

# Garden Cities: a perspective from the Shelter/PRP team

Andy von Bradsky and his shortlisted team applaud Lord Wolfson for setting the exam question; it is now for Government, the GLA and Local Authorities to absorb the learning and not reject the intellectual outcomes of a truly valuable process out of hand, they say

After considerable efforts by all who participated, great organisation from Lord Wolfson and his team, the winners of the Wolfson Economics Prize for Garden Cities were announced with great fanfare. There is a wealth of learning in the 274 submissions from which political and financial leaders can draw so it was a great disappointment for the Housing Minister to have slammed the winner so soon afterwards.

Shelter's submission, to which PRP and KPMG contributed, was formally declared runner up to the winning submission by Urbed. It received plaudits from the industry, independent commentators and the media, including BBC's Countryfile programme as it focusses on a real place and the practical issues around deliverability, finance and community support.

The exam question was 'How would you deliver a new garden city which is visionary, economically viable and popular?'. All finalists agree that 'garden cities' are an essential component to address the undersupply of housing for all tenures in the UK and that without pro-active planning for large scale housing development, the crisis will worsen. The principles of funding infrastructure through land value capture models – a locally-led approach, funding with private equity rather than government subsidy and a long term community trust model, are a feature of the URBED and Shelter proposals. There are clear differences in each of the finalists' entries, but we all agree that a 21st century model for garden cities is necessary and deliverable.

Shelter's vision was for supply across all tenures, with quality and affordability achieved with zero public subsidy and local consent. We chose a real site in order to show that their model was deliverable in practice, not just in theory. It enabled us to analyse real data, including the economic, environmental and social constraints for developing to scale.

The determinants for the ideal location for 'garden cities' were set out to assess the suitability of sites. We concluded that the model works when the following criteria are addressed:

- Future demand: identifying the areas of the highest level of new demand for homes, that is close to London
- Environmental protection: avoiding areas where there are significant environmental impacts
- Connectivity: ease of access through existing or proposed transport infrastructure
- Proximity to employment: reduced travel times to major centres of employment
- Viability: the model depends on land value uplift so sites with lowest land values are most suitable

The Hoo Peninsular, central to Terry Farrell's vision for Thames Gateway is ideally located and ticks all the boxes. It is the site for the Mayor's proposed London Hub airport and we chose to challenge whether the site is better suited for housing infrastructure rather than an airport. Medway recently granted consent for a large scale development of ex-MOD land at Lodge Hill for 5000 homes as a foundation for a larger settlement. The available data enabled us to model the design, financial, environmental and practical issues for delivering a new garden city.

Our proposal is for a polycentric city made up of a necklace of housing settlements, similar in concept to Ebenezer Howard's original model, joined by an existing re-used railway line. We focussed on its centre, Stoke Harbour, a fictitious town with a population of 36000 people and 15000 new homes. It is a landscape led proposal with 40% open space in the form of parks and green spaces along transport corridors to integrate it into its surrounding countryside. There are a series of walkable neighbourhoods to an average density of 60 dwellings per hectare, with a mix of homes for all tenures, from market sale, market rent, shared ownership and social rent. It includes a 15 per cent allocation for self-build, 37.5per cent affordable housing and specific proposals for housing for the elderly, integrated with a community based health care model. Homes are built to high environmental performance standards and a district energy and power network is sourced from the nearby existing power station.

Our proposal sets out a growth plan and shows that with appropriate mechanisms to front fund social infrastructure and parcel land, it is possible to build out 4 to 5 times the current UK average as is often achieved in North European delivery models.

Skills and materials are in short supply even under current modest market conditions so our plans include a new offsite manufacturing facility that can produce over 2000 homes per annum to achieve accelerated build out rates. Creating other >>>

BELOW:  
PRP's Viking Park



local employment opportunities in green technologies and the energy industry through tax incentives ensure that the settlement will not be a dormitory town. It is anticipated that 3000 jobs will be created locally.

A major strength of the proposal was the extent of testing Shelter undertook to determine public perception of garden cities. A series of surveys of residents were conducted in the area to test the popularity of the concept.

The outcomes offer real insights for local and national policy makers. Whilst there are inevitably some polarised for and against, the polling demonstrated that a local referendum would be winnable by focussing on the benefits for the majority who are undecided. It dispels the theory that financial inducements are an answer and rather that local communities would support new settlements if schools, hospitals, other community services and infrastructure are improved for local people and the housing is targeted at local residents and their families. Involving the local community and stakeholders in all aspects of the process from conception to delivery and future management will be essential.

None of these concepts are ground breaking and much of it has been achieved before using similar approaches whether in the UK's historic Garden Cities and New Towns or more recently in the many new settlements in Northern Europe. What we

need is political leadership at a national level and local level who are prepared to sponsor and support big ideas despite the political and financial challenges. This was outlined in PRP's *Beyond EcoTowns: Applying the lessons from Europe* and the Housing Forum's report *The ABC of Housing Growth and Infrastructure* which URBED and PRP edited.

The proposals have a relevance to London as it seeks to increase supply of homes to 50,000pa without compromising affordability and quality. London's housing shortfall must be considered in a regional context and inevitably other settlements outside the M25 will be required and existing settlements such as Harlow and Crawley should be completed if we are to make in-roads. Providing there is good infrastructure, short journey times and the right balance of local facilities, settlements based on garden city principles must surely be a valuable contribution to London's housing shortfall.

We hope that by pooling their experience, the winner and the short-listed Wolfson entries will create a head of steam for the delivery of a pilot garden city, whether on the Hoo Peninsular or other sites with similar characteristics. We applaud Lord Wolfson for setting the exam question: it is now for Government, the GLA and Local Authorities to absorb the learning and not reject the intellectual outcomes of a truly valuable process out of hand. ■

BELOW:  
Garden Cities masterplan



# Wolfson winners: grow your own garden city

David Rudlin and Nicholas Falk, winners of the Wolfson Economics Prize 2014, outline their ideas

URBED were announced as winners of the 2014 Wolfson Economics Prize – the second most valuable economics prize after the Nobel. Their submission, developed with Jon Rowland and Pete Redman, illustrated how to double the size of the historic, if fictional, city of Uxcester, and then applied the ideas to the very real issues being faced in Oxford. Their Garden City is one grown from the strong rootstock of an existing place rather than a free-standing new town. They identified 40 towns and cities where the model could be applied and they are in discussion with a number of places interested in applying the ideas. Their full essay is available at [www.urbed.com](http://www.urbed.com). David Rudlin outlines the economic case made in the essay for improving the quality of housebuilding while the following article by Nicholas Falk describes the implications for Oxford and responds to criticism

David Rudlin outlines the economic case for developing a city like Uxcester

The country that gave the world the Garden City is now building around 100,000 fewer homes each year than it needs to. What is more, the quality of the housing that is built, while better than it used to be, is still poor compared to other Northern European countries in terms of space standards, environmental performance, layout and infrastructure. For many years URBED's Nicholas Falk has led study tours to cities like Freiburg, a German city near Basel of a little over 200,000 people that has built two large urban extensions at Vauban and Rieselfeld in the last twenty years. Walking through these new neighbourhoods with UK politicians, professionals and community activists, past the shining trams, high-quality housing and generous green space, the question asked is always; why can't we do this? The answer is not that we in the UK lack the talent or commitment, but rather that our system makes it if not impossible then at least very difficult.

So in our submission for the 2014 Wolfson Economics Prize we showed how this system might be reformed. The economics of the original Garden City was based on what its creator Ebenezer Howard called the 'unearned increment' – the uplift in the value of land that happens when development takes place. Howard was writing before the planning system was created and today the 'unearned increment' is created by the mere allocation of land for development. An average piece of farmland in the UK is worth around £15,000 per hectare. If it is granted consent for housing then its value rises to more than £2m per hectare. That value uplift goes to the farmer and to all the agents, housebuilders, lawyers and consultants who prised the consent out of the local planning authority. In Freiburg and indeed much of Northern Europe, the money and effort is spent not on the land but on the neighbourhood, it builds the trams, creates the parks and schools and is spent on the quality of the housing.

In our Wolfson submission we propose a set of reforms to allow the same economics to be applied to the development of a new round of Garden Cities in the UK. Land would be acquired with fair compensation for owners but otherwise at existing use value. This will require legislation; a new Garden City Act that creates the powers to allow towns and cities and their partners to acquire land and plan positively in the way that their peers are able to do elsewhere in Europe. Rather than plan Garden Cities from Whitehall, we propose to invite cities to bid for Garden City status and the powers that go with it. Our discussions in cities like Oxford, where house prices are now eleven times average incomes, suggest that Garden City designation could be a solution to the problems of accommodating growth that many of these cities currently face.



We based our calculations on the purchase of 6000 hectares of land, half of which would be allocated for open space with the balance being used to build just under 70,000 new homes, employment space for 70,000 jobs along with shops, schools and other facilities. Once developed the land would be worth just over £6bn. Factoring in acquisition, financing and other costs, the 'unearned increment' is just over £4bn. What can you get for that nowadays?

Well, you can build the schools and the health facilities you will need, construct quite a lot of roads, build a tram system and lay out all the open space. In short you can do what Freiburg has done. But can you build a Garden City? Well that depends what you mean by a Garden City and particularly what you mean by a 'city'. The assumption has tended to be that Garden Cities are freestanding new towns of up to 30,000 homes. This of course is not a city, indeed even Ebenezer Howard recognised that to be sustainable his Garden Cities needed to be part of a wider network that he called the 'Social City'. This is important because in the modern world, cities are the centre of our economy. Places that cannot offer the attractions of city life struggle to attract graduates and employers. To build a Garden City we therefore need to extend our shopping list; we are going to need a city centre; a proper one with shops, bars, theatres and galleries. We need a mainline >>>



RIGHT:  
Uxchester's urban structure

railway station (and of course a mainline railway to serve it), a large hospital, a university or two (preferably Russell Group) and a cathedral would be nice. The £4bn is not going to be enough, not by a long way. Even if it were, most of this stuff cannot be bought off-the-shelf, it needs to be cultivated for a few centuries.

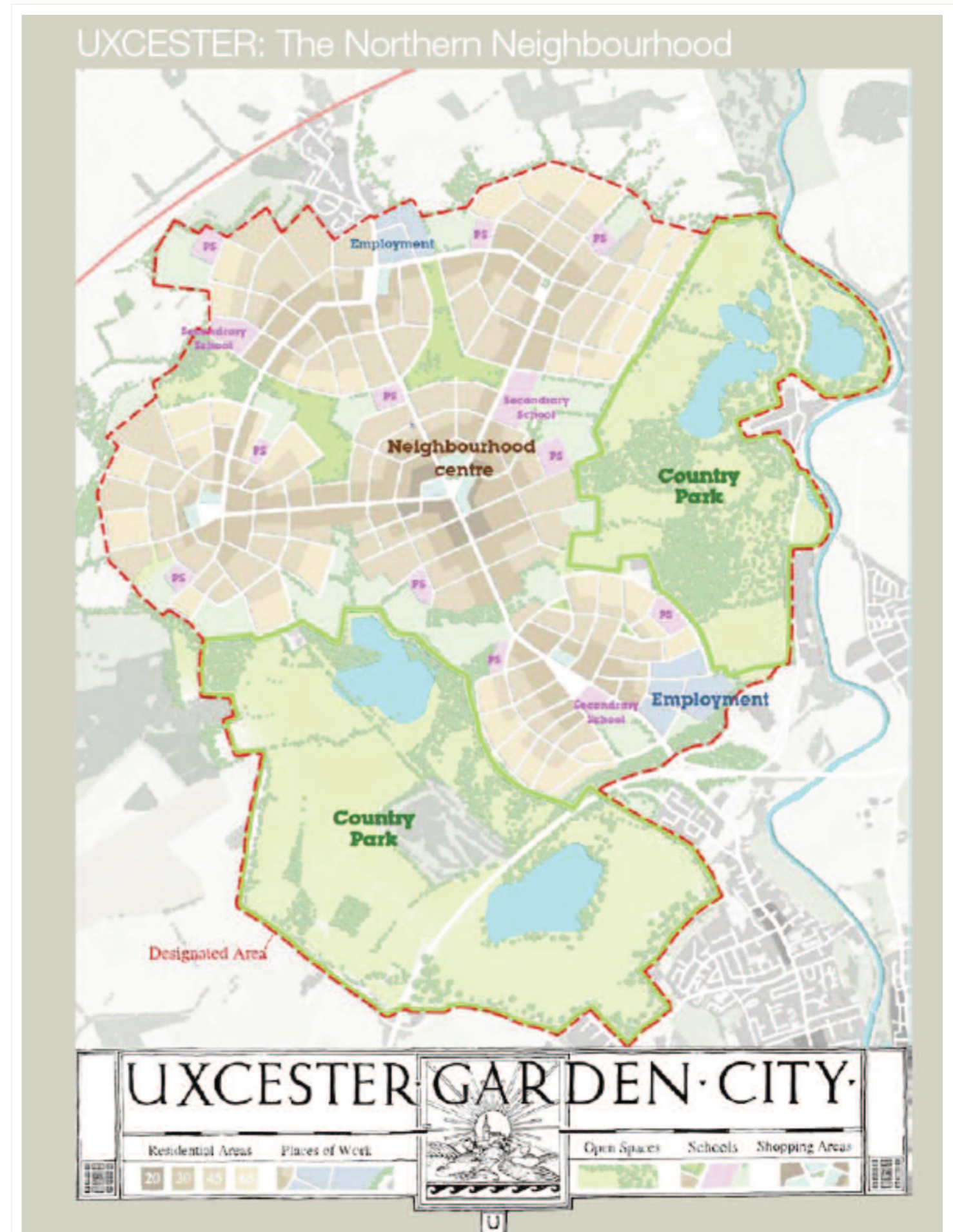
We therefore concluded that rather than grow a Garden City from a seedling that will be vulnerable for years we should graft it onto the rootstock of an existing city. We targeted historic cities with populations of 1-200,000 and explored the implications of doubling their size through a series of urban extensions. To do this we invented the city of Uxchester (pronounced uss-ter), to avoid becoming mired in the complexities of a particular place. Uxchester was modelled on York, leavened with a little bit of Chester and seasoned with Gloucester and Worcester. It is a city of 200,000 people in 85,000 homes currently growing at one per cent a year. Our plan is to double the size of the city in 35 years by building three substantial urban extensions within 10km (or a 20 minute tram ride) of the centre. Uxchester may be fictional but the pressures that it faces are very real to many UK cities of this size. Cambridge is already planning expansion on this

scale and as part of our submission we explored the implications for Oxfordshire, where 100,000 new homes are needed to cope with demand.

Our Garden City is therefore grown from an existing city and the new housing is built within reach of all its existing facilities. Doubling the size of the city will take up only 15 per cent of the land within this 10km ring, much of which will be farm land with little ecological value and no public access. Our Garden City needs to rediscover the spirit that built Edinburgh New Town or Bath or, for that matter London's Bloomsbury. None of these were built on brownfield land, they were built confidently on the fields that surrounded the city and in doing so enhanced its beauty and setting. These fields of course are today in the green belt and are the most closely guarded of all our green fields.

However if we are serious about building more homes and enabling our cities to compete with those in Northern Europe, we need to have the confidence to reallocate some of this sacred land. In doing so we should use the Garden City to expand and enhance the city rather than building an alternative to it in places that no one can object to, because no one wants to live there! ■

*URBED's Wolfson submission is written by David Rudlin with Nicholas Falk, Jon Rowland (JRUD) and Pete Redman (Traderisks). It also benefitted from contributions from Joe Ravetz (Manchester University), Jeff Austin (JVM) and Gerard Dericks (University of Oxford). The draft also benefitted from the expert advice of our sounding board who are listed on the inside cover of the submission.*



# A 21st Century garden city for Oxford?

An essay by  
Nicholas Falk

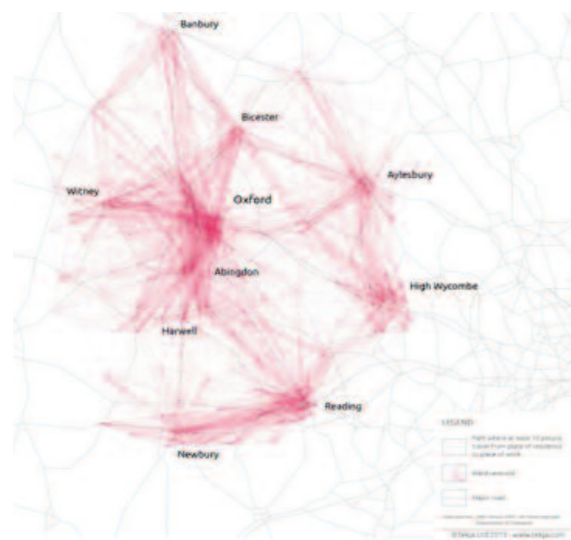
The idea of a new crop of Garden Cities is receiving a lot of attention nationally, thanks in part to the 2014 Wolfson Economics Prize and the efforts of organisations like the Town and Country Planning Association and Shelter.

Ebenezer Howard's original idea, which he started to apply in Letchworth and Welwyn Garden Cities, was to use the 'unearned increment' from the uplift in land values as a result of development to fund high-quality infrastructure, including electric tramways to connect new communities into what he called 'the Social City'. In the past it was seen as a means of enabling city dwellers to escape from cramped and polluted conditions to places that combined the best of both the town and the country.

However in a city like Oxford, with its congested roads, rising energy costs, and potential for economic growth, a 'Garden City for the 21st century' offers the chance of attracting investment to make the city as a whole much more sustainable, as well as widening housing choice.

Over the last year Jon Rowland and I have been supporting the Oxford Civic Society and others in looking at the bigger picture, and over a longer time-span, in the light of experience elsewhere. The results were published as *Oxford Futures: Achieving smarter growth in Central Oxfordshire*. At the launch Oxford's new Professor of Geography and housing expert Danny Dorling warned that if Oxford does not grow it will find its position as a leading university lost to others.

Our research showed that it was practically impossible to build a new Garden City from scratch; it needed to be grafted on to 'strong root stock', because the costs of infrastructure are greater than the value released by building the new homes. Having been shortlisted for the 2014 Wolfson Economics Essay Prize for a new Garden City in the fictitious town of Uxcester, we decided to testing out our ideas in Oxfordshire as part of



Visit the Wolfson Prize project blog at <http://goo.gl/GQzZAC> for more information.

the second stage. We wanted to see if it were possible to achieve an ambitious and long-term aim of doubling the population of Central Oxfordshire without any loss to the quality of life that residents already prize.

In particular, could Oxford grow in a similar way to its twin city of Grenoble, France's 'high tech capital', or to Freiburg in Germany, near Basel, whose Director of Development spoke at one of our events in Oxford Town Hall?

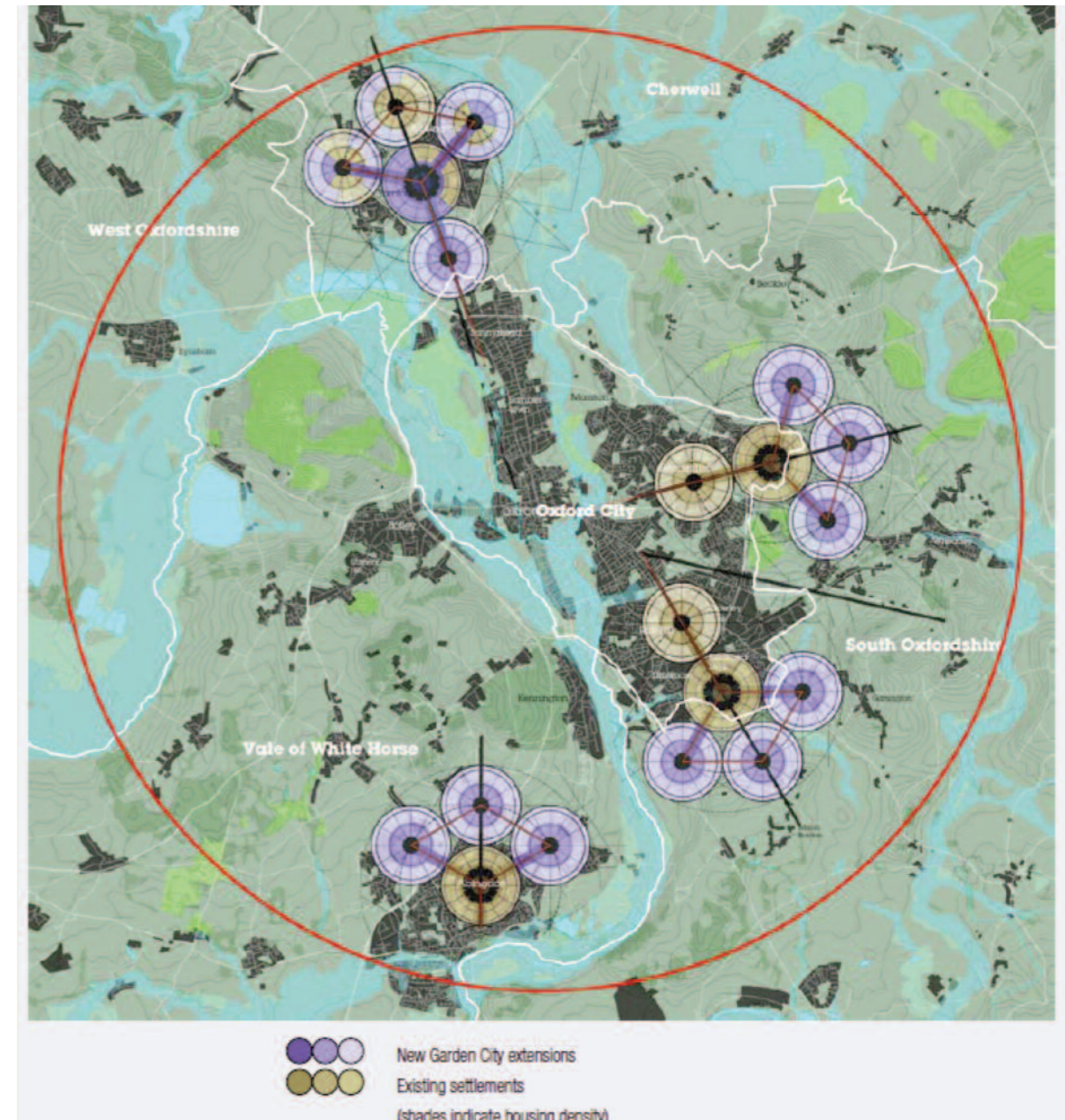
Land for development within the City boundaries is inevitably very limited. But on the borders in places like Kidlington, there are opportunities to 'piggyback' on the investment going into the new Oxford Parkway station at Water Eaton, and the new road links that the government is funding. Of course it is vital to avoid flood plains or pressures on overloaded junctions.

Pete Redman who advised us on finance demonstrated that there would be enough funding available to fund a new tram system and to create a series of country parks so that people could cycle or use public transport as they do in comparable cities on the Continent. This would take up a relatively small part of the green belt, and could be part of a 'deal' that preserved the many villages that are now under pressure from developers within Oxfordshire.

So what are the obstacles? There will always be resistance to development and fear of a leap into unknown territory. Over the last few decades confidence in planning and development has declined to an all-time low. However a 21st Century Garden City for Oxford could offer a range of benefits to the existing community, as a meeting that we organised as part of our Wolfson work at Cutteslowe Community Centre demonstrated.

The key is ensuring that there is an organisation in place to provide the necessary leadership and to ensure that the promised benefits are delivered, through a Garden City Land Company which serves a Trust that brings the stakeholders together. With the promise of planning permission, a Bond would be issued to raise private finance to open up sites to a wide range of house builders, including many who want to commission their own homes but cannot find a plot. The Leader of the County Council has already gone on record saying that doing nothing is not an option, that 100,000 new homes need to be built somewhere, and that a Continental style transport system is needed to stop Oxford grinding to a halt.

The Uxcester proposals are a modest first step in showing how the ambition could be realised; perhaps the Wolfson Prize provides some neutral ground for people with very different concerns to come together to see that Oxford remains in the forefront of European cities, and not a museum piece for the Chinese to look at on their way to shop at Bicester Village! ■



## Green belt or grey corset

The arguments prompted by our winning submission for the Wolfson 2014 Economics Prize revealed the arid state of thinking over the future of our town and country. On the one hand defenders of the Green Belt forget the pressures on thousands of villages in counties like Oxfordshire or Gloucestershire, where almost every field is optioned for development.

On the other hand, proponents of an urban renaissance, like Richard Rogers, disregard the inconvenient truth that not every family wants to live in an apartment block and that cities like Oxford or York have very little brownfield land left to build on.

URBED's proposal for Uxcester Garden City argue that you cannot build a real city from

## Nicholas Falk responds to criticism of the Prize announcement

scratch; you need to graft an urban extension onto strong rootstock.

The economics of development make it unviable to build the infrastructure that we demand in new locations, so we should start where there is already adequate infrastructure, or where new capacity is planned.

By taking a carefully considered 'bite' out of the Greenbelt, and not nibbling at the edges, we could use the 'housing crisis' to build sustainable urban neighbourhoods. We could use what Ebenezer Howard called the 'unearned increment' to fund the local infrastructure – transport, energy and education – that we so badly need before the new homes are built.

In a recent event in Oxford Danny Dorling, the

new Professor of Geography, argued that while in general we could only solve the housing crisis by making better use of the existing housing stock, in both London and Oxford we urgently need more homes to be built.

So instead of wasting time and resources on impossible quests, like making people want to live in the Thames Estuary when their jobs are elsewhere, why not spend a little time thinking about how and where we should be living in, say 2050?

Then we would see that the best way of conserving the character of our English countryside is helped by building a new crop of 21st century garden cities, and not housing estates everywhere. ■