4	5.6	13.1	1.5
OXFORD	13.0	7.1	14.4	7.7	33.8	19.4	1.1
THAME	8.6	44.3	15.4	3.5	1.3	9.7	10.7
WALLINGFORD	13.0	22.3	24.7	4.7	2.3	13.7	3.5
WITNEY	6.3	24.4	23.1	8.4	0.7	12.3	5.1
WOODSTOCK & KIDLINGTON	11.0	18.2	40.7	7.1	3.9	7.9	5.1
UK	8.6	17.8	16.0	16.8	6.3	25.9	5.1

Responding to unmet demands

By going for the kinds of market segments identified by Richard Webber in his Mosaic neighbourhood classification system (see page 10), new developments could not only respond to housing need, but would also strengthen the local economy and reduce commuting times to work, and hence congestion and its related costs (Figure 18). In the process they would also add to the quality of life, particularly for those on lower incomes, and help re-balance communities.

However this requires some method of containing the rise in house prices in an

area that becomes desirable. Possible solutions include the use of Community Land Trusts to hold the freehold and different forms of tenure, whereby the home must be offered to the rest of the community before it is put on the open market.

So through joined-up planning and becoming much more strategic and proactive, the full potential of Central Oxfordshire can be realised in environmental and social as well as economic terms.

References

13. *Oxford and Oxfordshire City Deal,* op cit

14. Nicholas Falk, *Funding housing and local growth: how a municipal investment corporation would help*. London, The Smith Institute, 2014

Community Land Trusts can be used to provide affordable housing, such as at the former Cashes Green Hospital in Stroud

6 Making things happen

It is easy to take the view that Central Oxfordshire's challenges are simply too great to be fully mastered but it is not a view shared by participants in the Oxford Futures debates. We believe the approach to seemingly intractable problems is to learn from others' experiences and to experiment. Here we set out eight proposals for action by a range of key players who hold Central Oxfordshire's future in their hands.

General scepticism about the feasibility of building better neighbourhoods or changing lifestyles can only be overcome through demonstration projects that seek to turn visions into reality. The process invariably starts by recognising that common and intractable problems can only be overcome by trying out different approaches. In the case of Central Oxfordshire, contributors to the Oxford Futures debates generated eight calls for action that seem worth discussing further, and trying out those with sufficient support.

1 Set up an Oxford Futures Commission

The interest generated through four debates needs to be sustained and fresh ideas developed with the support of the main stakeholders. A good way forward would be for representatives of the main local authorities, the Local Enterprise Partnership and major landowners, such as Oxford University, to consider this report and the steps that might be taken to implement the proposals. This will need a leader trusted enough to champion the ideas and principles in the face of inevitable cynicism and possible opposition.

2 Develop a spatial growth plan and charter for sustainable development

We need a spatial growth plan and to maximise consensus by spending more time finding out what different groups would like to see or avoid (Figure 19). To gain credibility, coordination needs to be provided by an outside body and the Royal Society of Arts may be willing to take on the role. Some of the points made in this report could easily be turned into a briefing pack for those involved in development and this could tie in with work already done on the City Deal by staff at Oxford Brookes University.
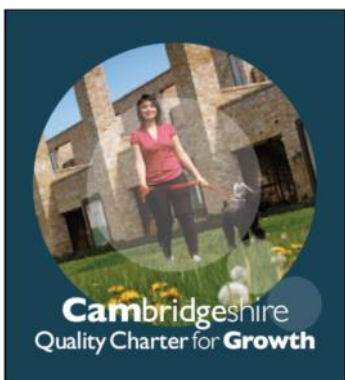
Figure 19. The growth plan for Cambridge began by establishing priorities then assessed locations for development and finally agreed principles to govern quality. Areas in orange are sites for new development, some of them in the Green Belt, which was redrawn. The guided busway (shown in purple) is part of a new transport route that links Huntingdon with the city and the Park and Ride site at Trumpington to the south (see also page 16)

Image courtesy of Peter Studdert

3 Establish a Quality Review Panel

The high level of expertise around Oxford, including many members of the Academy of Urbanism, represents a great opportunity to provide the Councils with an independent means of assessing important proposals and avoiding further eyesores. Oxford's new Quality Review Panel provides a means of discussing proposals with developers before they are too committed to a particular scheme. Other authorities should consider establishing such panels.

4 Engage the public through a Development Forum

The region needs to find ways of tapping the energy and interests of those who do not attend conferences, but who will form and fund the communities of the future. A first step is to ask local people what kind of city region they would want to see in 2050, in the light of feasible options. Such ideas could feed into a Development Forum comprising the house-builders who will be building the communities of the future, including housing associations, and the professionals who will be advising them. Such a Forum would provide a practical way of disseminating information on what needs to be built, and might be spear-headed by one of the developers who are already active. This would help ensure that the difficult political decisions about what should happen where are not ducked.

5 Train and develop key decision makers

The value of seeing what others have done is indisputable and the looking and learning process works best when people from different backgrounds are brought together in a constructive way[15]. Oxford Brookes University could set up such a process under its Continuing Education Programme, provided local authorities in the region give it their full support. Design Council CABE is likely to be interested in helping and there are several other sources of expertise, such as the Academy of Urbanism, the Prince's Foundation and similar social and economic organisations, who have worked with the City Council, and who could contribute.

6 Establish competitions for key sites

Some of the most important sites, such as around Oxford station or on the edge of the city, involve different land owners and even different authorities. They inevitably arouse controversy. Competitions for developing such sites can attract the best design practices. Much greater use is made of competitions on the continent and a lot could be learned from others' experience. By getting the best practices engaged, Central Oxfordshire would have a better chance of matching international standards. The first step in any development will be discussing the brief and who might be invited to compete with the new Quality Review Panel.

7 Model the impact of development and transport options

Undoubtedly there are difficult issues of assessing the costs and benefits of different transport improvements and the impacts on different parts of the county. Recent advances in modelling techniques have greatly improved our ability to assess options more effectively. The Transport Studies Unit in Oxford University would be well placed to advise as part of the process of agreeing how much development should go where. Such an exercise would enable the Local Enterprise Partnership to discharge its responsibilities for helping to plan future growth, to use its budget to best effect, and follow up work it has already commissioned.

Oxford delegates on a study tour of new Dutch settlements. Among other features they saw how cycling was planned for and prioritised

Land for sale near Oxford station, an area with immense potential – and scope for a design competition?

Central Oxfordshire stands in an exceptional position to use its strengths and opportunities to provide inspiration for how to live well within the constraints of the 21st century environment.

8 Mobilise and coordinate investment

Finally, and cutting across all these proposals, further work is needed on the best mechanism to mobilise and coordinate investment on larger schemes (as used to happen with Development Corporations and through English Partnerships). There are a number of possible models, including the joint venture that Oxford City Council has set up with Grosvenor Estates to develop the new community at Barton Park. This is a topic that requires much further discussion in the light of what needs to be done to satisfy both government demands and local pressures. It could form a topic for a further event or research.

Conclusion

Central Oxfordshire has reached a time when difficult choices have to be made in a much more coordinated way. There are several possible scenarios. One will be to pursue a path of smarter growth, in which development and infrastructure are joined up, and in which some of the wealth created by the growth of the knowledge economy in the wider area is reinvested in improving opportunities and well-being for all. Another is to let matters drift and to see the opportunities wasted as piecemeal development sprawls further, and the talent that is drawn to Oxford gets dissipated. Central Oxfordshire stands in an exceptional position to use its strengths and opportunities to provide inspiration for how to live well within the constraints of the 21st century environment. This report has tried to chart a possible course. We trust it will not only encourage further debate but also concerted action.

Sketches for new housing at Barton Park. Work is due to start on this housing development near Headington, Oxford in 2014. It will provide over 800 new homes, 40 per cent of them affordable. The aim is to build to high environmental standards and to encourage residents to walk, cycle or take the bus to work

Image courtesy of Barton Oxford LLP

References

15. See for example report of the Barton working group study tour to new settlements in the Netherlands, www.urbed.coop

Appendix 1. Oxford – the future: urban planning for the 21st century
Oxford Futures debate 17 January 2013

What kind of city do we want Oxford to be in the future? Do we want it to grow and change or to resist both? Can we sustain growth in our congested area without compromising the very qualities that make Oxford so special? Seventy people attended our Oxford Futures seminar, held in Oxford Town Hall, to open up the debate.

Introducing the theme, **Peter Thompson,** Chairman of Oxford Civic Society, stressed the vital importance of thinking about the future, given the need to respond to the challenges – a changing economy, housing shortages, climate change and energy security among them. Crucially we need to work together to solve the issues.

A strong local economy but ...
Dave Valler, an economist from Oxford Brookes University, drew conclusions from his work for the City and County on Oxford's economic position. While the local economy has been growing, it is only at the national average and has been outstripped by Berkshire and Cambridge on factors such as income per head and inward investment. Oxford has great strengths in health and education but it may be vulnerable from so many jobs being in the public sector, and incomes are low in relation to house prices. Hence it is vital to realise the full potential of the knowledge economy, not least by acknowledging the need to link economic clusters by addressing transport issues. The fundamental question 'should Oxford grow?' needs to be asked, not avoided.

The City's strategy
David Edwards, Executive Director at Oxford City Council, explained the City's strategy for planned economic growth. Oxford is in competition with other cities and has severe problems with its infrastructure. Hence it is important to plan where future jobs and homes will go, and how people are going to travel between them. At present many workers live outside the city, yet many commute to the city edges not the centre, making it a challenge to offer public transport.

He explained why the bid to government under the City Deal involved growing a knowledge spine, connecting up a number of sites. He also acknowledged the need to improve the public realm and referred to the new opportunities at Oxford station, Oxpens and the Westgate development. The new rail link to London via Bicester and electrification of the current line will bring immense opportunities. While hundreds of new homes are planned for Barton, there are still real problems in making housing affordable for would-be residents.

Lessons from Europe
Nicholas Falk from URBED, one of the promoters of the seminar, used examples from comparable cities to show how growth and infrastructure can be joined together to produce smarter results. He cited Cambridge where the £150 million investment in fast busways was starting to pay off with plans for some 20,000 homes along the route.

Those who had gone from Oxford to learn from new Dutch settlements were impressed by how easy it was to get around on foot or bike, and how cars took second place. Fast growing historic cities like Freiburg, Montpellier and Copenhagen have kept car use down by using carefully planned urban extensions to boost their appeal as places to live and visit, and make modern rapid transit pay for itself. Success depended on agreeing a spatial and investment plan for the wider travel to work area, ensuring new development and infrastructure were joined up, and having an agency or joint ventures that could provide continuity and hence confidence that private investors look for.

A strategy for transport
Peter Headicar, transport specialist at Oxford Brookes University and member of OCS Transport Group, warned that over-reliance on growth in peripheral towns such as Bicester was simply adding to the problems of journeys to work, as many people feel that cars are the only viable option. He showed how a step change could be achieved through seven measures:

- enhancing local rail services
- some form of rapid transit
- better interchange hubs
- shuttle links
- integrated travel information and ticketing systems
- workplace travel plans, and
- changes in the funding arrangements, including congestion charging in the city.

In Peter's view, the details were less important than having an agreed strategy for transport, which might

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take up some of the technological breakthroughs that are being made in Oxford, such as electric bikes.

Tackling climate change

Peter Thompson addressed the vital need to cut carbon emissions and switch to renewable sources of energy. New development could help Oxford play a role in showing the way forward. He recommended David MacKay's book *Sustainable Energy Without the Hot Air* (www.withouthotair.com), which explains the urgency of adopting a range of actions, including green power, to meet our future energy needs.

Wendy Twist from the Low Carbon Hub showed how people are taking the lead in different parts of Oxfordshire, by creating their own renewable energy and helping householders reduce energy use.

Oxfordshire is unique in having over 60 active low carbon groups and many are undertaking ambitious projects such as solar panel arrays on schools and micro-hydro schemes on the River Thames.

The Low Carbon Hub's vision is for the waterways and rooftops of Oxfordshire to be the power stations of the future: communities, businesses and the public sector will 'power up' by developing renewable energy schemes and create an investment market for clean, green energy generation. And, communities will implement retrofitting programmes across the city and county to encourage householders to 'power down' and reduce their energy use.

With support from a European Union grant of £1.2 million the Low Carbon Hub is working in partnership with Oxford City Council and Oxfordshire County Council to make this vision a reality through the OxFutures initiative.

Tapping into community or social enterprises offers a practical way of changing behaviour and ultimately attitudes. And many of these grassroots projects help in building social capital.

Read more about the Hub at www.lowcarbonhub.org

Developing local communities

Van Coulter, Councillor for Barton and a member of Oxford City's Cabinet, highlighted the contrasts between those living in Barton and in the city as a whole, particularly in educational attainment, income levels and home ownership. With the population there likely to increase by a third, it was vital to engage local people and ensure their voices are heard. Bodies like

the Low Carbon Hub had a major role to play in tackling fuel poverty.

Oxford Civic Society Vice President **Tony Joyce** said that the nation may be looking to Oxford to boost prosperity, but the city needs the resources to do this properly so that those who work in the knowledge economy can reach their jobs without depending on cars.

He cited three very successful communities – Wolvercote, Jericho and Headington – which while very different in history and physical character, shared a strong sense of identity and community. He thought that the wide social mix and role played by primary schools and local clubs and associations were key to this success. The challenge is to replicate the success of these communities elsewhere.

The need for vision

Summing up, **John Glasson**, Emeritus Professor at Oxford Brookes, said the City now needs to aim higher with a clear vision of what it aspires to. We must consider how to develop planning policies that can integrate housing, transport and economic development. Green Belt policies need serious reconsideration. New stations create new opportunities for housing and employment. We could push for Oxford to become a 'solar city' where we're known for renewable energy.

But a key issue is how we align our institutions – only if we speak with one, powerful voice will we get the ear of government. He cited how Cambridge Futures had become a forum for the discussion of ideas, while 'Cambridge2You' is now successfully using promotional techniques from Silicon Valley.

A member of the audience questioned whether growth was the right goal and whether it would deliver a better quality of life. Our speakers all noted that change is unpredictable but inevitable and that it must be managed effectively to ensure the prosperity on which all our futures depend.

Photos courtesy of Graham P Smith

Appendix 2. Why should Oxford grow?
Oxford Futures debate 20 June 2013

A second event under the 'Oxford Futures' title, held in June, saw a lively debate on the question of why and how Oxford should grow. The event was held at the Smith School for Enterprise and the Environment.

This seminar brought together over 40 members of the Society and others with an interest in the city's development to discuss different aspects of growth. The ambitious plans for Science Vale, the upgrading of Oxford's rail connections and its housing situation raise issues about the value of further growth and how the benefits can be secured without losing what is valuable.

The seminar was introduced by **Dr Mick Blowfield** on behalf of the Smith School for Enterprise and the Environment. The School provides the university with an international hub and a bridge between disciplines. The Director, **Professor Gordon Clark**, invited two experts from very different fields to introduce the drivers of urban change, and the relationships between transport and development.

Professor Michael Keith, who directs Oxford's Centre for Migration, Society and Policy (COMPAS) had learned the importance of distinguishing between what you can and cannot change when he was Leader of Tower Hamlets Council in East London. He highlighted six factors which affect the future of cities like Oxford: an ageing population; lifestyle changes which affect residential preferences; a growing low-income social care sector needing homes close to workplaces; cultural draws which boost economic success; the importance of transparency in maintaining community support; and the value of social interaction, which technology cannot replace.

Dr Tim Schwanen has joined the Transport Studies Unit from the Netherlands, where his research focused on behaviour. Economic and transport growth are closely interlinked, and transport is a major cause of carbon emissions. Though it is tempting to look to models such as Montpellier and Freiburg, innovations can be hard to replicate. Changing behaviour depends on complementing investment with other policies, for example parking. Oxford's Park and Ride system is one of the best, but the city needs to be seen as a node in a regional system. Congestion is inevitable, but more could be done to make walking and cycling easier. Grand projects can take funds away from the existing system and primarily benefit those who are already well off.

Participants' views

Group discussions on the topics of the economy, transport, housing, the environment, and the overall picture were led by **Nicholas Falk, John Glasson, Peter Headicar, Martin Stott and Peter Thompson**. These were among the conclusions.

Part of the great appeal of Oxford comes from its diversity, but there is a real danger of further social polarisation driving out those on lower incomes if too few homes are provided.

The city effectively already extends beyond its administrative boundaries, and needs to continue to do so. A big issue is how to achieve this while reducing the city's environmental footprint.

A sub-regional perspective and consistent and integrated policy is needed, looking at spatial form as a whole, not as a series of isolated 'blobs' of development linked by different forms of transport.

Planning for the future needs to be more of a route map and less of a blueprint. A regional vision and genuine leadership is essential, to choose the best scenario and to draw on the wealth of local expertise available.

In thanking everyone, the Chairman referred to *Visions for Oxford in the 21st Century* published by the Society 10 years ago and comprising 35 essays on the future of Oxford. Even then, Oxford was described as a place of 'private affluence and public poverty'. Change is inevitable but we need better ways of engaging all the communities in the process if we are to make the most of the benefits.

This event, sub-titled 'How can our neighbourhoods be fit for 21st-century living?' was held at Oxford Brookes University. It was sponsored by the University and the Academy of Urbanism.

John Worthington, founder member of the consultancy DEGW, emphasised that architects design spaces, but people make places. The city is a product of civic society, the result of a balance between participative and regulatory democracy – 'collaborative urbanism'. He identified barriers to success as centralised decision-making, an adversarial culture and dependency – 'leaving it to them'! A successful city can be defined as organic, ambiguous, non-hierarchical, networked and accessible – a stage for chance encounters.

The dynamism of cities involves a mosaic of communities which may be formal, informal or even virtual, but which live, practice and learn continuously, and are constantly engaged. Cities evolve from an individual centre to networked conurbations which compete with each other but fundamentally support the network.

Planning should aim to support economic success and to ensure equitable distribution of resources. A sustainable future for cities will involve embracing the challenges of climate change and technology, and improving the quality of life for all. More important than the plan is the engagement of society in its formulation: the focus should be on shaping change, not making form. We should understand and accept risk, share understanding, collaborate and learn from others.

Peter Studdert, former County Council Director of Joint Planning for Cambridge's Growth Areas spoke on *'Building a consensus in favour of growth and quality'*. He expressed the view that the regulation of the development market by local planning authorities was probably about the least effective mechanism possible for delivering functional communities and economic growth – a 'bone-headed way'!

Despite his pessimism, comparisons of the Oxford situation with what Cambridge has achieved and how provided some fascinating insights. Peter's former job-title gives a clue to a fundamental point: the County took responsibility for joint planning for agreed growth areas across administrative boundaries. **Cambridge Futures**, a partnership between the City Council and the University, was created and examined seven development scenarios, reaching the conclusion that no single option

was right – a balanced approach should be followed. The complexity of the chaotic planning system was alleviated by the adoption of a Memorandum of Cooperation across eight local planning authorities, and councillors visited a variety of locations to observe practice elsewhere. The key to success was the five 'Cs' – communities, connectivity, climate change and creating character, above all involving collaboration. The result is some wonderful examples of excellent contemporary residential and commercial development.

Richard Webber discussed *'What type of neighbourhoods does the Oxford region need?'* He explained the Mosaic neighbourhood classification system, involving detailed analysis of the region's demographics. Workers are attracted to a region as much as a job, and in choosing where to live, people select neighbours, neighbourhoods and communities, not just houses. Richard identified five social groups for which there is a shortage of accommodation and posed a number of questions related to planning housing development. What type of worker will the city region attract? What kind of housing, neighbourhood and community will be attractive to particular social groups? Where will they be employed? Where should housing be relative to public transport? How will the values of different social groups be reflected in the style of new housing?

Adrian Colwell, Head of Strategic Planning at Cherwell District Council described the planning for the proposed ecotown outside Bicester. The expiry of the current Local Plan causes significant difficulties, with numerous appeals and 11 Judicial Reviews in the past year. The new Core Strategy is intended to be adopted in 2014, with the basic themes of opportunity, safety and health, environmental concern, accessibility and value. It is interesting that while Cherwell DC has a joint management team with South Northamptonshire, only now in response to the newly-introduced statutory obligation to cooperate is a Memorandum of Understanding being worked out with Oxford.

The foci for development in Cherwell District are Banbury and Bicester, but despite the proximity to and good connections with Oxford there seemed little consideration of an integrated development plan, and no reference to transport issues, which are the responsibility of the County Council. Notable issues are the 5.9 million visitors per year to the Bicester Village retail centre, and the consideration of a limited review of the Green Belt boundaries at Kidlington Airport.

Georgia Butina Watson, Head of Department of Planning and Urban Design at Oxford Brookes University, described the inheritance Oxford enjoys, characterised by its different communities, architecture and natural features of water, open spaces and greenery, and the possibilities for learning lessons from elsewhere. The introduction of trams and the encouragement of cycling were the two principal suggestions for addressing issues of connectivity. She implied that improvements in city environments could be achieved by more widespread adoption of shared space concepts and changes in traffic behaviour, citing examples from the USA, Holland, Sweden, Switzerland and London. Changes in attitudes and behaviour could be initiated by 'temporary urbanism' – periodic or short-term road closures and temporary occupation of open spaces for community activities.

These talks were followed by a series of discussion workshops. That dealing with the **delivery of a better city region** concluded that leadership was needed, that the current mechanisms were dysfunctional, and that there was a massive problem with resourcing, but an opportunity for a wider authority, such as the Local Enterprise Partnership, or even central government, to alleviate the situation. There was a fundamental need to create a realistic vision, comprising not just fine words, but a proper spatial plan for the city region, and for this to be achieved by much more effective partnership and collaboration.

The group discussing **the creation of balanced and cohesive communities** concluded that the high demand for housing in Oxford should allow the setting of high standards. But it was essential to establish a fit-for-purpose county-wide plan, only achievable by genuine collaboration between authorities. This plan should have a perspective of 50 years and coordinate views across all communities. The current structures were incapable of delivering such a plan, but local authorities should exercise a coordinating role and use the resources of community and voluntary groups, including the establishment or reinvigoration of neighbourhood groups or parishes. Implementation by developer-led teams, as distinct from builders, could improve the quality of development.

Regarding **transport**, there is a need to improve the travel experience and close the gap between the aspiration of planners and the reality of provision. Car-centric mindsets need to be altered by making alternatives more attractive. Cycling needs to be promoted as a genuinely realistic mode for all, with provision of safe and convenient facilities, not just within new developments, but also connecting communities. Discouragement of car use by limiting parking, facilitating public transport with financial incentives, and simplified ticketing should all be considered.

Developments should be high-density, but located on transport routes, to reduce car use and improve viability of public transport. Serious research into the likely impact of homeworking, technological developments and freight consolidation should be carried out to predict patterns of behaviour and transport requirements. Transport should not be subject to political considerations, but to the social, environmental and economic needs of the community. For Oxford, some current needs are clear and could be addressed now; examples are the eastern arc and the Witney to Oxford route.

Financing of development could be facilitated by making the most of existing infrastructure and opportunities; the example of commercial opportunities associated with sites near the railway station was cited. Existing housing density could be increased, and encouragement could be given to co-housing and self-build (as is being done in Bicester) through planning policy. Development risk could be mitigated by more specific spatial planning; joint ventures could facilitate good development, and the Oxford region should make much better use of the research and planning expertise available through its two universities.

Cycling keeps cars off the road and both City and County have agreed to support it as part of transport policy. Facilities for cyclists can be improved during routine road maintenance

Photo courtesy of T Pettinger

The afternoon symposium was followed by an evening public debate at Oxford Town Hall, sponsored by the Royal Society of Arts.

Jon Rowland, Principal of consultants Jon Rowland Urban Design, highlighted some characteristics of UK housing development. These are: conservatism – little fundamental change in suburbia since the 1930s; domination of the market – 10 house-builders build 50 per cent of housing; UK homes at the bottom of the European league for house and room sizes; short-term development strategies, with no longer-term perspective; dis-empowerment of housing customers; declining scores on the Audit Commission's Quality of Life indicators; design stagnation – for example, no provision for homeworking despite 60 per cent of new businesses being started at home.

Gary Young of the architects and planners Farrells, explained that Farrells are the master-planners for the Bicester 'ecotown' development, for which he quoted densities of 30 to 40 dwellings per hectare, and an anticipated shift of 60 per cent in travel mode from car to public transport for residents. He identified 10 principles for successful development:

1. build sustainably
2. engage proactively with communities and engage **future** generations
3. create a social mix and balanced communities
4. create attractive alternative transport solutions to the car **before** occupation – make the pedestrian 'king of the public realm', humanise the ring road
5. consider landscaping and planting as primary infrastructure, not a bolt-on extra
6. allow for 40 per cent green infrastructure
7. fit the new into the context – build on the character of the old, update old solutions like courtyards, squares, village greens, and make architecture secondary to place
8. design for zero net energy consumption
9. phase development to allow gradual establishment of communities
10. grow communities through engagement of as many interests as possible. There should be a vision, delivered progressively by shaping and fitting the pieces of a jig-saw.

In an inspiring presentation **Wulf Daseking,** Professor of Sociology at the University of Freiburg and former Director of Development at the City of Freiburg, described his near 30-year involvement with its transformation. He characterised Oxford as beautiful but strangled by traffic. The imperative of reducing CO_2 emissions alone is sufficient justification for reducing traffic in cities, but streets should be where local culture is celebrated. This can be achieved by much better public transport and measures like car sharing and the establishment of car clubs. Cities should be judged by their suburbs, not their cores. UK development seems driven by the attitude of 'my house is my castle, my car is my treasure', but will this persist? The young may have different priorities. Every city should strive for the accolade 'the city of the short walk'.

The pressures on world resources and climate change make it essential that new housing is 'future-proofed'. Future families may be less likely to want their own cars or large gardens (only 85 per thousand Freiburg residents own cars), but will value easy access to jobs and neighbourhood facilities, and hence will choose to live in cities which offer a better quality of life. This means living close to transport facilities (84 per cent of Freiburg's residents live within 250 metres of a tram stop) and having a good local cultural life through places to meet each other.

Communities should be integrated, with a wide social mix rather than being socially polarised. Freiburg has won praise because the residential streets are full of children not cars, and because energy consumption has been cut. Residential areas have a 30kph (19mph) speed limit. There are strong communities with a third of the population living in social housing, and the majority renting. Originally new homes had to reduce energy consumption by 40-50 per cent, with higher standards on publicly-owned land, but now all houses have to be built to 'passivhaus' standards, consuming no more energy than they generate. They cost 12 per cent more to build (1900 euros per square metre), but the extra cost is recouped in seven years.

Freiburg has won awards from the Academy of Urbanism and others for being the best European city because its development follows a number of powerful principles. These include the idea of well-connected neighbourhoods at densities high enough to make good

public transport viable, building on the city edge after the centre has been intensified, and using several different architects so that streets look distinctive and varied. But while the design needs to match the context, it is the process used to manage growth that is truly transferable. The city has combined strong political leadership with institutional capacity that makes the most of local skills. The lessons form an ABC of place-making leadership: Ambition, Brokerage and Continuity.

In Freiburg a key element in the ability to plan development had been the governance structure between the Federal Government, the regional authority (Länd) and the city. The city had sufficient autonomy, including for fundraising, to be able to properly determine policy and deliver the vision. With a functional mayoral system the city governance structure facilitated control: such control enabled tight restraint on land prices and the acquisition of development sites by the city. These could then be allocated for different purposes and to different developers for specific types of development.

Finally, Wulf Daseking set out the 12 principles applied to Freiburg through the 'Freiburg Charter', which he considered could be equally well applied to the successful development of Oxford as a city of:

1.   diversity, safety and tolerance
2.   neighbourhoods
3.   short distances
4.   urban development along public transport routes
       – high density model
5.   education, science and culture
6.   commerce, economy and employment
7.   nature and environment
8.   quality design
9.   long-term planning
10.   communication
11.   reliability, obligation and fairness
12.   cooperation, participation and partnership.

Wulf Daseking

Freiburg has won praise because its streets are full of children, not cars

Oxford Futures: Achieving smarter growth in Central Oxfordshire. OCS, March 2014

Central Oxfordshire stands at a crossroads in its history. The region is poised either to become one of the key drivers of the UK's knowledge economy or to resist change and growth and stifle its own potential.

The challenges and opportunities facing the region were explored in four debates held in 2013 under the banner of 'Oxford Futures'. The debates brought together local planners, politicians and experts from many disciplines.

This report of the debates summarises the key issues, suggests a set of principles that should guide future growth and offers clear recommendations for action by a range of agencies. It calls for a smarter approach to strategic development in the region, underpinned by a shared vision of the future. Most of all it calls for leadership, collaboration and seamless coordination between the different agencies who hold the region's future in their hands.

Oxford Futures is essential reading for local planners, councillors, business leaders, university leaders and others who have a role to play in shaping future development in Central Oxfordshire.

About the author

The Oxford Futures debates were the brainchild of Nicholas Falk, working in association with Oxford Civic Society. Dr Falk has had a personal interest in Oxford since graduating from University College. An urban economist, planner and founder of the URBED consultancy, he has been involved in many aspects of the growth of Cambridge and the development of sustainable urban neighbourhoods with quality housing.

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