



# PARTNERING FOR PROSPERITY:

A new deal for the Cambridge-Milton Keynes-Oxford Arc



# Foreword

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The Cambridge-Milton Keynes-Oxford arc contains some of our most productive and innovative places, delivering growth and prosperity for the whole country.

But the continued success of these places is not guaranteed. Without swift and determined action to overcome the area's housing crisis, it will fall behind its international competitors and fail to attract and retain the talent and skills it needs.

The change needed is not insurmountable. This report outlines a new deal between central government and the local areas. Commitment to providing new strategic infrastructure must be matched with ambition and commitment at a local level to deliver major housing growth and create places in which people want, and can afford, to live and work.

The proposed East West Rail and Expressway schemes must be built as quickly as possible to unlock land for new homes and provide a better service for those who already live across the arc. They must also be futureproofed with the capacity to expand. Local areas must work collaboratively to make the most of these new opportunities, thinking more boldly than before, both now and in the long-term.

Our placemaking competition has demonstrated that there is an abundance of creative, industry-led ideas for how the arc can accommodate transformational housing and employment growth in a way that enhances quality of life while respecting the environment and interests of existing residents.

The Commission is grateful to all who have supported this study over the past 18 months, including Government, local areas, and a wide range of other private and public stakeholders. The commitment and drive of local areas to see their places succeed has been inspiring throughout – local leaders must now commit to working collectively, and in the national interest, to secure this success.



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# IN BRIEF

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**The Cambridge-Milton Keynes-Oxford arc must be a national priority. Its world-class research, innovation and technology can help the UK prosper in a changing global economy. But success cannot be taken for granted. Without urgent action, a chronic undersupply of homes could jeopardise growth, limit access to labour and put prosperity at risk.**

The Commission's central finding is that rates of house building will need to double if the arc is to achieve its economic potential. This requires a new deal between central and local government – one which aligns public and private interests behind the delivery of significant east-west infrastructure and major new settlements, and which seeks commitment to faster growth through a joined-up plan for jobs, homes and infrastructure. Any deal must give local areas the certainty, freedoms and resources they need to create well-designed, well-connected new communities.

## EAST-WEST INFRASTRUCTURE ENABLING NEW SETTLEMENTS

East West Rail and the Oxford-Cambridge Expressway provide a once-in-a-generation opportunity to unlock land for new settlements. Local and national government must work together, with developers and investors, to align the delivery of infrastructure and major new settlements – including the first new towns to be built in over a generation.

## EQUIPPING LOCAL AREAS WITH THE TOOLS TO DELIVER GROWTH

New settlements are only part of the solution. Meeting the arc's future housing needs will require development in and around existing towns and cities. Local areas must be equipped to meet this challenge and to remove the barriers that frustrate privately-led development. Government should ensure local areas have the powers and resources to shape high quality, well-connected places that respect the environment, and enhance quality of life for new and existing residents.

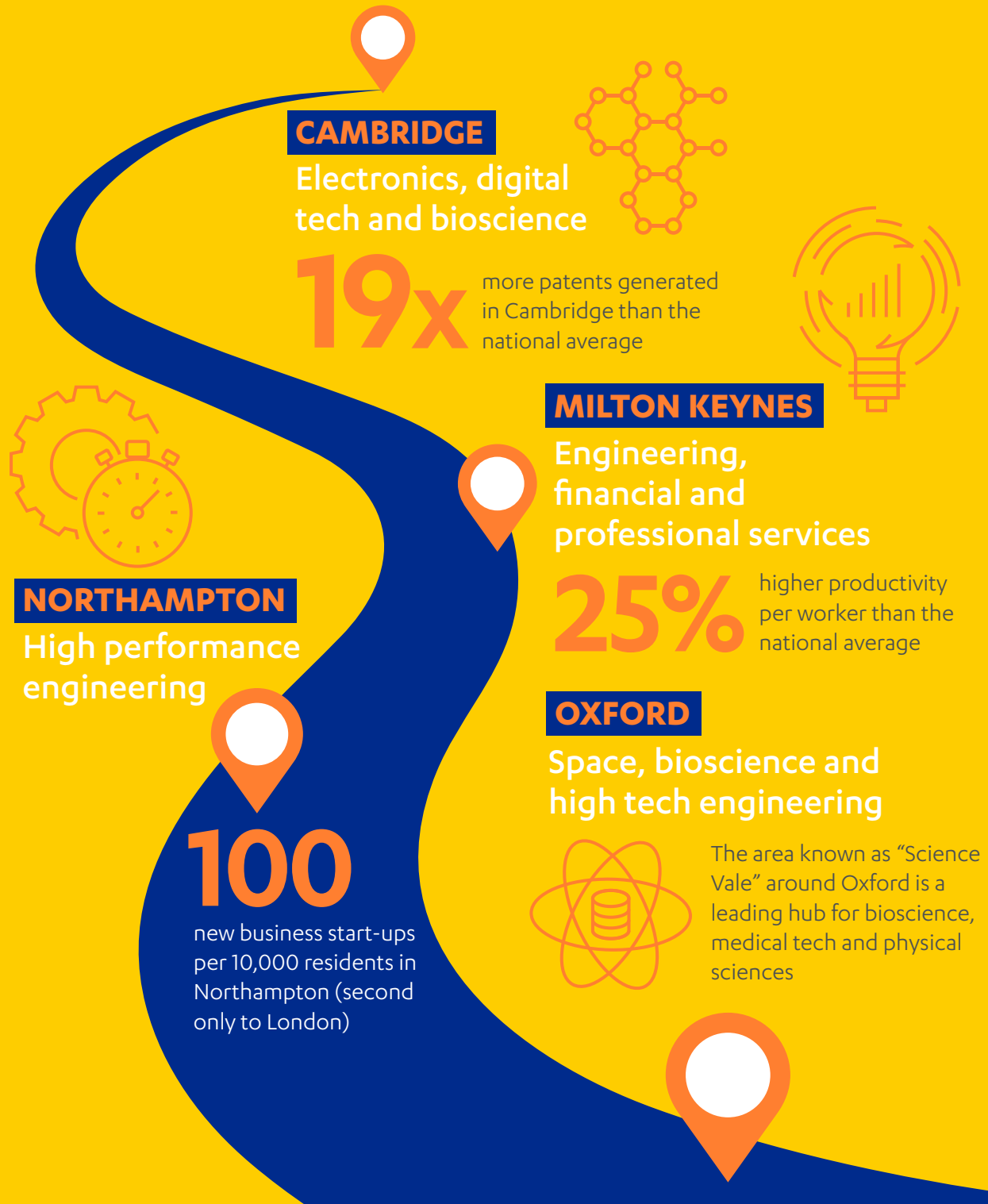
## A LONG-TERM VISION FOR THE ARC AND ITS SUB-REGIONS

A new deal will only succeed if it is based on a long-term vision for the arc shared by Government, local authorities and communities. Developing and delivering this vision will require effective leadership at the national and local level. It will require a strong strategic planning framework integrating opportunities for jobs, homes and infrastructure and robust collective decision-making.

**The success of this arc matters, not just to those who live and work in it, but to communities across the country. Local leaders must commit to work collectively, with Government, and in the national interest to realise its economic potential. Without this commitment, the arc will be left behind, damaging the UK's global competitiveness.**

# CAMBRIDGE – MILTON KEYNES – OXFORD ARC

Cambridge, Milton Keynes and Oxford are amongst the UK's most productive, successful and fast growing cities. They host a highly skilled labour force, cutting edge research facilities and technology clusters which compete on the world stage.



Sources: Cambridge Econometrics, SQW

# PARTNERING FOR PROSPERITY

The new deal between Government, local areas, and communities

## GOVERNMENT



Deliver

### NEW TRANSPORT INFRASTRUCTURE

unlocking opportunities for transformational development



### PROVIDE THE MECHANISMS AND RESOURCES

to enable new settlements and wider housing growth

## LOCAL AREAS



Commit to

### DOUBLING THE RATE OF HOUSEBUILDING

attracting the talent and skills that businesses need to grow



### DEFINE A LONG TERM VISION

for the arc with the right governance to support delivery

## COMMUNITIES



### WELL-CONNECTED, THRIVING LOCAL COMMUNITIES

with access to jobs and services, and homes for future generations



### QUALITY OF LIFE AND WELLBEING,

for new and existing residents, whilst respecting the natural environment

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# EXECUTIVE SUMMARY

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The National Infrastructure Commission has been asked to provide Government with proposals and options to maximise the potential of the Cambridge-Milton Keynes-Oxford arc as a connected, knowledge-intensive cluster that competes on a global stage, protecting the area's high quality environment, and securing the homes and jobs that the area needs.

Since the project's inception in March 2016, the Commission has engaged with a range of stakeholders from across the arc including local authorities, Local Enterprise Partnerships (LEPs), universities, and Government departments. This has included evaluating in excess of 120 responses submitted by more than 145 organisations to two separate calls for evidence.

The Commission's interim report, published in November 2016, presented its assessment of the key challenges facing the arc. It argued that a lack of sufficient and suitable housing presents a fundamental risk to future economic growth and that, without a joined-up approach to planning for housing, jobs and infrastructure, the arc risks being left behind by its international competitors, damaging the UK's future competitiveness. It identified new east-west transport links as a once-in-a-generation opportunity to secure the area's future success.

**The Commission's central finding is that rates of house building will need to double if the arc is to achieve its economic potential. This requires a new deal between central and local government – one which aligns public and private interests behind the delivery of significant east-west infrastructure and major new settlements, and which seeks commitment to faster growth through a joined-up plan for jobs, homes and infrastructure. Any deal must give local areas the certainty, freedoms and resources they need to create well-designed, well-connected new communities.**

## A NEW DEAL FOR THE ARC

Cambridge, Milton Keynes and Oxford are amongst the UK's most productive, successful and fast growing cities. They play host to a highly skilled labour force; world-leading research facilities; knowledge-intensive firms and technology clusters which compete on the world stage. To maximise the economic potential of this arc – and the contribution it makes to UK output, trading accounts and tax revenues – we must invest in the continued growth and success of these cities and their surrounding areas.

Infrastructure will be a vital part of this investment package. Investment in skills; higher education; science and technology are, of course, essential, but the right decisions on infrastructure – and particularly transport infrastructure – will help tackle the most serious constraint on the future growth of these cities and this arc: its lack of sufficient and suitable housing.

The success of towns and cities across the arc has fuelled demand for homes. But a sustained shortfall in housing supply has led to high house prices and low levels of affordability, for both home ownership and private rental, and an undersupply of affordable housing. This is placing a fundamental constraint

on the continued growth of the arc's most successful economies. Workers at all levels are being priced out of local housing markets, restricting firms' access to labour and impacting upon competitiveness. From post-doctoral students to professors, and from catering staff to managing directors, finding affordable and good housing is a struggle. Difficulties in accessing labour are exacerbated by poor east-west transport connectivity. The area is a series of separate labour markets and commuting between key hubs is almost non-existent.

If the arc is to maximise its economic potential, current rates of house building will need to double – delivering up to one million new homes by 2050. It is equally important that new development improves quality of life – this means engaging architects, developers and designers in the process of building new homes in well-designed, liveable and connected communities which respect and enhance the natural environment and the quality of life enjoyed by existing residents.

It is unlikely that this level or quality of development can be delivered if growth is focused exclusively on the fringes of existing towns and cities, or through the development of small garden towns and villages. Government and local authorities will need to plan for, and work with investors, developers and housebuilders to deliver, large new settlements and major urban extensions – including the first new towns in over a generation.

Making this happen will require national investment, local leadership, support from local communities and buy in from industry. The Commission proposes, therefore, a series of deals between Government and local areas which:

- a. align national investment in new east-west transport infrastructure to unlock the development of ambitious new and expanded settlements; and
- b. seek local commitment to accelerated house building, in exchange for certainty over investment in enabling infrastructure, and the freedoms and resources necessary to shape growth in a way that enhances quality of life for new and existing residents.

The success of these deals will depend upon all parties' commitment to an ambitious, arc-wide vision and robust plans for its city and county-regions – integrating planning for jobs, homes and infrastructure. Sustained improvements in collective working across the local areas – supported by clear and accountable collaborative governance arrangements – will be vital.

## **EAST-WEST INFRASTRUCTURE ENABLING NEW SETTLEMENTS**

National investment in the East West Rail project and the proposed Oxford-Cambridge Expressway present a once-in-a-generation opportunity. These schemes will enhance connectivity across the arc, expanding the labour markets of key towns and cities, as well as improving connections with international gateways such as Heathrow. They will also provide a vital step in the development of a strategic transport corridor connecting East Anglia to the west of England and south Wales. But crucially, these schemes can play a key role in tackling the arc's housing crisis, unlocking major new development locations and enabling transformational growth around existing towns and cities.



Maximising the potential of these schemes to support well-connected and well-designed new communities will mean:

- progressing the East West Rail project as an inter-urban commuter railway – limiting the number of stations in order to safeguard commuting times, and focusing larger scale development around a smaller number of transport hubs and interchanges;
- developing the Oxford-Cambridge Expressway, along the same broad corridor as East West Rail – creating a multi-modal transport spine that can support the development of large scale new communities; and
- delivering these projects as part of a single, integrated programme focused on identifying and exploiting major development opportunities, from smaller scale garden towns of around 10,000 homes through to new city-scale developments of up to 150,000 homes. Any such programme should consider opportunities that may exist to:
  - i. enable new settlements and major urban extensions – for example, between Oxford and Milton Keynes, and between Bedford and Cambridge – some of which may have the potential to grow to city-scale; and
  - ii. support the ongoing growth of existing towns and cities – for example, re-establishing Milton Keynes as a growth location of national significance; unlocking growth in and around Bedford, and focusing development on a small number of key nodes in the Marston Vale.

**Recommendation 1a: Government should progress work on East West Rail, the Expressway and new settlements through a single co-ordinated delivery programme, with cross-government ministerial commitment and oversight. The aim of this programme should be to unlock opportunities for transformational housing growth through the creation of well-connected new communities. As part of this programme Government should commit:**

- £1bn to deliver the infrastructure necessary for a high quality and resilient rail commuter service between Bicester and Bedford, accelerating delivery of this section of East West Rail to a target date of 2023;
- to accelerate work on the development of the new East West Rail line between Bedford and Cambridge, and commit to open the line by 2030; and
- to deliver the ‘missing link’ of the Oxford-Cambridge Expressway, accelerating development work to deliver a clearly-defined and agreed route by 2025, enabling construction to begin as part of the next Road Investment Strategy (RIS 2) and be complete by 2030.

Key milestones and decision points in the development of East West Rail and the Expressway should be subject to “in principle” agreement to the development of significantly more ambitious proposals for housing growth in the arc, including major new settlements and urban extensions, and subsequently, progress in identifying, evaluating and designating sites. “In principle” agreement should be provided within 12 months. The schemes should be futureproofed to ensure the potential for expansion and improvement is not permanently and prematurely closed.

The success of any major new settlements, will depend upon connectivity north-south as well as east-west. Fast and reliable links to London – with journey times of less than one hour – will also be crucial.

East West Rail proposals include services between Milton Keynes and Aylesbury, via an upgrade of an existing freight line. Some changes to existing services and infrastructure could enable services to continue from East West Rail, via Aylesbury and into central London on the Chiltern line. Improvement could unlock major growth opportunities in the arc between Bicester and Bletchley, and enable faster journeys between London and Aylesbury.

**Recommendation 1b: Government should seek to introduce fast, direct services to London to enable growth in the arc between Bicester and Bletchley and improve connectivity between London and Aylesbury. Any such improvements should be contingent on local authorities' commitment to major development between Bicester and Bletchley and around existing settlements.**

While East West Rail will unlock major settlement opportunities across the arc, targeted rail investments can play a key role in unlocking and accelerating local housing development in the short term. Small scale interventions, aligned to wider plans for East West Rail, could reduce stress on the existing rail network enabling immediate opportunities for growth.

**Recommendation 1c: Government should work with the private sector and the relevant local authorities to agree funding packages and progress schemes to support housing and employment growth now. These should include:**

- essential works required to enable passenger services between Oxford and Cowley no later than 2019; and
- the acceleration of East West Rail phase 3 works around south Cambridge to enable the delivery of a Cambridge South station in 2022 as part of Control Period 6.

**Substantial private sector and local contributions, reflecting the benefits that these parties gain, will be required to enable the delivery of these schemes.**

Without intervention, there is little chance that the market will deliver major new and expanded settlements at the scale and pace required. The risks associated with large-scale land assembly, masterplanning and upfront infrastructure investment make this commercially unattractive, even to the largest developers. Statutory development corporations – in various forms – have been the key factor in enabling successful new settlements in the UK and elsewhere in Europe, driving long-term development and providing assurance on delivery.

Neither the location of new settlements, nor the form taken by development corporations should be imposed 'top-down'. Local authorities and national government should work together, through a robust and transparent assessment processes, to identify, assess, consult on and designate locations for new settlements. They should negotiate the objectives, membership and reporting arrangements for new development corporations. The Secretary of State should, however, retain the power to designate new settlements in the national interest where voluntary agreements cannot be reached.

The success of new development corporations will depend on their control of land for new settlements. Development corporations should negotiate positively with land owners (including Oxford and Cambridge colleges) to assemble the land required for new settlements through voluntary agreements. However, it is important that public investment in strategic infrastructure does not lead to large windfall gains for land owners at the expense of new and existing communities. Development

corporations should, therefore, be prepared to use the full range of powers at their disposal (including compulsory purchase) to ensure that land is acquired at ‘no scheme’ values. The Commission sees a clear case for strengthening and streamlining mechanisms for compulsory purchase, accelerating and reducing the cost of land assembly. The Commission will make further recommendations on this issue soon.

**Recommendation 2a: Government and local authorities should work together, through a robust and transparent process, to designate locations for new and expanded settlements by 2020. This should involve:**

- commissioning formal studies to identify and assess options for new settlements required, and potential locations for these settlements;
- consultation with communities, statutory agencies, infrastructure providers, wider stakeholders and public examination of proposed sites; and
- formal designation of sites and the publication of such assessments as legally required.

The Commission is optimistic that Government and local authorities will reach agreement on the scale and location of new settlements in the national interest. However, if agreement cannot ultimately be reached, the Secretary of State should designate these new settlements.

**Recommendation 2b: Government should:**

- work with local authorities to establish appropriate delivery vehicles for new and expanded settlements across the arc, considering the role that can be played by locally accountable Development Corporations, Mayoral Development Corporations, the Homes and Communities Agency and Urban Development Corporations.
- establish New Town Development Corporations to deliver larger new and expanded settlements. In so doing, it should:
  - work with local authorities to define and agree the objectives, membership and reporting arrangements for new development corporations;
  - provide a clear remit to support the economic success of large new settlements as centres of employment, and assist the development corporation by using wider policy levers to support local economic growth; and
  - explore the full range of options for funding development corporations’ programme of land acquisition, including providing public funding with a view to unlocking substantial private investment, and balancing considerations of short-term affordability and long-term value for money.

New development should not be to the detriment of existing communities, nor should it compromise the quality of the arc’s natural and built environment. Maximising the arc’s potential requires effective placemaking and robust arrangements for the stewardship of new and expanded settlements.

Effective placemaking can deliver well-connected, sensitively designed new places where communities can flourish. It can encourage efficient use of infrastructure, support positive social outcomes, and enhance natural capital – either by improving the quantity or quality of natural assets and/or making these more accessible. With effective design, this can be achieved without affecting viability and without increasing costs to the taxpayer or to future residents.

But there can be no blueprint for effective placemaking. Good placemaking requires judgements that balance physical, economic, social, historic and cultural factors – each of which will be specific to the local area. These judgements are best made locally. However, structured advice from independent experts in different fields of design, in architecture, sustainability and engineering, alongside representation from communities, can help inform local judgements and – when given weight within local planning processes – help shape development to maximise positive outcomes.

Maintaining attractive, liveable places over the long-term will require a positive approach to stewardship. The most powerful mechanisms place responsibility – and resources – with the community itself. Where Government realises surpluses arising from the development of new settlements, a proportion should be retained to establish mechanisms for the ongoing development, stewardship and maintenance of local community assets, without further burden on the general taxpayer.

### **Recommendation 3: Government should work with local authorities to:**

- **put in place an independent design panel for East West Rail, the Expressway and new and expanded settlements across the arc by April 2018. This panel should work in concert with existing infrastructure design panels and new development corporations to specify, scrutinise and challenge settlement designs, plans and delivery, with a view to:**
  - making most efficient use of new and existing infrastructure (including transport and utilities);
  - supporting positive social outcomes (including better mental and physical health);
  - achieving net gains in biodiversity and natural capital across the arc; and
  - improving quality of life for existing and future residents.
- **establish arrangements for the long-term stewardship of valued community assets in each new or expanded settlement, placing responsibility and resources in the hands of the community – learning from both the Parks Trust in Milton Keynes and the Letchworth Garden City Heritage Foundation; and**
- **ensure that strategic infrastructure, including new elements of East West Rail and the Oxford-Cambridge Expressway, are planned and developed to achieve net gains in biodiversity and natural capital across the arc.**

## **EQUIPPING LOCAL AREAS WITH THE TOOLS TO DELIVER GROWTH**

New settlements will not, on their own, be sufficient to meet future housing needs or secure the level of commercial development required to realise the arc’s economic potential. Greater levels of development will be required across all of the arc’s existing towns and cities. This growth must be sustainable and deliverable. Any deals that seek commitment to accelerated housing growth must, therefore, give local areas the ability to shape long-term growth by providing greater certainty over investment in growth-enabling infrastructure.

This means providing greater long-term visibility over the scheduling of national investments in infrastructure schemes – looking beyond individual rail control periods, road investment periods and spending review periods. But it also means equipping local areas to develop urban transport systems that can enable and sustain future growth.

In the absence of any long-term funding programme for urban transport, bespoke deals should make long-term funding available to local areas. These deals should be premised on the development of robust, credible and locally agreed plans for urban transport in the arc's key towns and cities.

**Recommendation 4: Government and local authorities should implement measures to increase certainty on the delivery of growth enabling infrastructure.**

- **Government should work with local authorities to establish an indicative, long-term pipeline of strategic national and local infrastructure investments, conditional upon specific housing delivery milestones, and with firm financial commitments made at the beginning of the relevant spending review, road investment or rail industry control period. This pipeline should be established and agreed by 2020.**
- **Local authorities should work with LEPs, local business groups, educational institutions and other key partners to formally agree robust and credible transport plans to enable the development of the arc's key towns and cities. These should be agreed locally by April 2019. These plans should provide a firm basis for long-term growth and investment, and include plans for significantly upgrading public transport, integrating transport hubs and providing safe cycling infrastructure.**
- **Following agreement of these long-term transport plans, Government should develop deals, bespoke to this region, with local authorities in Oxfordshire and the central section of the arc. These deals should extend powers over bus franchising, the introduction of smart ticketing, and give greater long-term certainty over future funding which authorities can use to fund, and unlock finance for, city-regional infrastructure improvements. Powers and resources should be devolved no later than April 2020.**

It is important that measures to provide funding certainty for infrastructure should not depend exclusively on the general taxpayer. There is a powerful case for enabling local authorities within the arc to capture a greater share of the land value uplifts that result from investment in transport schemes or planning decisions, to fund growth-enabling infrastructure at the local level.

While a wider, national review of land value capture mechanisms is required (the Commission will consider this through its National Infrastructure Assessment), immediate progress could be made within the arc if Government and groups of local authorities, working together through appropriate governance structures, were to negotiate a more flexible approach to the deployment of the Community Infrastructure Levy (CIL) and Section 106 agreements.

Such changes should enable a range of options for capturing land value uplifts which local areas can then deploy to reflect local circumstances, for example, the scale of particular developments and differences in development viability across different areas.

Changes should aim to:

- allow groups of local authorities, working together, the freedom to levy CIL charges in addition to those set out in district-level CIL schedules. These city-regional or county-regional CIL charges should be greater in specific zones where investment in infrastructure or public planning decisions increase the viability of development – they may be levied on smaller developments within these areas where the negotiation of S106 agreements is not a realistic option; and

- remove restrictions on the pooling of section 106 revenues and on borrowing to forward-fund infrastructure against future receipts. Such changes would, in effect, enable local authorities to adopt a tariff and prospectus approach to infrastructure funding through land value capture, modelled on the Milton Keynes Tariff.

**Recommendation 5: Government should, through bespoke deals with local areas, make changes to the operation and application of CIL and s106 agreements across the arc that will:**

- give groups of local authorities, working together through appropriate governance structures, the power to levy a city-regional CIL; and
- remove restrictions on the pooling of section 106 revenues and on the forward funding of infrastructure against future receipts. These changes should be agreed by 2020.

Any deal under which local areas commit to accelerated housing growth must give these authorities the means to shape the character and distribution of this growth. It is vitally important, therefore, that commitments to accelerated housing growth are matched by measures to ensure that local authorities can manage the risks posed by speculative development that sits outside local plans.

Even with adopted local plans in place, local areas can be at risk of speculative development where they cannot maintain a pipeline of available and developable land sufficient to support housing delivery over the next five years. This requirement to maintain a five-year land supply also creates an incentive for local planning authorities to focus on smaller sites that are more likely to deliver in shorter timescales. This can be at the expense of larger sites which could make a greater contribution to meeting long-term housing need.

While it is imperative that local authorities sustain a supply of land to support housing development, there is a risk that, without adequate safeguards, their commitment to higher levels of development and to the development of large sites, may place the communities they represent at greater risk of speculative development.

**Recommendation 6: government should consider the need for agreements extending flexibilities in the application of five-year land supply requirements. These agreements should only be considered in cases where local authorities agree deals to accommodate significantly higher levels of housing growth. Flexibilities should:**

- help ensure that local areas are not exposed to increased risk of speculative development as a result of their commitment to additional growth; and
- be kept under review and made subject to local areas demonstrating progress in the delivery of major housing growth.

In all cases, agreement must preserve the requirement for local authorities to maintain a supply of land sufficient to enable house building at the rate that would have been required in the absence of any deal to support additional housing growth.

## A LONG-TERM VISION FOR THE ARC AND ITS SUB-REGIONS

If any deal between the local authorities and Government is to succeed, it must be based on a shared vision for the future of the arc and a robust framework for strategic planning.

The starting point must be the articulation of a clear spatial vision for the arc over the next 50 years. This should be jointly owned and led by local stakeholders – working from the bottom-up – and by Government. It should provide an expression of the arc’s long-term economic, physical and social development. It should identify locations for growth and investment and enabling strategic infrastructure. This vision should shape a supporting arc-wide Strategic Infrastructure Plan and economic plan, framed to support the UK’s emerging industrial strategy, and which distills a set of strategic, arc-wide investment priorities.

The most powerful mechanism for translating these arc-wide strategies into policies and plans that guide development is through the planning system. Strategic spatial plans should be developed through bottom-up collaboration between local authorities at the ‘larger than local’ level, joining up economic, infrastructure (including transport and utilities) and land-use planning in defined sub-regions across the arc. These sub-regions should include Oxfordshire, and Cambridgeshire and Peterborough. Where the definition of planning sub-regions within the arc is contested – as in the central section of the arc – local authorities and LEPs should work together to agree sub-regional definitions with Government.

These strategic spatial plans should be placed on a statutory footing – ensuring that local plans at the district, borough and city level are developed to support the wider spatial vision. They should be supported by a clear investment plan, a phased delivery plan and by the necessary assessments, appraisals and consultation processes.

Developing a fit-for-purpose vision and supporting plans will require local authorities and LEPs to work across administrative boundaries and to deepen existing collaborations. It will require them to put in place new governance structures to enable collective decision-making and signal their long-term commitment to the success of the arc.

**Recommendation 7: Government should work with local authorities across the arc to secure agreement that:**

- **representatives of each of the arc’s defined sub-regions will work together at the arc-wide level, and with Government, to develop an ambitious spatial vision covering the whole arc area up to 2050, identifying locations for growth and investment and enabling infrastructure requirements. This work should be completed no later than summer 2019. This vision should be supported by a set of arc-wide economic plans and an arc-wide plan for strategic infrastructure; and**
- **local planning and transport authorities will work together, in defined sub-regions, to prepare statutory strategic spatial plans and submit these for inspection by April 2020. These should be underpinned by a clear investment strategy and a phased delivery plan, and shaped by the requirements of a robust integrated appraisal framework. Local Enterprise Partnerships and utilities providers should be included in the development of these strategic spatial plans.**

**Local authorities and LEPs should work collectively and seek to agree a definition for sub-regional planning areas by April 2018. If agreement cannot be reached by this date, the Secretary of State for Communities and Local Government should define the sub-regions based on consideration of the best areas for joined-up economic, transport and land-use planning.**

The development of an arc-wide vision, robust statutory plans, and transformational development, will require leadership at different spatial scales.

At the sub-regional level, the development of collective decision-making structures should build on existing collaborations:

- the Cambridgeshire and Peterborough Mayoral Combined Authority provides a powerful platform for robust collective decision-making across district, city and county level authorities;
- the Oxfordshire Growth Board – a locally constituted joint committee of the six Oxfordshire local authorities together with the LEP and university – provides a vehicle for collective decision-making on key issues; and
- local authorities across the central section of the arc have been working on proposals to develop their own growth board, based on the joint committee model adopted in Oxfordshire. Buckinghamshire County Council have recently committed to the development of a similar growth board.

Building on the Oxfordshire Growth Board and the emerging growth board structures across the central area is a pragmatic move. However, these boards will need to be strengthened if they are to give wider stakeholders confidence in the delivery of ambitious statutory strategic spatial plans. Local authorities in each area should make a binding commitment to collectively develop and agree these plans. They should ask the Secretary of State to designate their growth boards as ‘planning joint committees’ with responsibility for strategic plan-making functions in their respective areas.

Strengthening existing growth boards in this way would bind their members into the collective development, adoption and delivery of a statutory plan, without undermining their existing functions. With these ‘enhanced growth boards’ in place, local partners may wish to consider measures to pool capacity and share specialist resources through, for example, joint planning units.

Over the longer-term, as collaborative working practices become the norm, and as levels of trust and understanding builds, local authorities should consider evolving their ‘enhanced growth boards’ into statutory combined authorities, including with directly-elected mayors. Such structures would provide a robust platform for city and county-regional governance.

At the arc-wide level, local authorities and LEPs are already working together through the East West Rail Consortium, the Fast Growth Cities group and, in particular, through the England’s Economic Heartland Strategic Alliance Transport Forum. This Transport Forum is working to develop proposals that could, subject to statutory processes, see the establishment of a Subnational Transport Body (STB).

Government at all levels should welcome the progress made in building the standing of the Transport Forum and delivering its current work programme. However, the development of an STB will not, on its own, deliver a model for arc-wide governance that is capable of delivering a spatial vision to 2050, a robust economic industrial strategy and a strategic infrastructure plan.



Securing progress will require local authorities to go further, putting in place an arc-wide ‘strategic partnership board’ to lead the development of an arc-wide vision. Members should be drawn from sub-regional growth boards, LEPs and combined authorities. Government will need to play an active role in this board.

Making this strategic board work in practice will require a skilled and committed chair who can sustain the confidence of all stakeholders. The chair of the strategic partnership board should be independent – recruited by Government and agreed by local partners following an open, competitive process – with a remit to convene partners, achieve meaningful progress through stimulated consensus, exert challenge locally and nationally and drive transformation across the arc.

**Recommendation 8: Government should work with local authorities to put in place robust sub-regional and arc-wide governance arrangements. This will include:**

- reconstituting the Oxfordshire Growth Board as a planning joint committee by April 2018, ensuring it is empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan;
- establishing growth board arrangements for defined planning areas in the central section of the arc by April 2018, ensuring these are constituted as planning joint committees and empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan(s);
- supporting the continued development of new and existing growth boards, with a view to their being constituted as statutory combined authorities, or mayoral combined authorities, as soon as possible and no later than 2022; and
- working with representatives of the Cambridgeshire and Peterborough Combined Authority, Oxfordshire Growth Board and other growth board(s) across the arc to establish an arc-wide ‘Strategic Partnership Board’ by Summer 2018. This should include recruiting an independent chair to convene the board and provide a clear link to Government, and agreeing this appointment with local partners.

The recommendations set out in this report for the delivery of infrastructure, the designation of new settlements and the development of planning and governance arrangements suggest an ambitious timeline for the ongoing development of the arc.

Meeting this timetable will require local authorities and Government departments to maintain the momentum that has built over the past 12 months. To help sustain this momentum, the Commission proposes that Government and local authority partners provide regular published updates on their progress in developing and delivering their vision for this vital growth area.

**Recommendation 9: Government should work with local authorities and any new delivery bodies from across the arc to prepare and publish a six-monthly update, with the first being published in April 2018, enabling the Commission to assess the progress achieved in delivering the recommendations set out in this report.**

# DEFINING THE ARC

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The Cambridge-Milton Keynes-Oxford (CaMkOx) arc is home to 3.3million people. It stretches around 130 miles from Cambridgeshire, via Bedford and the south east midlands, to Oxfordshire. It forms a broad arc around the north and west of London's green belt, encompassing Northampton, Daventry and Wellingborough to the north, and Luton and Aylesbury to the south. The arc links with Norfolk and Suffolk in the east and with Swindon to the west.

Subject to decisions on its future, the arc could provide a strategic economic and transport link, connecting towns and cities in East Anglia to the west of England and South Wales. However, the arc today is neither a joined-up transport corridor, nor a single functional economic area:

- The arc is not currently served by high-quality, end-to-end, east-west transport links. Its principal transport arteries run north to south, providing strong links to London, the midlands and the north of England. (e.g. the M40, M1, A1, and A14/M11). The largest urban areas within the arc are all served by direct and frequent rail services into London with journey times of less than 60 minutes. All are within an hour's drive of an international airport. In contrast, journey times between the towns and cities within the arc are often long and unreliable. In many cases the only rail option is to travel via London.
- The arc is a polycentric housing market area and labour market. Cambridge, Milton Keynes and Oxford are important centres of employment and experience high-levels of net in-commuting, but the arc comprises a wider set of overlapping travel to work areas including those centred on Bedford, Luton, Northampton, and Aylesbury.

Today, the arc is best understood as an alignment of highly successful, fast growing and productive towns and cities, each with a highly skilled labour force and with global strengths in knowledge-led business sectors.

These towns, while sharing these fundamental strengths, are diverse – they have developed separately from one another, and have different economic histories and identities. For example, the growth of Cambridge since the 1960s owes little to the development of Milton Keynes which, in turn, owes little to the success of Oxford. These towns and cities – and others across the arc – have developed distinct economies, each positioned on different radial routes around from London.

Realising the potential of the arc means realising the economic potential of these towns and cities.



# PART ONE: THE ARC

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The success of the Cambridge-Milton Keynes-Oxford arc should be a national priority. The arc competes with locations across the globe, attracting talent and bringing investment into the UK. Its towns and cities are amongst the most economically productive outside London and make a vital contribution, both to national income and to national tax revenues.

If the UK is to succeed in the global economy, it must invest in the success of the arc. This matters, not just for those who live and work in the arc, but for all parts of the UK.

The economic importance of the arc – and its position at the heart of the UK’s knowledge economy – is a reflection of its concentration of world leading research facilities, internationally significant business clusters, track record in innovation and entrepreneurship, and the skills of its workforce.

The arc’s higher education institutions and scientific research facilities are fundamental to its success. Oxford and Cambridge Universities<sup>1</sup> rank consistently amongst the top four in the world, and Cranfield University is a global leader in engineering disciplines. The arc’s teaching hospitals – including the John Radcliffe, and Churchill, in Oxford and Addenbrooke’s in Cambridge – drive internationally significant clinical and medical developments, while the Harwell Campus and the Culham Science Centre house some of the world’s most important facilities for applied scientific research.

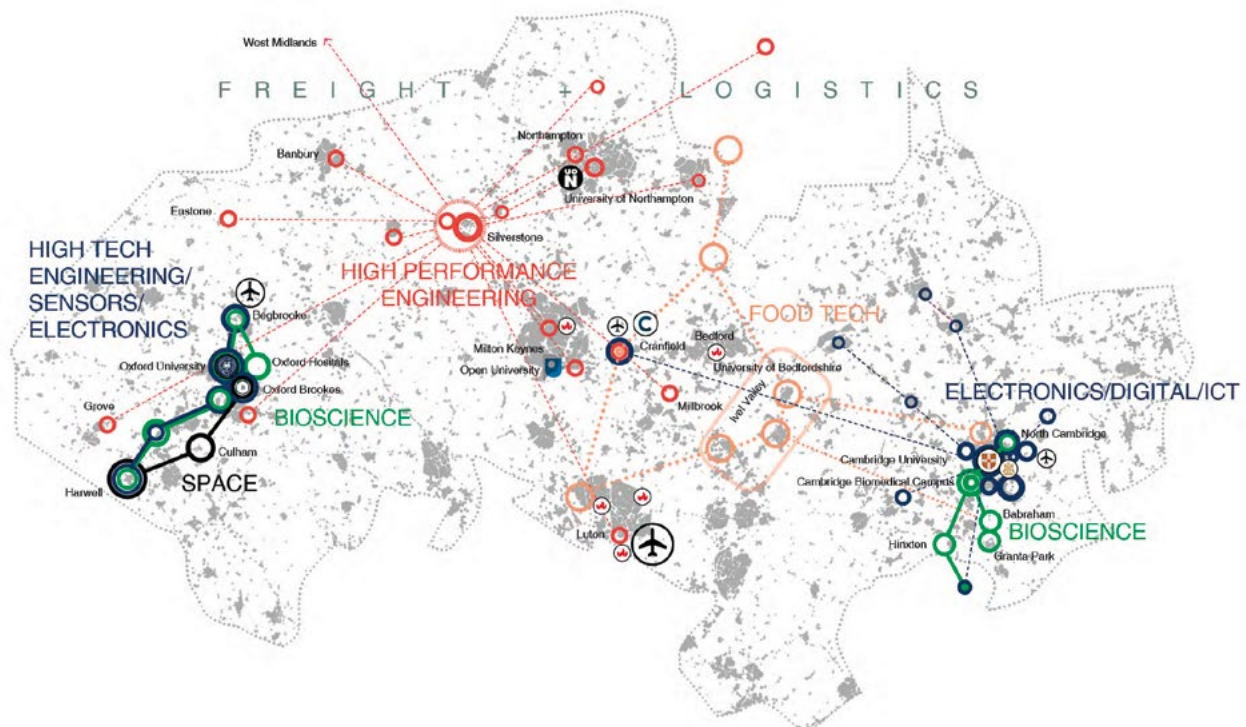
The arc also has internationally significant business clusters operating in knowledge-intensive sectors. These include corporate head offices and companies operating at the leading edge of scientific research; life sciences; pharmaceuticals; high-tech manufacturing; performance technology and motorsport sectors. Nine of the UK’s top 100 (and two of the top ten) high growth tech firms are located in the arc, despite the area accounting for just 5.1% of the UK’s population.<sup>2</sup>

- **Cambridge:** technology, digital and ICT clusters have enjoyed significant long-term success, from the emergence of Cambridge Consultants (founded in 1960) and TTP (1987), through to the success of businesses such as Autonomy and ARM in recent years. Bioscience has been central to growth over the past decade, with the successful development of companies such as Cambridge Antibody Technology, Horizon Drug Discovery and Abca, and the attraction of major inward investors, most notably Astra Zeneca.
- **Milton Keynes:** major financial and professional services companies such as PwC, Santander and Mazars have a substantial presence, and the town hosts the global/European/national headquarters of major companies including Mercedes Benz, Suzuki, Volkswagen AG.

Milton Keynes is also home to some major high performance technology and motorsport companies, notably Red Bull Racing, Prodrive Composites and Nissan's European Research and Development HQ.

- **Northampton:** from a well-known leather and footwear cluster evolved a major hub for engineering. Major players currently include Cosworth and MAHLE Powertrain. The wider Northampton area includes Silverstone – the location of the British Grand Prix and a major high performance technology motorsport cluster. Plans for the expansion of Silverstone Park suggest its significance could increase further over the coming years.
- **Oxford:** key business clusters in and around Oxford, Didcot and Abingdon (the area known as Science Vale), include bioscience and medical technologies; physical sciences including work on cryogenics, instruments and magnets; telecommunications, computer hardware and software; and engineering and electronics, including motorsport. They include some long-established companies such as Oxford Instruments (founded in 1959), some very high profile ones such as Williams F1; some relatively new companies experiencing very rapid growth (e.g. Immunocore) and developing technologies which could have global impact.

Figure 1: Major business clusters in the Cambridge-Milton Keynes-Oxford arc



Source: 5<sup>th</sup> Studio based on analysis from SQW

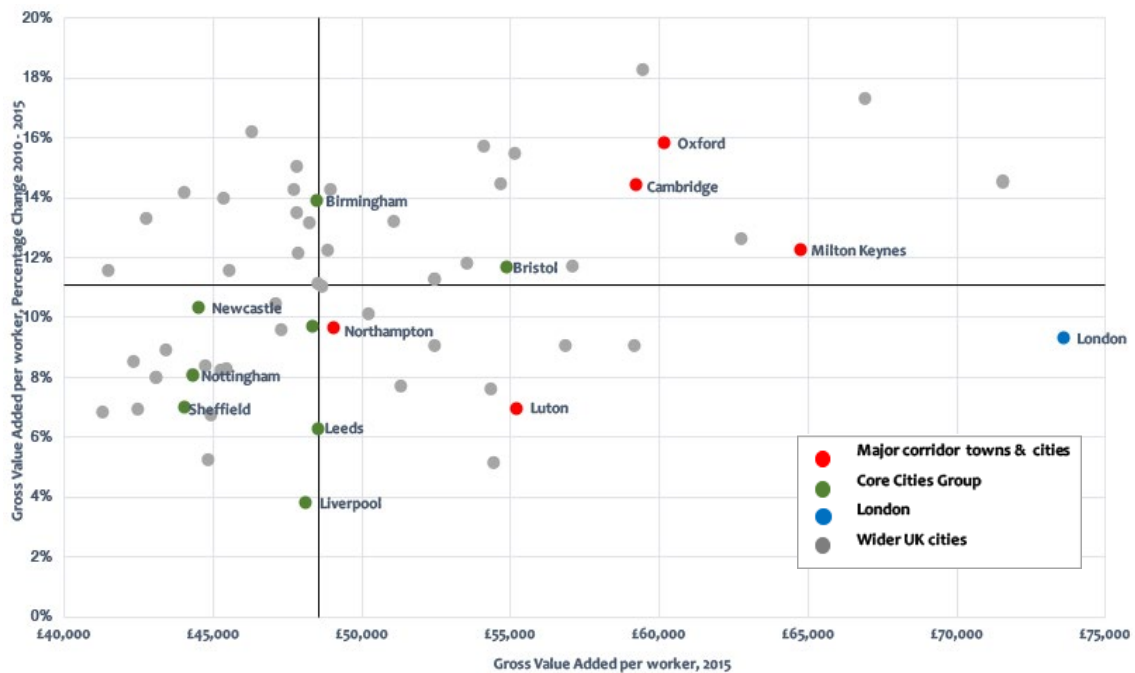
The arc's research capability and knowledge-intensive business clusters have provided a powerful platform for innovation. In 2015, the number of patent applications generated in Milton Keynes was around double the national average, Oxford generated over four times the national average, whilst the number from Cambridge was 19 times greater than the UK average.<sup>3</sup> In a recent Centre for Cities report, Oxford and Cambridge were the only two UK cities in the European top 20 for innovation.<sup>4</sup>

A strong culture of entrepreneurship has seen the arc translate research and innovation into commercial success. Universities within the arc have a clear track record in this area – developing both successful businesses, and the facilities for these start-ups to grow and succeed over the longer term. There are high profile examples across the work of Cambridge, Oxford and Cranfield. Outside of the university sector, Northampton has the second highest number of new business start-ups per 10,000 residents in the UK outside London, and Milton Keynes was the UK’s fastest growing city both in terms of employment and output (GVA) over the period from 1981 to 2013.<sup>5 6</sup>

Fundamental to the success of the arc has been the skills of its workforce. Across the arc, residents are better qualified, on average, than across the UK as a whole. Some 40% hold degree level qualifications, compared to 36% nationally.<sup>7</sup> Oxford and Cambridge have the most highly qualified workforces in the country with more than 60% of workers qualified to degree level or higher.<sup>8</sup> Cambridge in particular has been identified by Centre for Cities as having the highest concentration of highly skilled residents in Europe.<sup>9</sup> Milton Keynes and Northampton have seen sustained growth in degree-level qualifications – fewer than 20% of workers in these towns were qualified to this level in the mid-1990s compared to more than 30% in 2016.<sup>10</sup>

This combination of innovation, entrepreneurship and highly-skilled workers has established the towns and cities across the arc as amongst the most productive and fastest growing in the UK (see figure 2 below). Milton Keynes has the highest productivity per worker within the arc, almost 25% higher than the national average.<sup>11</sup>

**Figure 2: Fast growing and highly productive cities - productivity and productivity growth (2010-2015)**



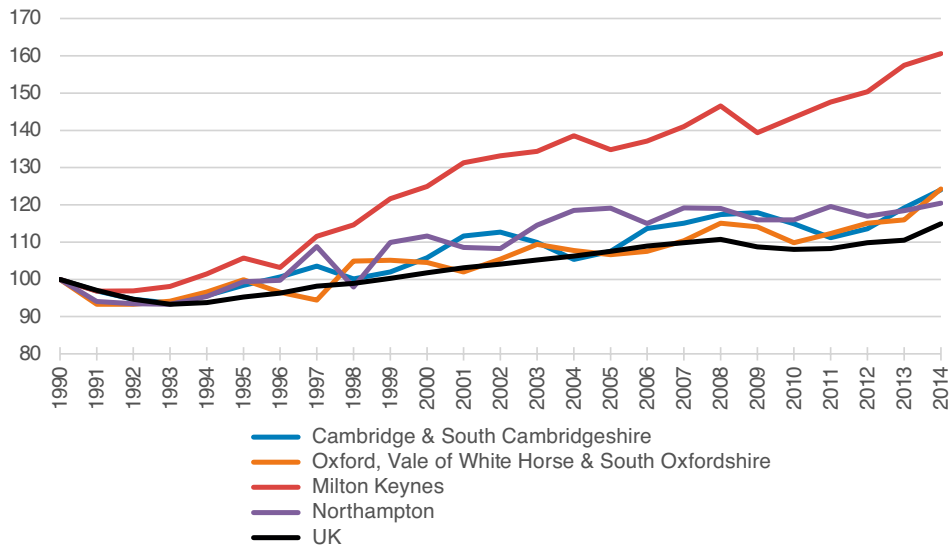
Source: Centre for Cities

Note: City median data reflects the median for UK’s largest 62 towns and cities

The pace of growth can be seen in changing employment and population levels across the arc’s key economic hubs.

Since the early 1990s, Oxford, Cambridge and Milton Keynes have sustained growth in their working age population far in excess of the national average (12%). Between 1992 and 2016 Northampton grew by 17%, Oxford by 30%, Cambridge by 26% and Milton Keynes by 44%.<sup>12</sup> These towns and cities have also maintained workplace employment rates well above national and regional benchmarks.<sup>13</sup>

Figure 3: Number of jobs in CaMkOx arc by area (index 1990 = 100)



Source: Cambridge Econometrics

Alongside growth in employment, the area has experienced comparatively high population growth, growing from 2.7 million people in 1990 to 3.3 million today, an increase of 22%. Milton Keynes alone has doubled in size since 1981, a rate of expansion nearly five times faster than the English average. Over the same period, Northampton grew by 34%, double the national average.<sup>14</sup>

The pace of growth and high levels of productivity in the arc's town and cities ensure that the area makes a significant – and increasingly important – contribution to national output; to the UK's trading accounts and to the tax revenues that fund public services across the UK.

- **Contributions to national output:** GVA per worker in Oxford is around 14% greater than the average for the UK as a whole. The average worker in Milton Keynes generates around 23% more.

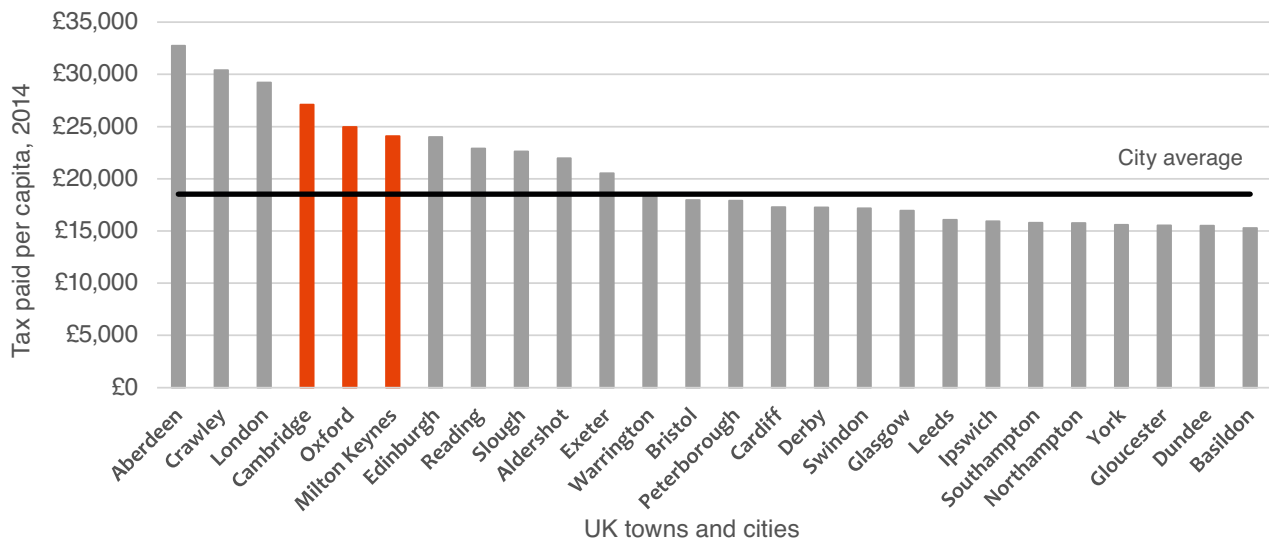
The contribution of the arc is clearer still in knowledge-intensive sectors such as high-tech manufacturing. While the average value of output for workers in high-tech manufacturing is around £80,000 per year across the UK (2011 prices), the value of output in Northampton is around £85,000; in Milton Keynes is around £89,000; in Cambridge is around £106,000 and in Oxford is around £136,000.<sup>15</sup>

- **Exports:** businesses in the arc's key hubs have global reach. Milton Keynes is among the UK's top ten cities for service exports exporting around £10,500 worth of services for each job in the town. Taking goods and service exports together, Milton Keynes exports some £19,500 per job and Oxford exports £17,950 per job compared to a national average of £15,690.<sup>16</sup>

- Tax revenues:** analysis undertaken by the Centre for Cities suggests that, per head of population, Oxford, Cambridge and Milton Keynes are amongst the greatest contributors to national tax revenues. Amongst the UK’s cities, only London, Crawley and Aberdeen make a greater contribution per capita (see figure 4 below).

Furthermore, this analysis suggests that the contribution made by the arc’s key towns and cities to the national exchequer is increasing. Between 2004 and 2014, total revenues raised from Oxford, Cambridge, Milton Keynes and Luton increased by over 20% in real terms. Only London and Aberdeen delivered larger increases over this period.<sup>17</sup>

**Figure 4: Annual tax paid per capita in the UK’s 62 largest towns and cities, 2014**



Source: Centre for Cities, 2016

Note: Full dataset includes a further 36 towns and cities with tax per capita < £15,000 per annum

## Growing pressures

The success of the Cambridge-Milton Keynes-Oxford arc has fuelled a demand for homes which has not been matched by supply. Despite building faster than the national average for the past decade, and despite recent increases in the number of housing completions, the arc is not building enough homes to meet current and future needs. The under-supply of homes in some areas is reaching crisis point.

The undersupply of new homes has contributed to high house prices and low levels of affordability for both home ownership and private rental. The ratio of median house prices to earnings is 13:1 in Cambridge and 12:1 in Oxford making them two of the least affordable cities in the UK.<sup>18</sup> The issue is not unique to the arc’s cities. In parts of Buckinghamshire, Oxfordshire and Bedfordshire average house prices are around ten times the average salary.

But the impact is not limited to the housing market. The undersupply of homes presents a fundamental challenge to future economic growth in the arc’s towns and cities. Many communities across this arc enjoy near full employment and, without further growth in the population and labour supply, and in the provision of homes for these workers, future growth will be constrained.



Indeed, there is powerful evidence that house prices are already diminishing firms' ability to attract employees. Workers are being priced out of local housing markets, restricting firms' access to labour and impacting on their competitiveness. Global businesses within the arc have told the Commission that, had they realised the impact that employees' housing costs would have on their business they may have located elsewhere. Others may yet choose to do so. This is as much an issue for high-tech firms and universities seeking to attract, recruit and retain globally mobile talent, as it is for public sector agencies looking to recruit key workers.

These difficulties in accessing labour are exacerbated by poor east-west transport connections. Rather than connecting the arc's principal employment centres, the strategic road and rail network reinforces their connections with London – the dominant market in the south east:

- it is not possible to travel by rail directly between the four main rail stations within the area – Oxford, Milton Keynes, Bedford and Cambridge. The only way to travel between Oxford and Cambridge by rail in less than three hours is via London;
- there is no continuous, high-quality road connection between Cambridge, Milton Keynes and Oxford – existing roads suffer congestion and average speeds between the arc's main centres are low;<sup>19</sup> and
- the main public transport link across the area is provided by the X5 coach service. This takes nearly three and a half hours to travel between Oxford and Cambridge.

Commuting between key hubs on the arc is almost non-existent and the area functions as a series of distinct labour markets.

## Enabling future growth: the scale of the challenge

To maximise the potential of the CaMkOx arc, and the contribution it makes to our national prosperity, we must invest in the continued growth and success of the arc's towns and cities and in its globally competitive clusters.

Infrastructure will be a necessary part of any investment package – but it will not be sufficient on its own. A holistic response will require investment in the skills of the current and future workforce; in science, research and innovation; in the facilities to support the growth of new businesses, and in the continued development of the arc's world-leading sector strengths. Nevertheless, the right strategy for the development of infrastructure can play a key role in releasing the latent economic potential that exists within the arc. Crucially, it can also help tackle the most serious constraint on the future growth of the arc's towns and cities: their lack of sufficient and suitable housing.

Removing the constraints to growth that result from the undersupply of housing could support a step change in the arc's economic performance and make a significant additional contribution to national output. Long-range economic scenarios, prepared to support the Commission's study, suggest that, without major intervention, and with rates of housing completions at current levels (around 14,330 per year for 2015-16), the area could support around 335,000 new jobs to 2050, increasing economic output by around £85bn per annum (2011 prices). However, by meeting future needs and removing the constraints to growth arising from the area's housing shortage the area could sustain a transformational level of growth, supporting around 1.1m new jobs and increasing economic output by £163bn per annum.<sup>20</sup>

Realising this transformational growth in jobs and output will require population growth of around 1% per year. It would see the population increase by between 1.4 and 1.9 million in the period to 2050. Responding to, and enabling this growth will require a substantial number of new homes – more than is currently planned, or being delivered, across the arc (see figure 5).

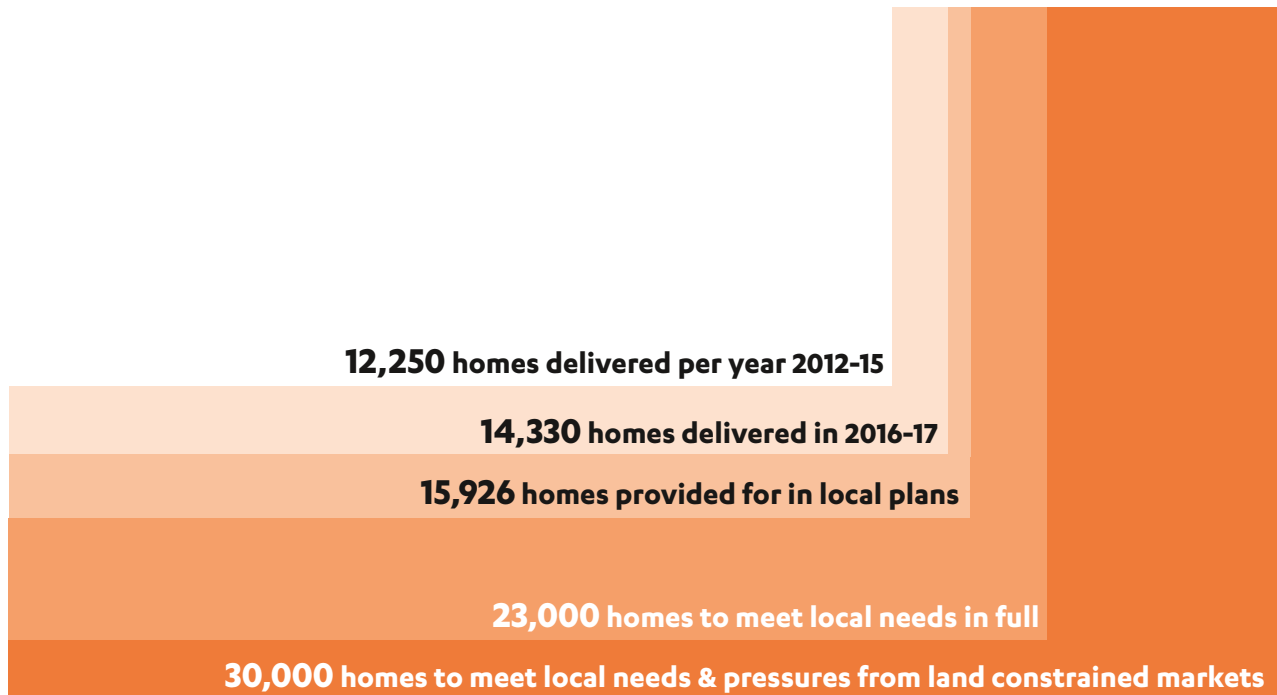
Estimates prepared for the Commission suggest that meeting the needs of the arc's future population and workforce could require 23,000 – 30,000 net new homes per year. While completion rates at the lower end of this range (around 23,000 net new homes per year) may be sufficient to meet the needs of the arc's own future workforce, further development may be required to mitigate the impact of growth and under-delivery of homes in neighbouring, land-constrained markets such as London. As employment in the capital continues to grow, and as London struggles to meet its housing need, there is a risk that relatively highly-paid commuters relocating to the arc could make it more difficult for those who live and work locally to access housing. This would diminish the impact that new housing provision could have on local firms' access to labour. Addressing this issue could require up to a further 7,000 new homes per year (30,000 per year in total).<sup>21</sup>

These estimates of housing need exceed local estimates of objectively assessed needs developed by local authorities through their Strategic Housing Market Assessments. These assessments estimate housing need across the arc at 20,135 homes per year. This discrepancy should not be a surprise – there is good reason to believe that the methodology used in undertaking assessments of local housing need can be conservative and can mask high levels of unmet need.<sup>22</sup> Although local authorities are not consistent in their approach to calculating need, many use trend based household projections which are based on recent migration trends. In many cases historic migration has been suppressed by low housing supply, leading to underestimates of migration in areas with high levels of demand and growing housing needs. This is a national issue, but of particular relevance to the study area given high levels of demand for housing.

The arc does not have plans in place to meet its housing needs (irrespective of how these assessments of need may have been calculated). Taken in aggregate, local plans make provision for fewer than 16,000 homes per year. This reflects the fact that only a small minority of authorities have adopted local plans that comply with the requirements of the National Planning Policy Framework. As such, many do not provide for enough homes to meet locally assessed housing need.

Rates of housing completions are lower still. Between 2012 and 2015 the average number of homes built each year in the arc was 12,250, although this has increased to around 14,300 in 2016-17.<sup>23</sup> Even at this higher delivery rate, this is around 1,500 per year fewer than required to deliver on local plan commitments, 5,500 fewer than required to meet local assessments of need, and between two-thirds and half the level of development required to help secure economic transformation across the arc (based on the Commission's 23,000 – 30,000 net new homes figures). This shortfall in supply is greatest in some of the arc's most pressured local housing markets.

Figure 5: Average annual housing need, planned housing development and housing completions across the CaMkOx arc<sup>24</sup>

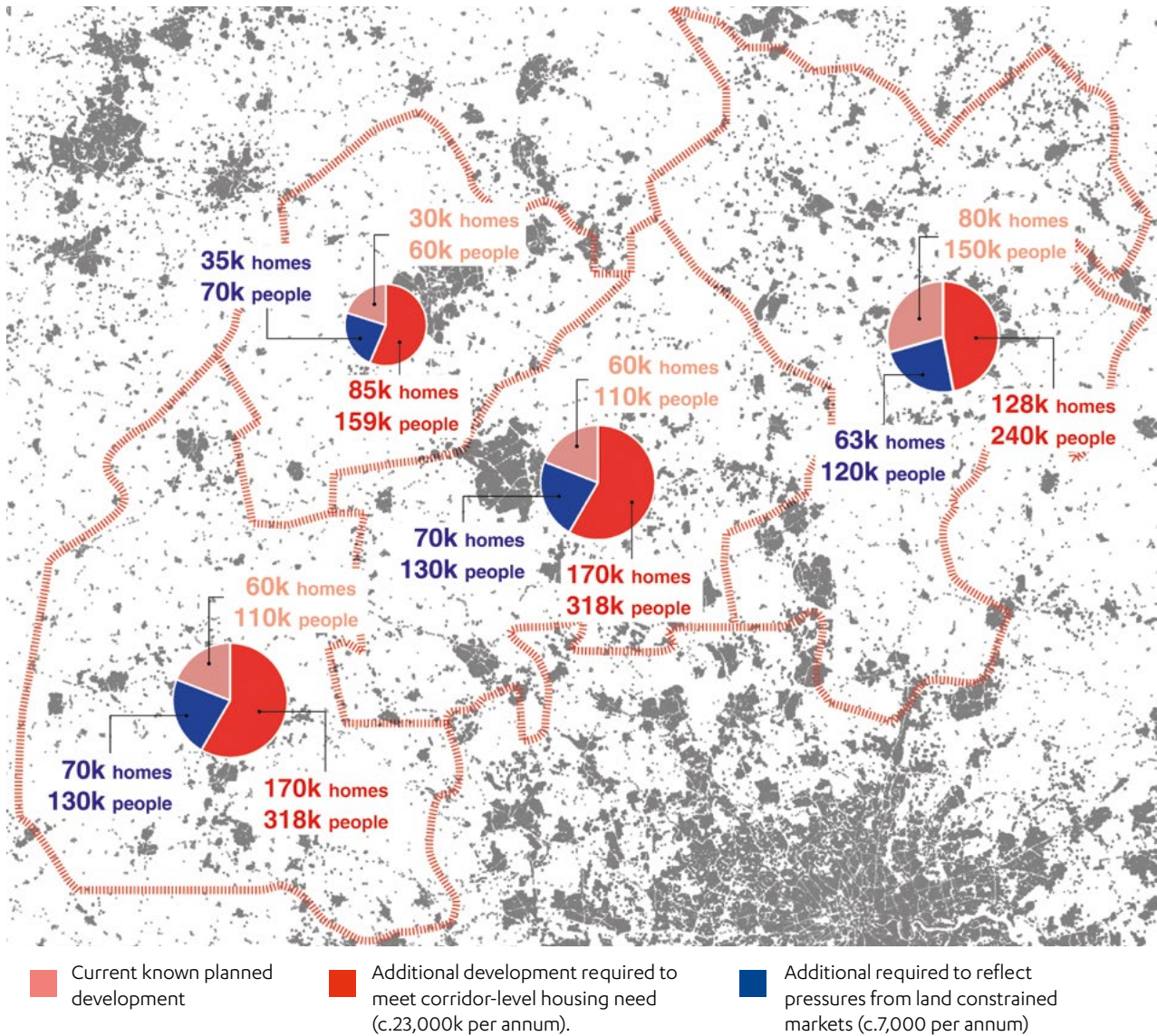


Source: NIC analysis of data provided by Savills and DCLG Housebuilding Statistics (Live table 253)

Although current assessments of need, current plans, and current rates of delivery fall short, the scale of population growth and development required to help realise the arc's economic potential is not unprecedented. It is in line with the averages delivered in the east and south east of England through the twentieth century. It is, however, a significant challenge in absolute terms, not least given the scale of growth that has already occurred in this part of the country.

Accommodating between 1.4 and 1.9 million people could require between 782,000 and 1,020,000 new homes by 2050. Current development plans, if realised in full, might be expected to deliver only 230,000 of these new homes. This includes sites that are under construction, approved, in for planning or allocated in local plans. Figure 6 illustrates the quantum of planned and required development across different areas of the arc.

Figure 6: An illustration of planned and required development levels, 2016-2050



Source: 5th Studio, based on data analysis by Savills, Arup and Cambridge Econometrics

Note: Housing/population figures for current known development sites include sites which are under construction, approved, in for planning or allocated in local plans. The distribution of development required to reflect pressures from land constrained markets is indicative. It follows a proportional trend according to the distribution of the “Additional development required to meet arc level need”.

The challenge for government at all levels, will be to determine how this growth can be accommodated within the arc and, crucially, how this growth can be achieved whilst improving quality of life, for current and future residents. **Towns and cities across the arc will struggle to succeed amongst their global competitors if they do not support a high quality of life. It is vital, therefore, that new homes are delivered as part of high quality, well-connected, liveable communities which respect the environmental character of the arc and the interests and rights of existing communities.**

**It is unlikely that this level and quality of development can be delivered if new housing is secured exclusively through incremental developments on the fringes of existing towns and cities.** Such an approach to development can:

- **be deeply unpopular with existing communities:** focusing development on much loved peri-urban landscapes, and making it difficult for local authorities to provide for ambitious growth in their local plans;
- **fail to deliver necessary supporting infrastructure:** the incremental pattern of growth means that no single development is ever sufficient to trigger the need for investment in city-wide infrastructure and services. This can reinforce perceptions that development is a burden on communities; and
- **reduce the potential to capture land value uplifts to fund infrastructure:** as land on urban fringes is acquired, traded by speculators, or optioned by developers, the 'hope' value of the land increases. This can reduce the scale of further uplifts that result following the granting of planning permission. Local mechanisms typically used to capture land value uplifts from incremental developments (CIL and S106 agreement) are not sufficiently powerful to influence decisions on land trading and speculation, whereas statutory mechanisms to support the delivery of other forms of development (e.g. new settlements and major urban extensions) can be more effective.

It is equally unlikely that this level of growth can be achieved through the development of smaller garden towns and villages. Although these will be a vital component of any solution, a large number of such developments risks displacing and dispersing demand for physical, social and public service infrastructure. Equally, no specific development project will trigger the need to build or contribute to new service facilities. This makes the provision of high quality public transport and access to jobs relatively more costly, energy intensive and time-consuming without achieving the critical mass required to make these services viable.

Therefore, if we are to unlock the potential of the CaMkOx arc, Government and local authorities will need to plan for major urban extensions and large new settlements – including the first new towns to be built in over a generation. Delivering development of this scale, character and quality will require local leadership, the support of local communities and skilled planning. It is vital that Government and local authorities negotiate a new deal to help maximise the arc's future potential. Such a deal would:

- **tie national investment in east-west transport infrastructure to the development of ambitious new and expanded settlements, effectively linking infrastructure investment with spatial planning and placemaking; and**
- require local partners' commitment to accelerated house building, in exchange for greater certainty over long-term investment in enabling infrastructure, and the freedoms and flexibilities necessary to ensure the creation and maintenance of well-designed, well-connected, liveable places.

For any deal to succeed, it must be rooted in a shared, ambitious, vision for the arc. Securing success will therefore require local partners, and Government, to develop a long-term strategic plan for the arc, integrating plans for future jobs, homes and infrastructure and making a clear statement on the scale of future growth. Strong sub-regional planning structures and strong collaborative governance will be essential.



# PART TWO: EAST-WEST INFRASTRUCTURE ENABLING NEW SETTLEMENTS

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**National investment in the East West Rail project and the Oxford-Cambridge Expressway present a once-in-a-generation opportunity. As well as linking the arc's key employment centres and expanding and diversifying their labour markets, these schemes have the potential to unlock new locations for development – tackling the area's housing crisis by enabling major new and expanded settlements.**

**Success will depend on the quality of the infrastructure provided and exploitation of the synergies between the rail and the road. Joined up working, across Whitehall, between national and local government, and with industry, will be vital in realising the true value of new east-west connectivity.**

New strategic infrastructure will help bridge the gap between towns and cities in the arc. Although the main urban areas within the arc have good north-south road and rail connections, east-west connectivity is very poor, with current transport links being sporadic in nature. Those wishing to travel between Cambridge, Milton Keynes and Oxford have the choice of using mixed grade roads, a very slow X5 bus (taking just under four hours), or rail transit via transfer in London.

The only current east-west rail service is between Bedford and Bletchley along the Marston Vale line, which is slow, infrequent and under-utilised. There is no direct passenger railway between Bicester and Bletchley, and no railway at all between Cambridge and Bedford. The road connections such as the A428, A421, and A418 are of mixed quality, with varying standards of junctions, single lane sections, and different speed limits – all of which lead to congestion at peak times.

By improving these connections, new east-west road and rail connections have the potential to increase the labour market catchment areas for the arc's key towns and cities, opening up new opportunities for collaboration and job growth. But the true value of these schemes rests in their potential to open up new sites for development, improving the supply of accessible, developable land and supporting the delivery of new homes at affordable prices for all workers.

To ensure east-west infrastructure plays a full role in tackling the arc's housing crisis it is vital that new infrastructure be delivered at pace, and aligned to the development of major new and expanded settlements – including the first new towns to be built in over a generation. It should be future proofed to ensure it can support continued transformational levels of growth across the arc into the longer term.

## Current proposals for new east-west transport

The proposed East West Rail and Oxford-Cambridge Expressway projects would provide a step change in connectivity across the arc, linking its major economic centres in a way not seen for over half a century.

These schemes, taken together, have the potential to create a multi-modal transport spine, which through new stations and junctions, can enable the creation of new communities. They can also improve access to jobs, services, wider national connections through the existing strategic road and rail networks and could enhance connections with international gateways, such as Heathrow. Each scheme would serve different purposes and markets, delivering benefits that are complementary to one another. It is therefore essential that both East West Rail and the Expressway are delivered as quickly as reasonably possible.

The first phase of East West Rail opened in December 2016, connecting Oxford and London with new stations at Oxford Parkway and Bicester Village, and has already proven a popular service.

### Oxford to Marylebone – the first phase of East West Rail

Opened fully in December 2016, the new Oxford to London Marylebone service run by Chiltern Railways is the first section of the East West Rail programme.

The £320m project, jointly funded by Network Rail and Chiltern Railways, was delivered in stages as part of the 'Evergreen 3' upgrade programme, with services between the new Oxford Parkway station and London via Bicester Village beginning in December 2015, before connecting into central Oxford in late 2016.



The success of this link is already apparent. Oxford Parkway's strategic location close to the A34 Park and Ride site and the A44, and link into National Cycle Route 51, helped deliver over 1.5 million journeys through the station since its opening. The new station at Bicester Village, the gateway to one of the UK's most popular destinations for overseas visitors, saw over 2.5 million journeys pass through it. 4 million journeys have been made on the new line in the two years since its launch.

This new link has generated impressive growth in rail journeys, seeing an 18% increase in rail journeys between Oxford station and London within the first six months of its introduction at the end of 2016.

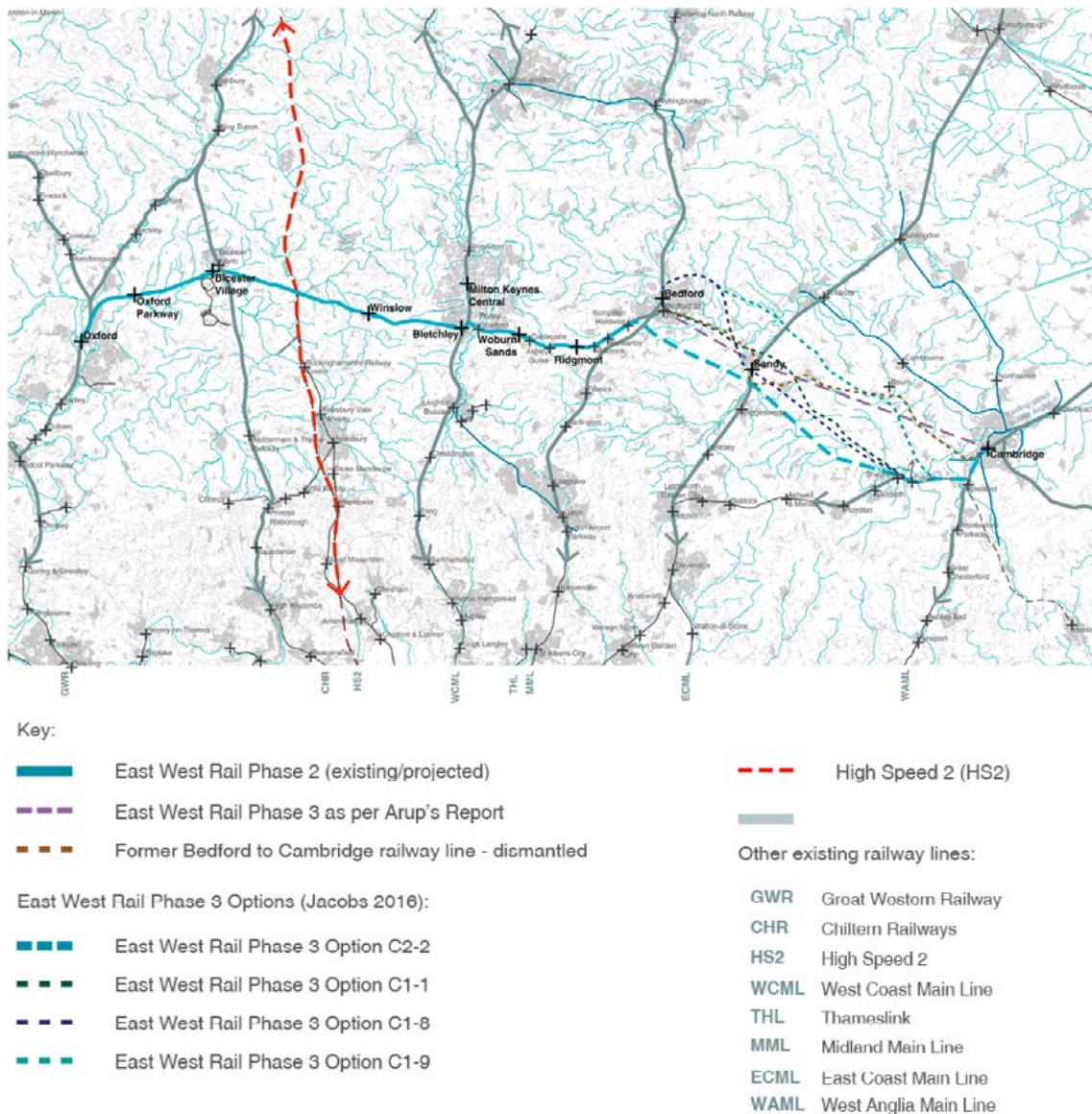
Note: Usage statistics provided by Chiltern Railways



The proposal for phase 2 of East West Rail involves connecting Bicester and Bedford, utilising the existing Marston Vale line between Bletchley and Bedford as part of this scheme. Phase 3 involves a wholly new line between Bedford and Cambridge. Taken together, this is essentially the re-establishment of the old ‘Varsity line’ that was closed in 1967, albeit with a new route for phase 3 and a number of stations different to those of the previous railway.

The original track bed for phase 2 of East West Rail remains mostly intact, and there appears little benefit in deviating in any major way from this route. Doing so would not only create unnecessary blight, but also significantly slow the delivery of the infrastructure. **This is a factor of particular importance due to the interface with the route of High Speed 2 at Calvert, where there would be a six year delay to East West Rail if works to enable the crossing of the HS2 route are not complete before HS2 takes possession of the land for construction of their maintenance depot and track works.** The imperative for speed is essential and therefore it is encouraging to see that proposals for a special purpose vehicle to design and deliver East West Rail at pace are already being considered.

Figure 7: Proposed East West Rail scheme

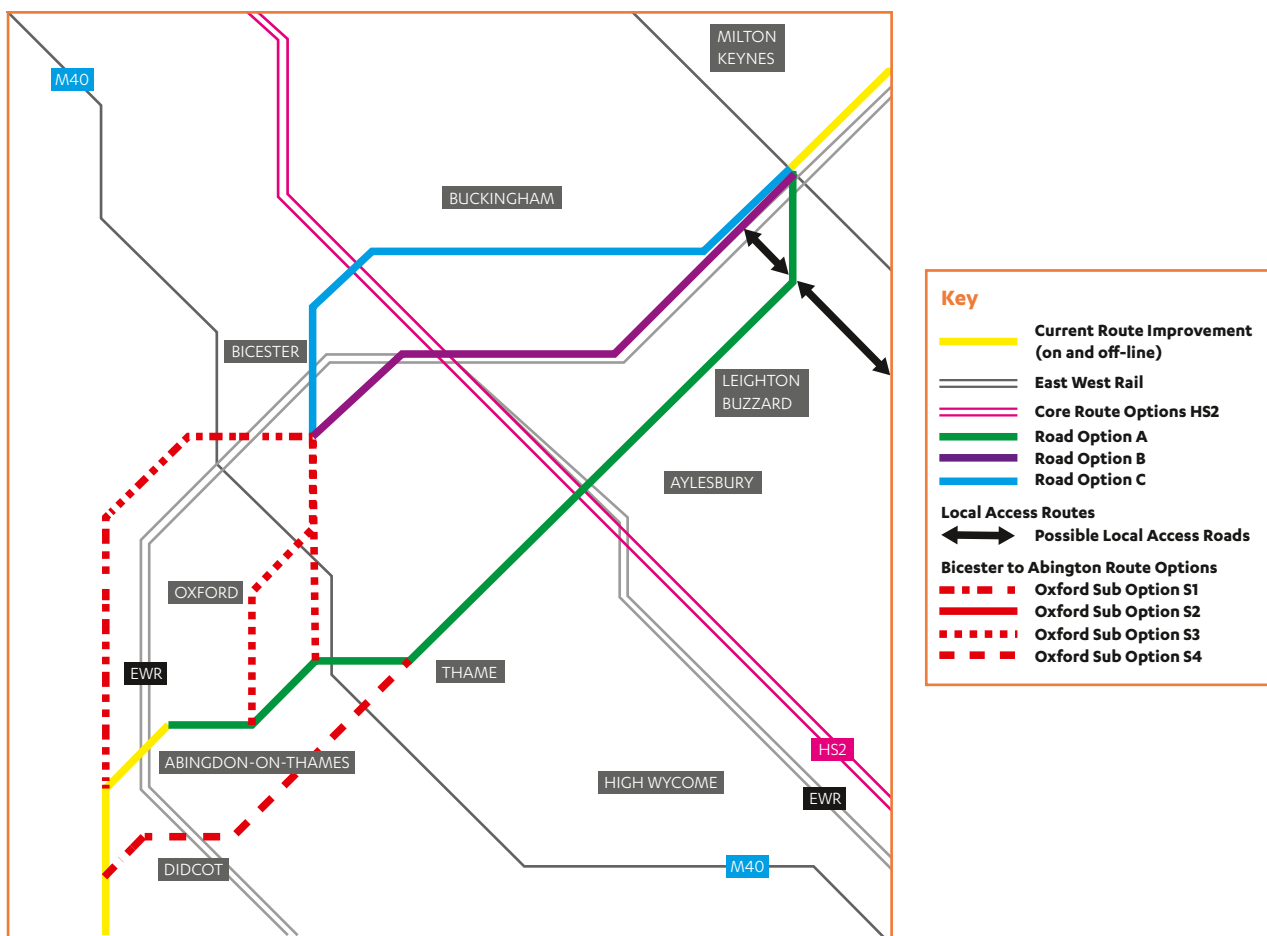


Source: 5th Studio  
 Note: Map has been rotated clockwise by 35 degrees

The Oxford-Cambridge Expressway would also be delivered in parts. The eastern section upgrades between the Black Cat roundabout on the A1 and Caxton Gibbet delivered as part of the current Roads Investment Strategy (RIS 1), in effect establishing an Expressway standard route between Cambridge (M11) and Milton Keynes (M1). A wholly new western section between the Milton Keynes (M1) and Oxford (M40) is being considered alongside an option for upgrading existing roads. These would complete the ‘missing link’ in the route of the Expressway.

The proposed Oxford-Cambridge Expressway will therefore play an important part in the arc’s growth story. As well as providing strategic connectivity between the existing strategic road network running through the area (such as the M4, M40, M1, A1(M) and M11), the Expressway offers an attractive and efficient route for freight and long-distance trips, and enhanced connectivity between key local and regional growth areas in the arc.

**Figure 8: Broad route options for the Expressway between the M1 and Oxford**



Source: Oxford to Cambridge Expressway Strategic Study: Stage 3 Report

Proposals for the western section between the M1 and Oxford are still under development, with three broad corridors (options A-C in Figure 8 above) connecting the M1 to the edge of Oxford, and a series of sub-options for navigating around Oxford city.

It is only through transport and housing being planned and delivered through a single integrated programme that the scale of land unlocked can make a significant contribution to delivering the homes needed to unlock the economic potential of the arc.

Only through such an approach is there the opportunity to align sites for new housing with access to jobs, services and leisure. This will require early decisions on East West Rail to ensure that it is designed to unlock growth at scale, but must also be met with a commitment from local areas to deliver a major uplift in housing growth.

## Designing transport to unlock major housing growth

The proposed route of EWR is already attracting positive attention from developers. Stations across EWR will act as a beacon for development, allowing sites and localities that are currently poorly connected to become viable options for major expansion. During this study the Commission has become aware of a number of housebuilders and investors proposing major development sites around key stations – demonstrating the pull that this new infrastructure would have.

The value of East West Rail rests, in part, on its ability to connect communities with centres of employment. It can also play a vital role in unlocking land for development. It is important that the railway be designed with these objectives in mind. End-to-end journey times should not, therefore, be the driving force behind design, especially where such decisions are at the cost of local links. Fast intercity services may be part of the service mix – but they should not be the primary consideration.

Designing the railway to deliver a ‘sub-regional’ commuter service would allow greater choices on route variations, station numbers, and station locations. This creates more flexibility for local areas, Government, private sector developers and infrastructure delivery organisations to plan housing and the railway in line with land availability, local aspirations, and physical and social infrastructure.

There is of course a balance to be struck between journey times, stations and service frequency, to ensure that the railway delivers an attractive commuter service beyond the immediate boundaries of major employment areas. In practice this will mean restricting the number of stations on EWR to those where housing can be delivered at scale.

However, this does not have to mean areas should have to suffer a loss of quality. One area where this may be particularly important is on the existing Marston Vale line – running between Bletchley and Bedford, with nine stations in close proximity to one another and a service that takes an hour to cover around 24 miles. Following the introduction of East West Rail, it may be more beneficial to the arc and the existing settlements in the Marston Vale to replace the existing slow service with faster East West rail services which would help maximise the capacity of the line. This may mean intermittent calling at stations (different stations receiving different service patterns), with the focus of service patterns growing around key nodes where development is taking place and therefore where the demand will be highest.

Such an approach could mean that the Marston Vale benefits from better trains, faster journeys, and access to more locations further afield. In addition, the arc as a whole enjoys better capacity – equating to the potential for greater frequency – on East West Rail services.

The development a sub-regional commuter rail service creates the opportunity for a limited number of new stations elsewhere along the line which could serve new or expanded settlements. However, any additional stations should be linked to the current and potential future demand for services in that area. A substantial number of people and/or jobs would be needed to justify the addition of a station.

Where the potential for new stations supporting new development is greatest, Government should ensure that the rail scheme is futureproofed – this may include making passive provision for new stations.

Decisions on the route and design of the Expressway will also have a fundamental impact on the potential for major new settlements. Whilst all the options for the western section of the Expressway would provide increased road capacity, aligning the route of the Expressway with East West Rail will unlock the greatest potential for sustainable new places at scale. Access to both rail and road connections will be essential in supporting the growth and sustainability of major new settlements, collectively providing greater access to employment opportunities than either the road or railway alone. The railway provides convenient connections to city centres, and the road enables greater access to the fringes of cities where, particularly in Cambridge and Oxford, there are expanding employment sites and science parks.

Aligning the Expressway and East West Rail on the same broad corridor is also likely to be less costly and to have fewest environmental impacts compared to other options of a wholly new road, containing the impacts of severance in a single broad corridor.<sup>25</sup>

The final aspect of the Expressway will be the route around Oxford. With limited detailed information on route options and new housing and employment sites, it is premature for the Commission to state a high level preference at this stage. However, the development of this route should be firmly tied to the potential to release development land and help reduce congestion in and around Oxford. Because all of the sub-options outlined in Figure 8 would have environmental impacts, including land take in the greenbelt, protecting the natural and built environment are important factors to be considered.

If East West Rail and the Expressway were to be developed along the same broad corridor then, analysis of land constraints<sup>26</sup> suggests that key opportunities for growth over the next 30 years could include:

- the re-establishment of **Milton Keynes as a development location of national significance**, through the intensification and expansion of the town to a population of at least 500,000, in line with local aspirations. This presents an immediate opportunity for growth;
- **development between Bicester and Bletchley**, unlocked through the combination of East West Rail and the Expressway, with the potential to grow to city-scale, ultimately supporting a population in the hundreds of thousands. This could be the first new town in over a generation;
- **concentrated growth in the Marston Vale between Milton Keynes and Bedford**, focused around a few key rail nodes in the area, and providing the critical mass to expand local services;
- **major development around Bedford**, supported through the introduction of East West Rail services and the wider connections that exist via the Midland Mainline;
- **expansion in and around the Sandy area** in central Bedfordshire, and along the A1 corridor, potentially supporting the development of a large town, exploiting new East West Rail and existing north-south connectivity via the East Coast Main Line. Delivering major growth may require other changes such as the re-alignment of the A1, and potentially relocating the existing East Coast Main Line station; and

- **a new garden town west of Cambridge**, supported by a new station on East West Rail, and providing a satellite for those working in the city.

The opportunity areas outlined above highlight potential opportunities within the arc, but represent only a handful of the options available. It is not for the Commission to make judgements on the right location of future development. Ultimately, local areas should work together and with Government agree how and where major housing growth can and should be located, so as to create attractive and sustainable places that meet the needs of the current and future residents.

Growth of the scale required to realise the potential of the arc may result in higher demands on different parts of the transport network. Therefore, it is important that opportunities for easy expansion are designed into the Expressway and East West Rail. Structures on the road should be wide enough to accommodate additional future lanes. Land immediately next to the railway – particularly in areas of single track such as the link to Aylesbury or for junctions for Bedford and Milton Keynes – should not be disposed of or developed upon. Building in flexibility is essential in responding to changing future needs without avoidable disruption.

**Recommendation 1a: Government should progress work on East West Rail, the Expressway and new settlements through a single co-ordinated delivery programme, with cross-government ministerial commitment and oversight. The aim of this programme should be to unlock opportunities for transformational housing growth through the creation of well-connected new communities. As part of this programme Government should commit:**

- **£1bn to deliver the infrastructure necessary for a high quality and resilient rail commuter service between Bicester and Bedford, accelerating delivery of this section of East West Rail to a target date of 2023;**
- **to accelerate work on the development of the new East West Rail line between Bedford and Cambridge, and commit to open the line by 2030; and**
- **to deliver the ‘missing link’ of the Oxford-Cambridge Expressway, accelerating development work to deliver a clearly-defined and agreed route by 2025, enabling construction to begin as part of the next Road Investment Strategy (RIS 2) and be complete by 2030.**

Key milestones and decision points in the development of East West Rail and the Expressway should be subject to “in principle” agreement to the development of significantly more ambitious proposals for housing growth in the arc, including major new settlements and urban extensions, and subsequently, progress in identifying, evaluating and designating sites. “In principle” agreement should be provided within 12 months. The schemes should be futureproofed to ensure the potential for expansion and improvement is not permanently and prematurely closed.

## Early action to accelerate housing delivery

East West Rail and the Expressway will support growth and unlock housing potential, but will not be fully delivered until 2030 at the earliest. Action is needed now in order to achieve transformational growth. Therefore, options should be considered to support accelerated growth in the short term. These options may not always require significant investments, but can be significant in their impacts.

The proposal for Phase 2 of East West Rail already includes the upgrade of the existing freight line to Aylesbury via a single track. Technically, trains could continue from Aylesbury into London via the Chiltern Line, providing a London link to any major new developments between Bicester and Bletchley.

The attractiveness of a city-scale settlement in particular would be enhanced by a direct link to London – providing a commutable location, helping to attract business, and connecting customers and supply chains. Such a link would put any new settlements on par with the other major centres in the arc, and help to support its success in the longer term. However, to be appealing such a link would require a journey time of less than an hour.

Delivering such a service is not without obstacles. A congested route shared, in parts, with London's Metropolitan line, and a number of constrained junctions mean that journey times between Aylesbury and London are already slow. The addition of a fast new service to a new major settlement would add to the pressures on this route. At the least, timetable changes may be required which would need detailed discussion with Transport for London and Chiltern Railways who currently operate services along this stretch of railway. It is however possible that more substantial works are needed to alleviate pinch points – such as Neasden Junction – which would need further investigation.

Importantly, these changes could help improve journey times from nearby areas on the line to London – such as Aylesbury – helping to spread the benefits of improvements to existing communities and support housing growth in existing areas.

**Recommendation 1b: Government should seek to introduce fast, direct services to London to enable growth in the arc between Bicester and Bletchley and improve connectivity between London and Aylesbury. Any such improvements should be contingent on local authorities' commitment to major development between Bicester and Bletchley and around existing settlements.**

Growth on the edge of cities, particularly Oxford and Cambridge where developable land is scarce, can be difficult – especially when connectivity is limited. Early delivery of new and relatively small scale infrastructure can help overcome some of the issues these areas face and support faster growth now. The example of Oxford Parkway station is a case in point – development of the station will be a key enabler of growth proposed for Kidlington to the north of Oxford, a development location which will play a key role in tackling unmet housing need from within the city.

Cowley in south east Oxford, and Addenbrooke's in south Cambridge, are two areas that are already developing quickly, and have the potential to grow further. The increasing employment opportunities and housing sites in these areas make them prime candidates to receive an early increase in transport capacity. Such an approach could help to cement any new deal between Government and local areas, as well as reducing the stress on the existing transport network.

Delivering rail services may be achievable, in the short-term, through timetable changes on the railway and relatively small scale infrastructure changes, including new stations at both locations. Going forward, further work may be required to remove existing bottlenecks and allow a full service pattern.

**Recommendation 1c: Government should work with the private sector and the relevant local authorities to agree funding packages and progress schemes to support housing and employment growth now. These should include:**

- **essential works required to enable passenger services between Oxford and Cowley no later than 2019; and**
- the acceleration of East West Rail phase 3 works around south Cambridge to enable the delivery of a Cambridge South station in 2022 as part of Control Period 6.

Substantial private sector and local contributions, reflecting the benefits that these parties gain, will be required to enable the delivery of these schemes.

## Developing a strategic corridor over the longer-term

The success of the railway will be dependent upon a high quality reliable service, facilitating access to key centres as well as between residential, employment, commercial, cultural and leisure opportunities.

Following the completion of Phase 3 of East West Rail, Bedford's connectivity will be significantly enhanced. The issue is whether the best location for a station is central or south of Bedford should be addressed in a way that is affordable and which secures the greatest benefits in terms of regeneration and new homes. In addition, the lack of eastern facing junctions on East West Rail at Bedford and Milton Keynes could mean neither centre would have direct services toward Cambridge.

Government, along with local partners, should investigate the case and options for fully connecting the centres of Milton Keynes and Bedford. This should be considered as part of an integrated approach to housing and infrastructure, in line with the wider spatial strategy for the arc.

## Wider network impacts

**Growing demand for travel will inevitably lead to impacts on other areas of the strategic transport network. In places this is already congested at peak times. Whilst new east-west transport will increase capacity, and help to unlock housing growth, wider network improvements will be required to ensure that the system as a whole continues to function and new communities remain connected and sustainable.**

High level, indicative, modelling undertaken on behalf of the Commission shows the potential impacts of growth on the existing strategic transport system in the arc, highlighting potential pinch points and locations where additional interventions may be required. This is an indication of the stress that development can create, if these stresses are not planned for and dealt with, they will act as a halt on growth and reduce quality of life for new and existing communities.

The continued development and success of the arc will require a pipeline of infrastructure upgrades and maintenance to manage congestion and problems on the network. East West Rail and the Expressway are the catalysts to kick start development at scale – but the sustained economic growth of the arc will require continued investment in strategic and local transport networks.

## Delivering broader benefits

East West Rail and the Expressway can do more than simply link the arc's centres and open housing locations within it. With the right strategic interventions at the fringes and further afield, these schemes could deliver a step-change in national connectivity, creating truly national level transport benefits.

There are a range of options that would use East West Rail and the Expressway as links to create an alternative strategic connection between East Anglia, southern and central England, as well as south Wales – each providing the opportunity for passenger and freight movement at a national scale.

Interventions such as four-tracking the railway between Oxford and Didcot (as outlined in Network Rail's 2015 Western Route Study) and junction improvements south of Cambridge could not only tackle an existing bottleneck on the national rail network, but also enable wider service opportunities.

Similarly, the connectivity of the Expressway can be enjoyed by more than those directly adjacent to it. Upgrades to existing roads – such as the A420 and the A41 – to connect into the Expressway, could enable better connectivity to places such as Aylesbury, Bicester, Buckingham and Swindon. Such improvements could deliver a multiplier effect on investment, delivering benefits across the country.

## DELIVERING NEW PLACES THROUGH DEVELOPMENT CORPORATIONS

Analysis prepared for the Commission suggests that larger new settlements have the potential to deliver the greatest number of new dwellings at the fastest rate.<sup>27</sup> However, without intervention, there is little chance that the market will deliver major new and expanded settlements at the scale and pace required. Experience from within the UK and elsewhere in Europe also suggests that transformational levels of growth are unlikely to be realised without direct intervention from appropriately empowered statutory bodies.<sup>28</sup>

Public sector intervention in the development of large new settlements is nothing new. Throughout the latter half of the twentieth century, thirty-two new towns were built across the UK by New Town Development Corporations. The last new town designation was, however, made in 1970 (Central Lancashire), and subsequent developments in planning policy have tended to eschew centrally-driven models of development in favour of locally based, market-led approaches.

But it is difficult to see how an exclusive reliance on locally-led, market driven development will deliver the homes this arc requires. The scale and complexity of the task, the need to fund upfront infrastructure and the challenges of land assembly and local politics mean other commercial opportunities are always likely to be more attractive.

The scale of the housing crisis within the arc – and the economic benefits that the UK will forego if it cannot provide homes for a future workforce – means governments at all levels should consider the case for direct intervention to ensure the delivery of new settlements.



Public sector intervention should be focused on managing the risks that make the development of substantial new settlements commercially unattractive to developers. It should focus on providing assurance on the delivery of jobs, homes and supporting infrastructure at a pace which private developers alone may struggle to maintain.

In practice this would mean a much stronger role for the public sector in:

- **land assembly:** negotiating positively with land owners (including Oxford and Cambridge colleges) to assemble land for new settlements through voluntary agreements and, where necessary, using compulsory purchase powers to acquire land at 'no scheme values' – the market value that the land would have, disregarding the proposed new settlement. The Commission sees a clear case for strengthening and streamlining mechanisms for compulsory purchase, accelerating and reducing the cost of land assembly. The Commission will make further recommendations on this issue soon;
- **masterplanning:** planning the new settlement – its density, built-form and infrastructure – in a way that is sustainable, deliverable and viable whilst supporting positive social outcomes and delivering enhanced quality of life for new and existing residents – and using this plan to provide certainty to developers and investors;
- **upfront infrastructure investment:** providing clarity and certainty on the delivery, funding and timing of enabling infrastructure (transport, utilities, digital) – this is fundamental for enabling private developers – who are likely to build out schemes of various sizes within any new settlement – to move at pace;<sup>29</sup> and
- **driving the pace of delivery** – providing clarity on enabling infrastructure and reducing lead-in times by providing 'oven-ready' sites for developers – this may include providing utilities connections. The pace of delivery may also be accelerated by controlling the release of developable plots to competing developers, introducing covenants on build-out rates or making the supply of land contingent upon the pace of development on previously released land.<sup>30</sup>

Playing these roles will give the public sector the greatest opportunity to capture the increases in land values that result from the development of new settlements and using these to repay the costs of upfront investment in local infrastructure.

Government should explore the full range of options for securing funding for any programme of land assembly and upfront infrastructure investment, balancing considerations of short-term affordability and long-term value for money. In the short-term, this could include public sector investment. However, as development progresses – and risks associated with the early stages of development are addressed – wider sources of finance are likely to become more readily available. Any public funding would sit outside the Commission's fiscal remit and, therefore, the Commission cannot advise on what level of funding may be affordable.

However land assembly and up front infrastructure investment is funded, there are a range of approaches that the public sector could employ to help balance the imperatives of short-term affordability and long-term value for money. These should ensure that statutory agencies have control over, and can draw upon land, as the development of new and expanded settlements progresses.

Strategies for gaining control over land need not require outright purchase of all land at the beginning of the development process, they could include acquiring land in incremental parcels, or on a deferred basis (effectively optioning land in the designated location at 'no scheme' values). They might also include agreeing to ongoing payments to landowners in exchange for land or offering equity shares in the new settlement as an alternative to direct land purchase.

Having acquired control of the land, the public sector might also use the development of new and expanded settlements to encourage self-build, custom-build, the growth of SME developers, or the use of innovative off-site or modular construction techniques. This could support wider national policy to stimulate and encourage diversification and competition within the house building sector.

## Mechanisms for delivering new settlements

There are a range of mechanisms through which the public sector can make direct interventions to support the delivery of major new and expanded settlements. These include:

- **Urban Development Corporations (UDCs):** statutory bodies established by Government and charged with the development of an urban area, outside the usual system of town and country planning. Board members are typically appointed by the Secretary of State and the work of the UDC is funded by national government. UDCs have a broad remit to secure the regeneration of a defined area by bringing land and buildings into effective use. They have extensive powers regarding land acquisition (including compulsory purchase) and may act as the planning authority within their area for the purposes of development control (but not plan making). However, the fact that their statutory objectives explicitly focus on urban development and regeneration means they may not be the most appropriate vehicle to deliver new settlements in greenfield locations.
- **Mayoral Development Corporations (MDCs):** statutory bodies which can be established at the request of a directly elected metro-mayor to secure the regeneration of a designated Mayoral Development Area. The relevant mayor would fund the work of the MDC and make appointments to its board. The MDC may act as a plan making authority for the designated area and can purchase land at 'no scheme' values through compulsory purchase powers.

Within the arc, MDCs could only be deployed within the Cambridgeshire and Peterborough Combined Authority area. As with UDCs, the statutory objectives of MDCs may make them less suitable for the delivery of new settlement in greenfield locations.

- **Locally Accountable Development Corporations (LADCs):** a statutory body established by local authorities and charged with the development of a locally designated area. Board members would typically be appointed by local partners in concert with Government while the work programme of the LADC would be funded by local authorities through existing resources and prudential borrowing.

No LADCs have been established to date. The establishment of new LADCs remains dependent upon forthcoming secondary legislation. But even once legislation is in place, the emphasis on funding LADCs from local budgets is likely to limit the scale of any new settlements delivered. It is unlikely that developments of more than 40,000 units could be delivered through this route, and typical developments may be much smaller.

- **The use of Homes and Communities Agency (HCA) powers:** the HCA holds powers to acquire land, including through compulsory purchase and, with the backing of the Secretary of State can exercise both plan making and development control powers in a designated area. The HCA can also provide infrastructure to enable house building. Although the HCA has not previously employed its powers to designate and deliver a new settlement, the existence of these powers could create a helpful route to deliver new and expanded communities across the arc.
- **New Town Development Corporations (NTDCs):** NTDCs are statutory bodies established by Government and charged with the development of new towns (although NTDCs have also been used extensively to deliver the expansion of existing settlements). Board members would typically be appointed by the Secretary of State and the work of the NTDC funded by Government.

NTDCs have bespoke planning powers and can develop and submit a plan to the Secretary of State (ensuring this is in line with any wider local authority plan) who can then approve it, with or without modification, before granting a special development order giving consent for the development proposals.

NTDCs also have the most extensive powers regarding land acquisition and compulsory purchase. For example, in cases where a NTDC is to be used to develop a designated site, the Secretary of State can issue a direction to ensure that all land within the designated area can be acquired at the 'no scheme' value, irrespective of whether it is purchased immediately or at a later stage. This, in effect, disregards increases in land values that might result from the provision of early infrastructure or the initial stages of development, and strengthens the potential for land value capture over the life of the scheme.

Given the range of mechanisms which could enable direct intervention in the development of new settlements, the different scales at which these mechanisms can operate effectively, and the different circumstances in which they can add value, central government and local partners must work collectively to determine the right mechanisms to drive delivery in relation to different opportunities across the arc.

## Balancing top-down intervention with local concerns

Most of the mechanisms outlined above are very top-down and centralist. The exceptions to this – Mayoral Development Corporations and Locally Accountable Development Corporations – are more limited in their scope and application. But even when considering the development of larger new settlements – those which would require the deployment of New Town Development Corporations – neither the location of new settlements, nor the operating practices of the development corporations should be centrally imposed upon local areas.

The New Towns Act 1981 locates responsibility for designating locations for new settlements with the Secretary of State for Communities and Local Government. This should not change, but the Secretary of State should work in an open and collaborative way with local stakeholders, through robust and transparent assessment processes, to identify, assess, consult upon and designate locations for new and expanded settlements.

The Commission is optimistic that Government and local authorities will reach agreement on the scale and location of new settlements. However, given the importance of the arc to the UK's future prosperity, and where agreement cannot be reached, the Secretary of State must retain the power to designate new settlements in the national interest.

Similarly, existing legislation gives the Secretary of State the sole ability to establish New Town Development Corporations. But again, they should work with local stakeholders to secure consensus around the operation of any development corporations, including their objectives, membership and reporting arrangements.

**Discussion on the operation** of development corporations should seek to preserve their role of acting in the national interest, whilst strengthening local engagement and accountability. This might involve:

- ensuring that board membership of any NTDC balances local authority and community representation with direct Government appointees;
- appointing a Chair in consultation with the relevant local authorities; and
- establishing dual reporting lines – with development corporations accountable to national Government for delivery and for their use of resources, and to local partners for progress in delivering key local outcomes.

In agreeing the objectives of any New Town Development Corporation, it is vital that Government and local areas give priority to the development of any new towns' economies, and the creation of employment beyond local service industries in order to attract new residents.

A focus on the economic development of new settlements will, inevitably, be expressed in the masterplans and land use policies, but ensuring the success of these new settlements will require more than this. Government and local authorities must be prepared to use a wider set of policy levers to put these settlements on a sound economic footing. This might include incentivising enterprises to locate in new settlements, attracting foreign direct investment into these new places; and stimulating the growth and expansion of the arc's substantial university and commercial research centres into these new locations.

**Recommendation 2a: Government and local authorities should work together, through a robust and transparent process, to designate locations for new and expanded settlements by 2020. This should involve:**

- **commissioning formal studies to identify and assess options for new settlements required, and potential locations for these settlements;**
- **consultation with communities, statutory agencies, infrastructure providers, wider stakeholders and public examination of proposed sites; and**
- **formal designation of sites and the publication of such assessments as legally required.**

The Commission is optimistic that Government and local authorities will reach agreement on the scale and location of new settlements in the national interest. However, if agreement cannot ultimately be reached, the Secretary of State should designate these new settlements.

**Recommendation 2b: Government should:**

- work with local authorities to establish appropriate delivery vehicles for new and expanded settlements across the arc, considering the role that can be played by locally accountable Development Corporations, Mayoral Development Corporations, the Homes and Communities Agency and Urban Development Corporations.
- **establish New Town Development Corporations to deliver larger new and expanded settlements. In so doing, it should:**
  - work with local authorities to define and agree the objectives, membership and reporting arrangements for new development corporations;
  - provide a clear remit to support the economic success of large new settlements as centres of employment, and assist the development corporation by using wider policy levers to support local economic growth; and
  - explore the full range of options for funding development corporations’ programme of land acquisition, including providing public funding with a view to unlocking substantial private investment, and balancing considerations of short-term affordability and long-term value for money.

## BUILDING INVITING, EFFECTIVE AND LIVEABLE COMMUNITIES

The delivery of new developments should not be of detriment to the interests of existing communities, nor need they have adverse impacts on the quality of the natural and built environment. Developing wholly new settlements provides the opportunity to recognise, celebrate and reflect the environmental and cultural assets that have made the Cambridge-Milton Keynes-Oxford arc such an attractive place to live. This is an opportunity that incremental urban fringe developments, city-centre regeneration and infill developments can rarely exploit.

In developing major new settlements it will not be enough simply to deliver an increase in the quantity of new homes – quality will be crucial to ensure that these settlements become successful *places* in which people want, and can afford, to live and work. In other words, we do not simply need to accommodate a growing population, we need to allow people and places to prosper by being resilient, safe, sustainable, economically viable and underpinned by effective infrastructure.

**The answer is to put ‘placemaking’ and good design at the heart of proposals for new infrastructure and development.** This means encouraging a creative, collaborative process for the design, development, renewal or regeneration of the built environment. It means encouraging multiple disciplines to work together to achieve outcomes that they would be unable to achieve individually.

**Placemaking and good design is about far more than places’ appearance and aesthetic.** Design is deeply rooted in the foundations and underpinnings of settlements. **The form of the street network and levels of density will have a much greater impact on the success of a settlement than its architectural style.**<sup>31</sup> The layout of cities, streets, buildings and open spaces strongly shape human behaviour, facilitating access to social and economic opportunities and accommodating the various flows of people, goods, food, water and energy that are required to sustain towns and cities.

It is precisely this level of design and detail that will be vitally important in maximising the benefits of new and existing infrastructure and ensuring that growth has minimal impacts upon the arc's existing communities and natural environment.

Good placemaking is also linked to a wider set of positive social, economic and environmental outcomes, including healthy lifestyles, mental health, environmental sustainability and enhanced financial and economic value.<sup>32</sup> By planning, designing and building better places, there is an opportunity to realise these wider benefits and ensure that new developments can become assets enhancing quality of life across the arc, without affecting the viability of developments or making them unaffordable.

Within the arc, there is a rich variety of architectural and material traditions and there are many historic examples of sustainable urban form and high quality design. But, too often, good places have been undermined by insensitive development:

- the dominance of private car travel in urban centres increases congestion, pollutes the air and occupies valuable urban space as surface car parking;
- efforts to encourage social inclusion and active travel (particularly cycling) have been undermined by ill-designed street environments and a lack of supporting infrastructure;<sup>33</sup> and
- the uptake and effectiveness of public transport have been hampered by the delivery of low density suburban developments, and poor quality environments in and around transport interchanges.<sup>34</sup>

By contrast, the development of new infrastructure and new settlements provides an opportunity for the arc area to pursue world-class design and development projects, befitting its status as a driver of national prosperity, a global centre for research, innovation, and technology.

Given the diversity of places across the arc, and the range of locations where new infrastructure opens up development opportunities, a range of responses will be required to realise transformational growth. There is no 'blueprint' for a well-designed new settlement and no single approach to placemaking which can be expected to deliver the 'right' response. The appropriate form of development and placemaking will be contingent upon factors relating to the specific physical, economic and infrastructural context and on effective and successful engagement with local communities.

The Commission has engaged extensively with urban designers, architects, planners, community specialists, landscape designers and development economists through its placemaking competition. This engagement suggests that there is no shortage of creative, industry-led ideas on how the arc can accommodate housing and employment growth in a way that enhances quality of life, supports positive social outcomes and respects both the environment and the interests of existing residents.

Entries submitted to the competition and those of the four finalists were diverse and distinctive. They have been published alongside this report. Each helps demonstrate key points made throughout the placemaking literature, emphasising the need for places to:

- develop settlements at a ‘human-scale’ considering accessibility and choice as critical factors for new development. The ability of residents to access employment, education, leisure and cultural opportunities, as well as public services, will be fundamentally important to the success of new communities.
- effectively integrate the design of new communities with new and proposed infrastructure schemes, with particular attention to the integration and connectivity of new and redeveloped stations into their urban surroundings. There is clear evidence that integrated transport and land-use planning, the density and land-use mix all play their part in enabling and supporting more sustainable transport choices.<sup>35</sup> The design of streets, public spaces and play spaces and the urban form make a significant difference as to how likely people are to walk or cycle.<sup>36</sup>
- explore compact new settlements by increasing levels of density, greater than prevailing densities across the arc’s major centres. Given the relatively limited availability of easily developable land in many areas of the arc, there is a need to make better use of this scarce resource. Through careful design there may also be scope to carefully and selectively increase and enhance the levels of density within existing settlements across the arc through processes of urban intensification.<sup>37</sup>

Widespread pursuit of dispersed or low density development is unlikely to help the arc meet its future housing needs or make the most efficient use of existing or future infrastructure schemes. Dispersed development spreads its impact, in aggregate, over a much larger area of socially valued rural land, increasing travel distances from major employment centres and increasing per-capita costs of public service delivery and energy, water and transport infrastructure, increasing travel distances from major employment centres.<sup>38</sup>

There is no shortage of built environment organisations setting out principles for the successful placemaking or development of new schemes, indeed two of the competition finalists set out principles for the design and delivery of new developments.<sup>39</sup> The Commission does not propose to reinvent these. The challenge will be to ensure that the appropriate mechanisms are in place to proactively implement these principles in new developments.

## Ensuring good growth: design panels

There are systematic methods for ensuring that design and placemaking is actively pursued to a high standard. Structured engagement with experts in different fields, including architecture, sustainability, engineering and community engagement can help inform local judgements and – if given weight within local planning processes – help shape development to maximise positive outcomes.

Design review is a recognised way of incorporating expert input and engagement into the planning and development process and improving the quality of design in the built environment. Design review panels are groups of leading multidisciplinary built environment experts who provide an independent, expert assessment of significant development proposals. These panels can also include a role for community representation and engagement, ensuring that the voices of existing and potential future residents are heard.

Well-managed design review panels, given a codified and independent role in the planning process, can help to specify and challenge the design of new schemes, ensuring that they add value to the places in which they are built.

Design review panels can be equally effective working alongside a local authority; or in relation to a particular infrastructure scheme (see the case study of the HS2 Independent Design Panel below); or as a part of a development corporation charged with realising a new settlement. In each case, the engagement with a multidisciplinary panel of experts will challenge the design of any new infrastructure scheme or settlement. This can help to champion the aims of promoting community, efficient use of infrastructure, and natural capital, as well as robust arrangements for ongoing management.

A design panel for the arc can form part of a governance structure to help ensure that investment in major new settlements and arc-wide infrastructure is specified and designed to a high quality, strategically linked with investment in green infrastructure, and will enhance the natural and built environment. A design panel for the whole arc can also account for the nuances of particular local schemes by establishing local sub-panels, which are made up of representatives from the wider panel and local areas (also seen in the HS2 Independent Design Panel).

**The Commission is currently examining proposals for a national infrastructure design panel.** It is expected that any new design panel arrangements within the arc should work in concert with established and emerging panels to specify, scrutinise and challenge plans and emerging designs for new developments, East West Rail and the Expressway.



## Case Study: HS2 Independent Design Panel

The HS2 Independent Design Panel provides independent advice and critique of the development of HS2 to help achieve its Design Vision. The panel has a dual role, enabling decision making at early stages of project development and subsequently reviewing and critiquing outcomes at key stages in the design process. The Design Panel does not make design decisions, but acts in an advisory capacity and offers impartial recommendations.

A pool of around 45 design panel members have been appointed, representing a wide range of relevant professional expertise, and with experience of working in different locations within the UK and internationally. Panel members have professional experience across architecture, urban design, engineering, planning, procurement, design management and service design.<sup>40</sup> Local sub-panels are used to review to specific local aspects of the HS2 scheme – for example the Euston Station Design Panel consists of twelve independent design experts, where half are taken from the route-wide independent Design Panel, and the rest from Camden’s Design Review Panel.

Despite the early stage of HS2, one example of the panel’s impact is the *Bridge Design Requirements* which defines the design principles and best practice to be applied by civil engineering contractors responsible for the design of the bridges along the route of the new high speed railway. The document was reviewed by the Design Panel a number of times during its development. The *Bridge Design Requirements* document is written to defend design quality, as well as to inspire design excellence. It is actively shaping procurement and design development processes through the articulation of a vision statement, a number of specimen bridge design scenarios and a library of bridge designs.

The HS2 Independent Design Panel has been set up at an early design stage, to allow it to advise on design guidance and best practice. However, at later stages of the design process the panel will review detailed designs by civil engineering and station design contractors to help ensure that HS2 achieves its Design Vision.

## Designing stewardship into new settlements

A key part of creating places is ensuring that they have enduring appeal and functionality so that they are valued, retained and capable of evolving for generations to come. Many new developments therefore provide residents with community assets such as green spaces or community centres. This was particularly the case in the many of the towns developed by New Town Development Corporations in the second half of the twentieth century. Considerable effort was put into creating high-quality environments with generous green space and a wide range of social and cultural facilities that could be enjoyed by residents from the earliest days of moving to the town.

Over time these have fallen into disrepair because, unlike the Development Corporations, the local authorities who inherited the new towns did not have the funds to pay the high maintenance costs for large areas of green space, public art or other public realm that was integral to the New Town vision. Many of the New Towns lacked a long-term stewardship strategy for the ongoing care and maintenance of the town's assets.<sup>41</sup>

The challenge is therefore to ensure that placemaking activity can be effectively sustained over the long-term without overburdening local authorities. Stewardship arrangements typically ensure that there are mechanisms and resources to maintain and develop valued community assets over the long-term, however the local authorities' spending priorities may change. The most powerful mechanisms for achieving this give responsibility for stewardship of community assets to the community itself.

In a marked exception from other new towns of its generation, Milton Keynes does not suffer from the same pressures managing its abundance of green spaces. An independent charity, funded by an endowment, was established by the development corporation to care for Milton Keynes' vast areas of parkland and green space (see the case study below). Another successful example has been Letchworth Garden City, where a charitable organisation uses income from its land and property in the town to provide benefits for residents, in addition to the services provided by the local authority (see the case study below).

While there is, arguably, no perfect model for stewardship, the two examples highlighted below and in the case studies demonstrate the importance and effectiveness of designing ongoing stewardship into the institutional underpinnings of new places from the very beginning to ensure their ongoing success and quality of life.

## Case Study: The Parks Trust, Milton Keynes



Campbell Park, Milton Keynes, The Parks Trust

Source: DroneMK

The founders of Milton Keynes wanted to ensure that the unique green landscape which characterises the town would be managed and protected in perpetuity, without having to compete for funds with other council priorities (as parks would in other towns).

The Parks Trust is an independent charity created in 1992 to care for many of Milton Keynes' parks and green spaces – about 25 percent of the new city area. The Trust took a 999 year lease of 4,500 acres of river valleys, woodlands, lakesides, parks and landscaped areas and at the same time was given an endowment of around £20m, mainly in the form of commercial property in Milton Keynes.

The rental income from this portfolio is used to fund the Trust and pay for the work of nurturing and enhancing the substantial green spaces and landscape which characterise Milton Keynes.

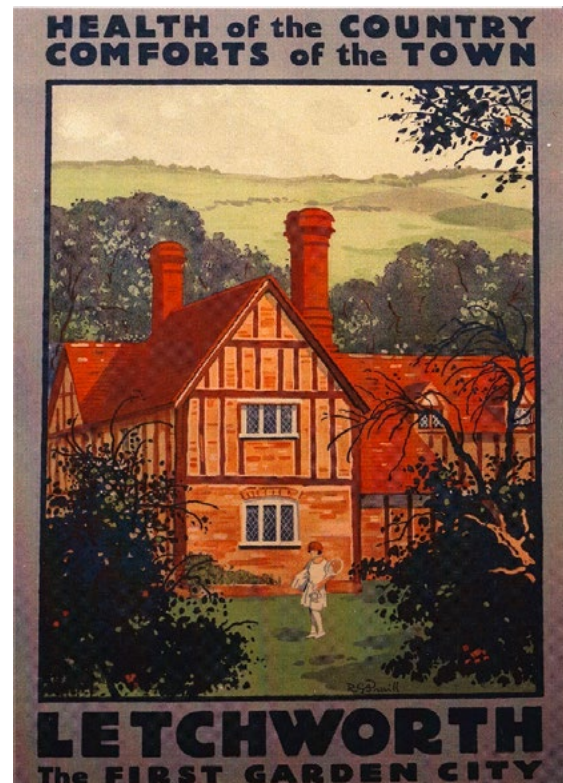
It was always envisaged by the Development Corporation that Milton Keynes would continue to grow and that the green estate would need to change and at times be reconfigured as the city evolved. The Trust considers that it has a responsibility to respond to changing circumstances of different generations and civic and national priorities and to help the city develop and grow.<sup>42</sup>

## Case Study: Letchworth Garden City Heritage Foundation

Letchworth was the world's first Garden City, created as a solution to the squalor and poverty of urban life in Britain in the late 19th Century. Based on the ideas of Ebenezer Howard, Letchworth Garden City has inspired town planning across the globe.

Howard's company, First Garden City Ltd, began construction of Letchworth in 1903. The company appointed architects Barry Parker and Raymond Unwin to design the masterplan for the new community. Central to the company's ethos was a commitment to repatriate all profits back into the estate.

In 1962, an Act of Parliament transferred the assets, role and responsibilities of First Garden City Ltd to a public sector organisation – Letchworth Garden City Corporation. 33 years later, a further Act of Parliament wound up the Corporation, passing the £56 million estate to Letchworth Garden City Heritage Foundation.<sup>43</sup>



The Foundation has a Board of Governors – a mixture of appointed and democratically elected representatives of the community and other local stakeholders. The Foundation reinvests its income for the long-term benefit of the local community. Provision includes, among many other things, the operation of an art deco cinema, a treatment centre for the local community and workers, an educational family farm, areas of open space, a greenway around the town and a minibus service.<sup>44</sup>

The Foundation also seeks to protect the character of Letchworth by running a Scheme of Management which applies to most freehold premises within the Letchworth Garden City estate. The scheme sets covenants on these freehold property owners to seek prior approval for external alterations to structures.

## Environmental impact: Natural capital and biodiversity net gain

The development of new settlements and arc-wide infrastructure schemes should not compromise the high quality natural environment for existing and future residents. Infrastructure providers, developers and government at all levels will need to ensure that they are actively seeking to minimise the environmental impact of achieving transformational growth within the arc.

The development and infrastructure industry is moving towards employing a 'net gain' approach to biodiversity and natural capital – this should be encouraged by all parties with a stake in the future development of the arc. Developers, for example, are increasingly working with local governments, wildlife groups, land owners and other stakeholders to support their priorities for nature conservation, ensuring positive impacts on biodiversity and natural capital are delivered through their developments. This might be achieved by increasing the quantity of natural assets, improving the quality of these assets and/or by making them more accessible.

Embedding 'net gain' into development is about seeking to maximise the value of natural assets as an integral and strategic part of placemaking and growth, rather than a compensatory add-on. Achieving these 'net gains' is more than simply replacing and outweighing losses with gains – it also requires doing everything possible to avoid losing biodiversity and natural capital in the first place.

"Net gain" principles for biodiversity have already gained a large amount of traction within the infrastructure industry, and there is emerging support from local authorities and developers. Indeed, many of the principles of 'net gain' are already embedded within the National Planning Policy Framework<sup>45</sup> and 'Good Practice Principles' have recently been established and published by construction and environmental management industry bodies.<sup>46</sup>

Incorporating "net gain" principles needn't damage the viability of sites or proposals. Developers and housebuilders are increasingly happy to adhere to net-gain principles as long as the requirement is explicit. Berkeley Group have already committed to 'Develop and apply an approach to ensure that all new developments create a net biodiversity gain'<sup>47</sup>. Barratt Developments have stated that they would comply with 'net gain' requirements where they are already in place, but have also committed, by 2020, to 'create a net positive impact on biodiversity and ecology across our development portfolio'.<sup>48</sup>

Embedding and codifying a 'net-gain' approach within local planning policy is critical to ensuring the success of deploying net gain principles. As Warwickshire's experience has shown, teams can become self-funding over time through planning fees and Section 106 agreements (see case study box below).

The scale of growth and the opportunities created through greater arc-wide collaboration on planning means that there is unique opportunity to take a large-scale strategic view of natural capital and biodiversity net gain opportunities. Projects such as the established Bedford & Milton Keynes Waterway Park could offer such an opportunity to create a green infrastructure asset which contributes to wider placemaking objectives.<sup>49</sup>

Government and local authorities should therefore work together to ensure that new settlements and strategic infrastructure, including new elements of the East West Rail and the Oxford-Cambridge Expressway are planned, developed and strategically linked with each other and investment in green infrastructure to achieve net gains in biodiversity and natural capital.

## Case study: best practice approaches to net gain in the UK

### Lichfield District Council

All development in Lichfield District is required to deliver a net gain for biodiversity. The District Council has embedded biodiversity net gain into its planning policy through a Biodiversity Supplementary Planning Document.

Lichfield District Council considers the minimum increased amount or ‘replacement percentage’ to be set at 20% above the biodiversity unit value of the habitats lost. For example, if the habitats to be lost are valued at 10 biodiversity units, they must be compensated for by the creation of habitats valued in total at no less than 12 biodiversity units. This is the minimum that would be accepted and the replacement percentage may be increased if for example: ecological networks have to be maintained or to avoid fragmentation of important existing habitats.

Any replacement habitat is required to be of greater biodiversity value and be guided by the Litchfield Biodiversity Opportunity Map.<sup>50</sup>

### Warwickshire County Council

The Warwickshire, Coventry and Solihull sub-region was chosen as one of the 2012-2014 six national pilot areas to trial biodiversity offsetting. Following the success of this pilot all the Local Planning Authorities within the sub-region agreed to continue with offsetting on all Minor and Major applications.

Developers are required to provide compensation for biodiversity loss under planning policy can choose to do so through biodiversity offsetting, once the mitigation hierarchy has been applied and compensation is seen as the only option available.

Wildlife areas are often fragmented. Biodiversity offsetting provides an opportunity to explore opportunities for joining up these areas and enhancing the overall biodiversity of the region’s natural environment.

Warwickshire’s experience demonstrates that biodiversity offsetting and net-gain needn’t be a burden on public sector resources because the team within the Council has become self-funding through Section 106 agreements.<sup>51</sup>

**Recommendation 3: Government should work with local authorities to:**

- put in place an independent design panel for East West Rail, the Expressway and new and expanded settlements across the arc by April 2018. This panel should work in concert with existing infrastructure design panels and new development corporations to specify, scrutinise and challenge settlement designs, plans and delivery, with a view to:
  - making most efficient use of new and existing infrastructure (including transport and utilities);
  - supporting positive social outcomes (including better mental and physical health);
  - achieving net gains in biodiversity and natural capital across the arc; and
  - improving quality of life for existing and future residents.
- establish arrangements for the long-term stewardship of valued community assets in each new or expanded settlement, placing responsibility and resources in the hands of the community – learning from both the Parks Trust in Milton Keynes and the Letchworth Garden City Heritage Foundation; and
- ensure that strategic infrastructure, including new elements of East West Rail and the Oxford-Cambridge Expressway are planned and developed, to achieve net gains in biodiversity and natural capital across the arc.





# PART THREE: EQUIPPING AND EMPOWERING LOCAL AREAS

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**New settlements will not, on their own, be sufficient to meet future housing needs or to secure the level of commercial development required to realise the arc’s economic potential. Greater levels of development will be required within and around the arc’s existing towns and cities.**

**But if this new development is to be sustainable, and is to be delivered in a way that protects and enhances quality of life, then it must be delivered alongside enabling infrastructure. It is therefore vital that local authorities have the powers and resources to bring forward new infrastructure to support growth in established towns and cities.**

Doubling the rate of housing delivery across the Cambridge-Milton Keynes-Oxford arc will require more than the development of new settlements and major urban extensions. Even if the major development opportunities enabled by East West Rail and the Oxford-Cambridge Expressway and identified in Part Two were delivered in full, this would account for less than half of the homes required to support the arc’s future workforce. The majority of the arc’s future housing requirement will need to be met through development in and around existing towns and cities.

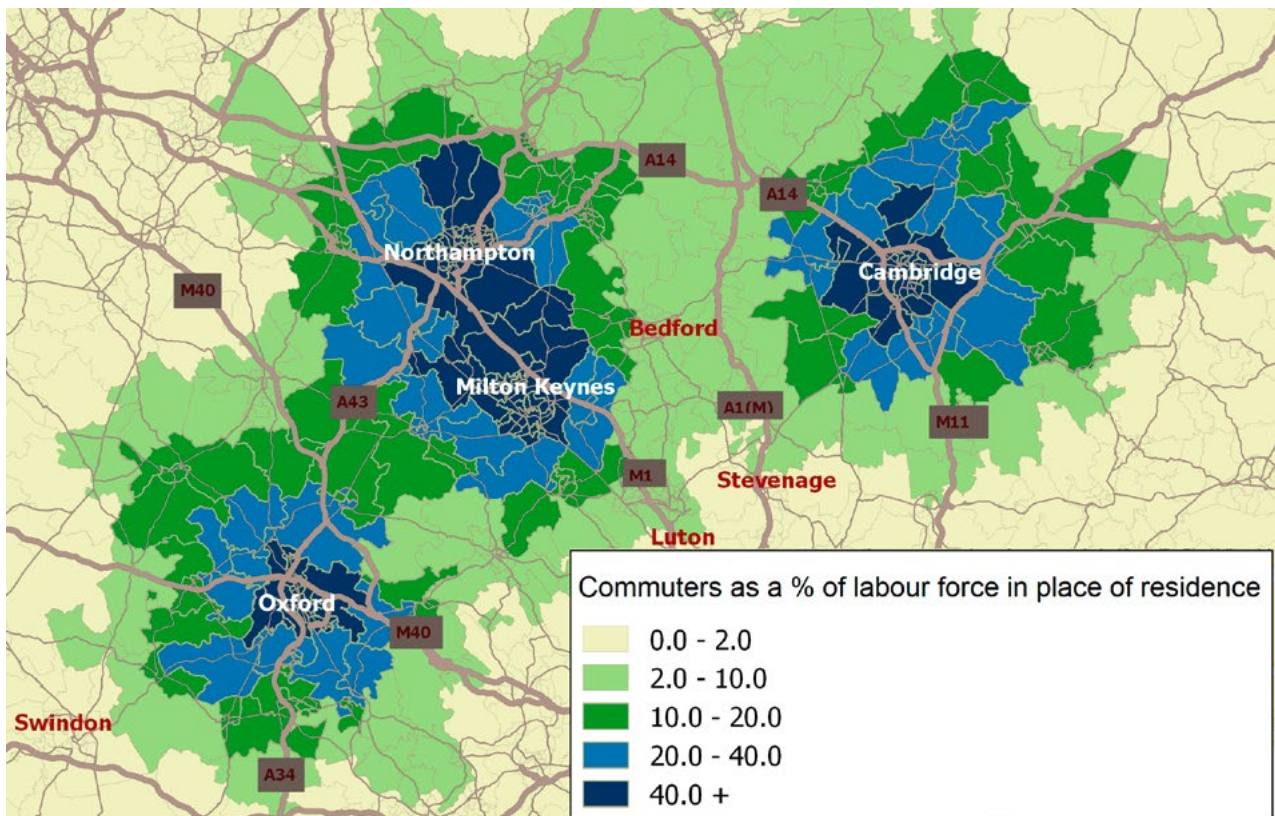
Any meaningful deal between Government and local partners must, therefore, secure local authority commitment to accelerated housing growth across the arc’s various housing markets. But the deal must also equip local authorities to shape this growth to ensure it is sustainable and respects the interests of existing residents. Local authorities must have the tools – the freedoms, powers and resources – to ensure that:

- they can shape strategic city-scale, city-regional and county-regional transport infrastructure, ensuring this acts as an enabler to, rather than a constraint on, future growth;
- infrastructure is planned, funded, and delivered in a way that provides certainty to local communities, to those developing local plans and to those bringing forward proposals for major residential or commercial development; and
- new housing results in well-designed, accessible and liveable communities.

## City-scale transport infrastructure to enable growth

Oxford, Cambridge, Milton Keynes and Northampton are the arc's major economic centres. They have large populations and are major regional hubs for employment, drawing commuters from across the wider arc (see figure 9) and driving higher levels of productivity and higher wages. Enabling the continued growth and development of these towns and cities is one of the key ways in which infrastructure can support the economy.

**Figure 9: Commuting as a percentage of the labour force across the Cambridge-Milton Keynes-Oxford arc**



Source: Cambridge Econometrics

But the success of these towns and cities has led their urban transport networks to experience significant levels of congestion – average travel speeds are low at peak times and journey times can be unreliable. In Oxford, Cambridge and parts of Northampton, the capacity of the transport network is limited by a street pattern fixed before the advent of the car:

- radial routes into the centres are congested during the peak periods. This is exacerbated at specific junctions, where capacity is limited and opportunities to increase capacity are constrained by the historic built environment; and
- ring roads, which also form part of the inter-urban network, experience peak period congestion as intra-urban movements to and from the urban centres compete with inter-urban traffic for space.

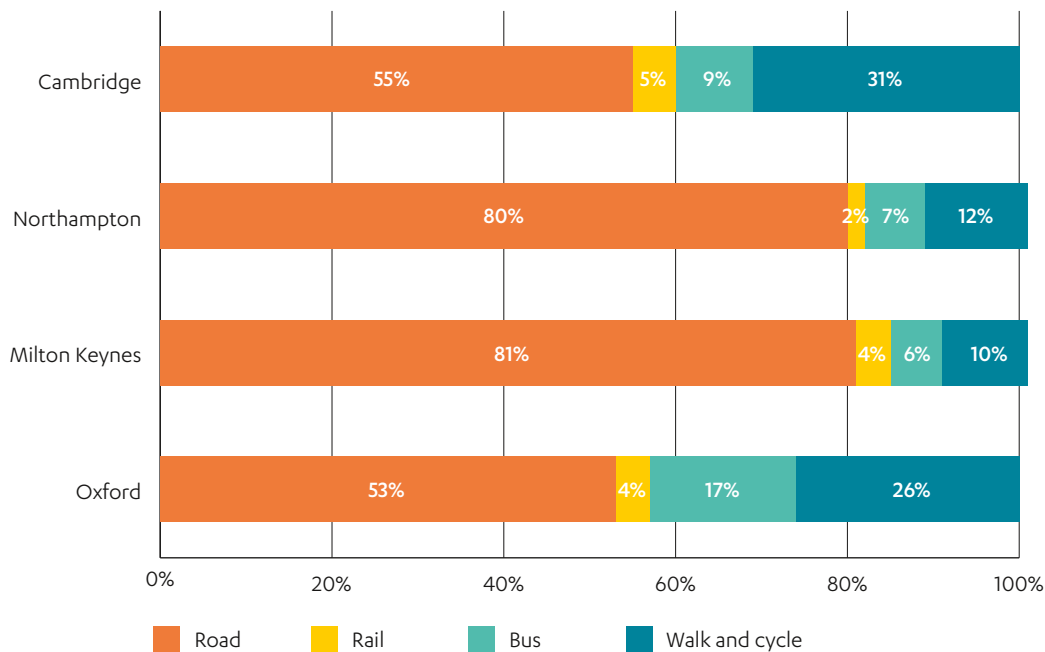
In Milton Keynes – a city designed with private car ownership in mind – peak period congestion at some junctions, particularly those serving the M1 and the A5, is severe. Congestion in Milton Keynes is expected to grow substantially over the next decade and the forecast impact of planned growth will be to increase total travel times in the morning peak by 54%.

Submissions made as part of the Commission’s call for evidence emphasised that congestion is becoming a threat to economic investment and quality of life as well as increasing levels of air pollution. Growing congestion in these towns and cities will limit people’s ability to access employment in the arc’s key towns and cities.

This presents a major challenge to development around the fringes of these major regional centres, and their satellite towns. Further population growth in new suburbs, and in satellite towns and villages, together with increases in city-centre employment will place even greater demand on these towns and cities’ infrastructure. It is vital therefore, that any deal under which local authorities agree to accelerated housing delivery also supports the delivery of supporting and enabling infrastructure that make it easier for businesses to locate in key towns and cities, and which enable people access the jobs they can create.

Within the arc’s key towns and cities, the prospects for increasing network capacity are limited. Space for wholly new transport corridors is expensive and is limited by existing buildings. In the longer term, smart technologies may allow additional increases in the efficiency of existing corridors. However, at present, the only realistic options to create additional transport capacity are to dig tunnels underground (although the costs and complexity of tunnelling means this approach should be considered only in exceptional circumstances), or to reallocate space on the existing transport network.

Commuting within the arc’s principal towns and cities is predominantly by private car. This is particularly the case in Northampton and Milton Keynes where eight in every ten commuting journeys are made by car. Even in Oxford and Cambridge, where walking, cycle and bus journeys play a more significant role, the majority of commuting journeys are made by car (53% in Oxford, 55% in Cambridge).<sup>52</sup> The dominance of the car is a clear signal that capacity on existing transport networks could be used more efficiently. Although cars are a convenient, flexible and relatively low cost form of transport, they use up a lot more road space per person than other forms of transport. If Cambridge, Milton Keynes, Northampton and Oxford are to continue to grow, there will not be enough space on their city-level transport networks to support current levels of car use.

**Figure 10: Urban centres commuting by mode (combined origin and destination share), 2011**

Source: Arup analysis of local authority areas based on Census 2011

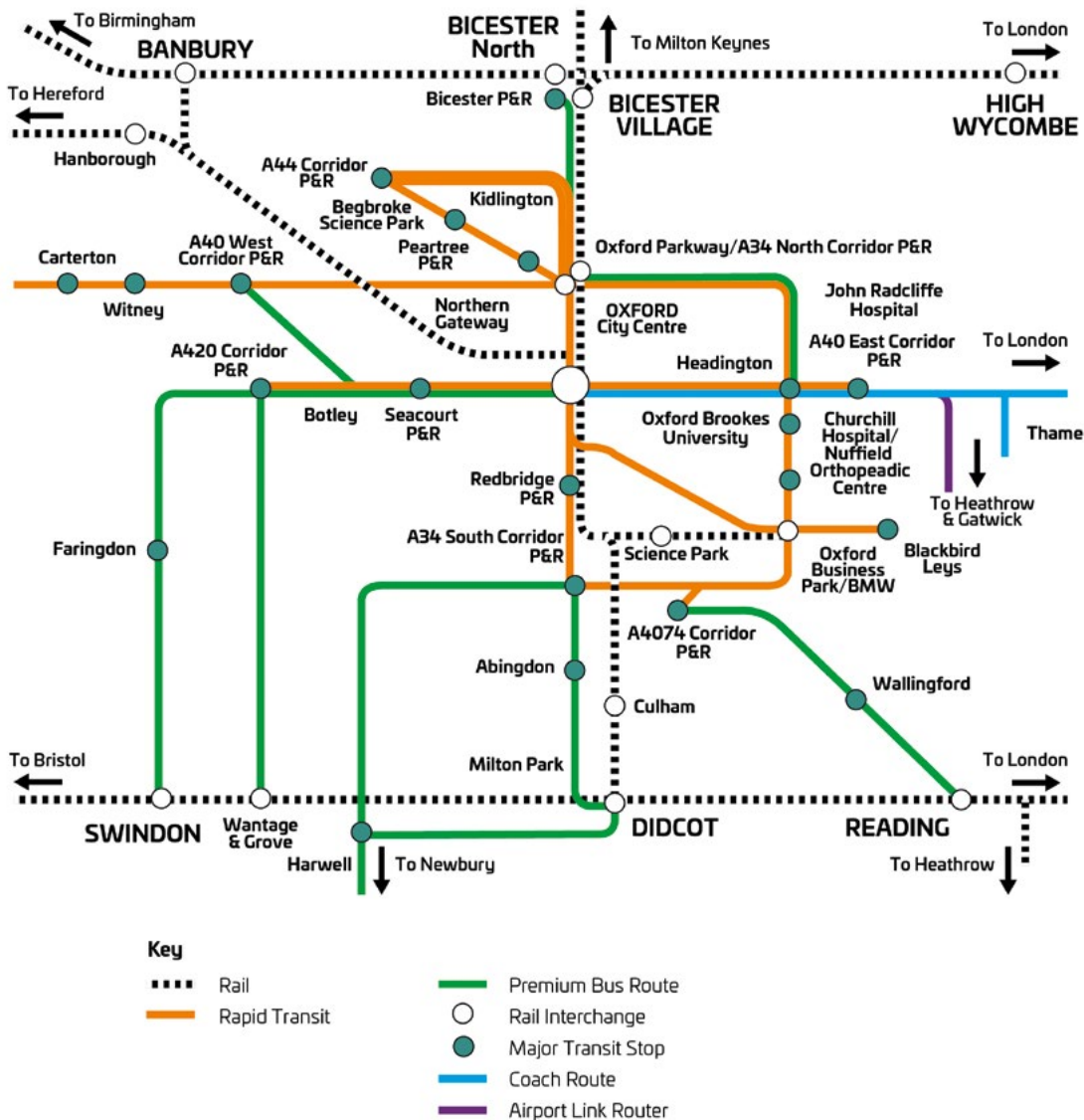
The development of public transport and active travel options could make more efficient and effective use of road space in the arc's key cities, reducing the amount of road space required per person and enabling a greater volume of journeys using the existing transport networks.

It is greatly encouraging, therefore, that the local authorities in each of the arc's key towns and cities are working to bring forward ambitious, evidence-based proposals for improving the effectiveness of city-scale transport based on the concept of mass rapid transit (MRT). The emerging proposals – published alongside this report – are the product of bottom-up collaboration within each city, and are supported by LEPs, business groups, higher education institutions and special interest groups.<sup>53</sup> The proposals are explicitly focused on:

- managing demand for road space through both policy measures and infrastructure interventions;
- enabling new development opportunities on the edge of the towns and cities, or in their surrounding communities (including those in neighbouring districts), up to 2050;
- maximising the opportunities associated with the development of East West Rail and the Oxford-Cambridge Expressway – integrating mass rapid transit with these schemes to enable effective first/last mile connectivity, in a way that enhances the value of these strategic infrastructure projects; and
- enhancing quality of life for existing communities, by reducing stress on current urban-scale, city-regional and county-regional infrastructure, and by opening up new travel opportunities (e.g. greater choice of how to travel or better connections to employment or leisure destinations).

The proposals have also been informed by joint work across Oxford, Cambridge and Milton Keynes. This collaboration may provide opportunities to ensure that the mass rapid transit concepts in Cambridge, Milton Keynes and Oxford are developed using common modes of transport, common technologies, common ticketing systems and a consistent 'look-and-feel'. There may also opportunities to consider integration of ticketing technology and fares with new East West Rail services. Developed in this way, local mass rapid transit systems could strengthen east-west connectivity, helping to extend and diversify key labour market catchments, and strengthen the arc's identity, both within the UK and amongst overseas investors.

Figure 11: Proposals for the future of mass transit in the Oxford city region



Source: Oxford City Council & Oxfordshire County Council: First/Last mile strategy

It is equally encouraging that these towns and cities have engaged in wider work undertaken by the National Infrastructure Commission, to examine the potential to increase the uptake and modal share of cycling in Cambridge, Milton Keynes and Oxford. An independent review of local cycling infrastructure produced for the Commission<sup>54</sup> identified several potential areas of improvement across Cambridge, Milton Keynes and Oxford, which include:

- the integration of cycling into the transport planning for these areas, giving it proper attention and weight as a mass transit commuting mode;
- the appointment of dedicated ‘cycling and sustainable travel Commissioners’ for each town/city, who have the knowledge and political weight to drive through change; and
- the introduction of segregated cycle lanes where possible (sometimes requiring a reduction in car traffic), and improvements at junctions to help deliver safer cycling.

These emerging proposals for mass rapid transit and cycling enhancements will need to be further developed and refined but, subject to the development of consensus, public consultation and local agreement, they should provide the firm basis for ambitions and credible transport plans to 2050. Taken together, local areas’ work with the Commission on mass rapid transit and on the future of local cycling indicates progress towards a clear strategy through which infrastructure investment at the city-regional scale can enable continued growth in and around existing towns and cities.

## Infrastructure certainty

Throughout this study, the Commission has heard consistently that uncertainty on the delivery of enabling infrastructure is a fundamental barrier to new development. Without clear mechanisms for forward planning and, ideally, forward-funding the infrastructure necessary to support specific developments, delivery can stall as developers bear large upfront costs. The risks are greater as the scale of the development increases. Equally, uncertainty over the delivery of major infrastructure schemes may lead local planning authorities to make provision for lower levels of growth than might otherwise have been the case. Submissions to the Commission’s call for evidence have, for example, suggested that some local plans from across the arc would have made provision for greater levels of housing growth had planning authorities been more certain of the delivery schedule for the East West Rail scheme.

Given the critical impact that certainty on infrastructure provision can have on development, any deal under which local authorities agree to plan for higher levels of housing delivery must give these authorities, the communities they represent and private developers, greater certainty on the delivery and timing of enabling infrastructure. Greater certainty is required on national, county and city-regional infrastructure schemes.

At the national level, investments on inter-urban transport networks are packaged into 5-year control periods (for rail infrastructure) and road investment periods (for the strategic road infrastructure). This system, while encouraging longer-term thinking and guarding against a stop-start pattern of investment, does not easily align with the development of local plans which typically look to a 15-year time horizon. If a new deal between local authorities and Government is to succeed in unlocking the potential of this arc, infrastructure plans will need to be developed over a longer period.

There is, therefore a need for Government and local authorities across the arc to work together to define and agree an indicative, long-term infrastructure pipeline setting out a schedule of schemes that may be brought forward subject to decisions on national investment, over the period to 2050. Any such pipeline should be scoped to consider the full range of publicly funded infrastructure.

Although indicative, the development of such a pipeline would require local authorities, LEPs and other local stakeholders to define a single set of long-term infrastructure priorities. It will allow for a 'single conversation' between Government and the arc on strategic local and national infrastructure such as upgrades and enhancements to the major road network and the national rail network. Crucially, it will give local and national government, business groups, infrastructure providers and potential investors greater clarity on the scope and timing of future infrastructure investment. Commitment to the delivery of specific schemes would need to be 'firmed up' at the beginning of each spending review period, road investment period or rail industry control period, subject to the availability of resources and the development of a robust business case.

The need for greater certainty on infrastructure provision is, arguably, most acute at the city and county-regional level. Transport infrastructure provides a clear case in point. There are no major long-term funding programmes available to support city and city-regional transport (as outlined in the Commission's Consultation on a National Infrastructure Assessment). Local leaders must bid into a wide range of funding sources, which come with limited long-term certainty and which are rarely sufficient to deliver major schemes or city-wide improvements. By contrast national rail and road networks, and Transport for London, benefit from multi-billion pound investment programmes planned for many years in advance.

The lack of certainty over future funding impacts at the city-regional level not just on the delivery of schemes, but also on local authorities' work to develop proposals for new growth-enabling infrastructure. Without certainty over future funding, and when faced with diminishing budgets and competing spending pressures, it is very difficult for local authorities to prioritise the detailed feasibility work necessary to support major schemes – the costs of which can run to millions of pounds. Without the facility to develop new thinking on infrastructure, there is a risk that local plans become incremental, conservative and resistant to new growth.

The situation is further exacerbated by the complexity of local delivery arrangements. Across the arc, and indeed across England, there are a multitude of agencies with responsibility for transport operations and investment – local authorities, LEPs, national agencies and private bus and rail operators. The complexity makes it difficult for local authorities to take forward service improvements such as a single transport ticket for different transport modes. It can also lead to inefficiencies in the use of resources as different agencies borrow, bid for and bring forward funding from different sources. The resulting patchwork of funding limits local leaders' ability to target investment towards priority schemes. Too often the use of different funding pots is constrained by the requirements set by funding bodies or Government departments.

Addressing this challenge in the CaMkOx arc requires that its local authorities – or groups of these authorities working together under appropriate governance arrangements (see part 4 of this report) – be given clarity over the long-term funding available to support the development of, and upgrades to, their city-regional transport networks. This should include flexibility to use funding to improve services as well as build new infrastructure where this is a more economic way of increasing capacity to support growth and development. Funding will be needed to enable these authorities to maintain the networks that already exist as well as to expand them to cope with transformational growth.

The Government has, of course, started to address some of this, focusing on areas which have adopted Mayoral Combined Authorities. For example, under the terms of the Cambridgeshire and Peterborough Devolution Deal, the Government has committed to allocate £20m per year for the next thirty years for investment in infrastructure. Crucially, 40% of this allocation is revenue funding and 60% capital.<sup>55</sup> The Combined Authority can use this allocation to fund infrastructure development and delivery, to leverage additional borrowing, and to catalyse further investment.

The certainty that this kind of long-term funding commitment can bring is not enjoyed by local authorities elsewhere in the arc, or across England's other cities. While putting such long-term arrangements in place may not require more money, developing similar deals in the longer-term may mean reconsidering the balance of funding between urban and interurban connectivity nationally. It will also mean trading-off different objectives – for instance whether to spread resources around all cities or focus them in specific places. The Commission will consider these issues in more detail, and for the country as a whole, in its National Infrastructure Assessment, to be published in 2018.

However, given the growth potential and economic opportunity that exists across the Cambridge-Milton Keynes-Oxford arc, and the imperative to unlock transformational levels of housing growth, there is an immediate case for measures that provide greater certainty on infrastructure, and which can help enable a step-change in housing growth.

**Recommendation 4: Government and local authorities should implement measures to increase certainty on the delivery of growth enabling infrastructure.**

- Government should work with local authorities to establish an indicative, long-term pipeline of strategic national and local infrastructure investments, conditional upon specific housing delivery milestones, and with firm financial commitments made at the beginning of the relevant spending review, road investment or rail industry control period. This pipeline should be established and agreed by 2020.
- Local authorities should work with LEPs, local business groups, educational institutions and other key partners to formally agree robust and credible transport plans to enable the development of the arc's key towns and cities. These should be agreed locally by April 2019. These plans should provide a firm basis for long-term growth and investment, and include plans for significantly upgrading public transport, integrating transport hubs and providing safe cycling infrastructure.
- Following agreement of these long-term transport plans, Government should develop deals, bespoke to this region, with local authorities in Oxfordshire and the central section of the arc. These deals should extend powers over bus franchising, the introduction of smart ticketing, and give greater long-term certainty over future funding which authorities can use to fund, and unlock finance for, city-regional infrastructure improvements. Powers and resources should be devolved no later than April 2020.



## New opportunities for land value capture

Measures to provide funding certainty for infrastructure across the Cambridge-Milton Keynes-Oxford arc should not depend exclusively on central government and on the general taxpayer. If local authorities could capture a share of the uplifts in land values that result from investment in transport schemes or planning decisions, they could augment their ability to develop growth enabling transport systems without placing additional demands on limited central government funding.

For 'land value capture' to be an effective element of local infrastructure funding, it is vital that the mechanisms used to capture a share of value uplifts do not undermine the viability of development. This generally requires stability and certainty on the contributions that developers are required to make to infrastructure projects. Long-term certainty allows developers to factor these contributions into their negotiations on land acquisition – often years before development is brought forward. It is also necessary that any mechanisms designed to capture land values do not undermine land owners' willingness to sell their land for development at a reasonable price.

Attempts to fund infrastructure by capturing a share of land value uplifts can only succeed in areas where the value of development land is high compared to agricultural or industrial land. Analysis prepared to support this study suggests that this criteria is met within the Cambridge-Milton Keynes-Oxford arc. Land with planning permission in the arc's principal urban centres is worth substantially more than land which is designated for other purposes. While agricultural land might be valued at c.£25,000 per hectare, land with planning permission might range in value from £1.6m per hectare in Northampton, to £2.7m in Milton Keynes and up to £5.7m per hectare in Cambridge.<sup>56</sup>

Taken together, this analysis suggests that if central and local government can balance the certainty and proportionality of mechanisms for land value capture, then there is a powerful case for using a greater share of land value uplifts to fund growth-enabling infrastructure at the local level. This case is strengthened by:

- the urgent need to expand the housing supply within the arc – improvements in transport connectivity will make development viable (and thus increase land values) in places where it was not viable previously. By funding infrastructure using revenues from land value capture, there is an opportunity to unlock greater levels and better quality of development than would be possible if infrastructure funding was drawn purely from Government;
- the need to support the development of well-connected new communities – funding projects through land value capture creates a stronger incentive for transport schemes to integrate with housing and commercial development; and
- the need to balance the interests of the taxpayer and land owners – land and property owners can receive windfall gains as the value of their land holdings increases following taxpayer funded investment in transport projects. It is fair that those who enjoy significant financial benefits as a result of public investment in transport schemes contribute towards their funding.

But the mechanisms currently available to local authorities seeking to capture land value increases – the Community Infrastructure Levy and the use of section 106 agreements – have significant weaknesses and are limited in their ability to raise funds for enabling infrastructure.

The Community Infrastructure Levy (CIL) is a planning charge levied per m<sup>2</sup> on net additional floorspace on new developments of more than 100m<sup>2</sup>. Rates are set for different types of development by local authorities. An independent review of CIL, commissioned by the government, found that CIL is not raising as much money as initially envisaged by Government and local authorities. It is not making a substantial or timely contribution to infrastructure costs (raising c.5% – 20% of funding required) and is therefore meeting neither the expectations of local communities nor the desire of developers and local authorities to provide certainty on the delivery of enabling infrastructure.<sup>57</sup>

The key weaknesses of CIL as a mechanism for capturing land value uplifts, is that it is slow to introduce and relatively difficult to adjust to reflect changes in development values over time or viability issues on specific sites. CIL rates must go through a lengthy examination in public, which reduces the speed of the rate setting process.

### Case study – Mayoral CIL

The Mayor's Community Infrastructure Levy (MCIL) was introduced in 2012 to help finance Crossrail, the major new rail link that will connect central London to Reading and Heathrow in the West and Shenfield and Abbey Wood in the east.

MCIL takes the form of a zonal planning charge, levied on new development at different rates across three zones across London. Charges are levied in addition to borough's own CIL rates at £50 per sqm in zone 1, £35 per sqm in zone 2, and £20 per sqm in zone 3. Unlike CIL, there is no discretionary relief, although medical and education developments, developments by charitable organizations and affordable housing are exempt. The Mayor of London is the charging authority, but the boroughs are the collecting authorities.

MCIL rates were set at a level to ensure other Boroughs' CILs were not adversely affected and their ability to fund their own infrastructure requirements was not undermined. In certain locations (central London, the northern part of the Isle of Dogs and around the new Crossrail stations) developments may also be liable for a planning obligation under s106.

The MCIL is expected to raise up to £600m by 31 March 2019 (including s106 contributions). The latest review of the MCIL was published in February 2017. At this time MCIL had raised £342m and a further £96m had been collected through s106 (more than 70% of the combined target). The review concluded that there was no requirement to change the rates.

On 26 June 2017 the Mayor published for public consultation the Preliminary Draft Charging Schedule (PDCS) for an MCIL2. It is intended that MCIL2 will be levied from April 2019, and will supersede MCIL. MCIL2 will contribute to the funding of Crossrail 2.

CIL rates must also be set at a level which ensures the viability of development across the entire local authority area. Setting CIL rates at a level to ensure strategic viability tends to create a bias towards setting lower CIL rates and, as a direct result, towards lower revenues. Local authorities do have the flexibility to incorporate different charging zones within their CIL charging schedules, but the

development and justification of these charging zones can be slow and complex. Local authorities also have to consider the cumulative impact of CIL and affordable housing requirements on development viability. The planning process also allows developers to challenge CIL rates or planning obligations on viability grounds; there are concerns that some developers have negotiated affordable housing requirements downwards by using pessimistic viability assessments.

Government has sought to support certain types of development by exempting them from CIL or allowing reliefs to be claimed. There is mixed evidence on the impact of these reliefs, but the range and extent of the reliefs has substantially reduced the amount of money that can be collected to help fund infrastructure.<sup>58</sup> These factors, when taken together, help explain why only half of LAs across the arc have implemented CIL charging schedules, and why some (e.g. Milton Keynes) have opted not to introduce a CIL, focusing instead on negotiating s106 agreements.

Planning obligation agreements made by local authorities and developers under section 106 of the Town and Country Planning Act 1990 are used to:

- prescribe the nature of development (for example, requiring a given proportion of the development to be affordable housing);
- compensate for loss or damage created by a development (for example, through the loss of green space); and,
- mitigate the impact of a site's development (for example, to meet the cost of additional public service provision required by the development).

One of the major strengths of these agreements is that they allow local authorities to adopt a site-by-site approach to the negotiation of the developer's contribution to infrastructure, recognising that some sites are more viable than others, and that these can withstand a higher level of contribution than other sites. While this means that s106 agreements tend to raise more than the CIL. However, the development of s106 agreements can be time consuming, resource intensive and unpredictable for both local authorities and developers. This tends to limit the application of s106 agreements to larger development sites.

Since the introduction of the CIL, the government has curtailed the use of monies raised through S106 agreements. Monies raised through S106 must be spent on site-specific infrastructure – they cannot be spent on strategic infrastructure (like city-regional transport) and can therefore do little to alleviate pressures on existing city-regional infrastructure. Changes to the CIL regulations explicitly limit local authorities' ability to pool S106 agreements from more than five developments. This change, together with restrictions on local authorities' ability to repay borrowing using CIL receipts has effectively ruled out the development of tariff and prospectus models for funding local infrastructure (the Milton Keynes tariff is the most effective example of such a model). Despite restrictions on using CIL to repay borrowing, local authorities may still use CIL to fund infrastructure which has been forwarded funded in other ways.

## Case Study: the Milton Keynes Tariff

Following the dissolution of the Milton Keynes Development Corporation, the Milton Keynes Partnership (MKP) – a sub-committee of what is now the Homes and Communities Agency – was charged with delivering continued growth in Milton Keynes. MKP published a ‘Growth Prospectus’ identifying the essential infrastructure required to support sustainable growth up to 2016.

The Milton Keynes Tariff was established to support the delivery of the Growth Prospectus by capturing a portion of uplifts in land value derived from the granting of planning permissions. The tariff was charged in defined areas – MK’s east and west ‘Expansion Areas’, which were expected to accommodate some 15,000 new homes.

Developed as a s106 agreement, the tariff was based on an overarching framework agreement between MK Council, land owners and developers. This agreement set out the obligations on each party. In particular, it set out the legal obligations on MK Council in respect of the provision of the infrastructure, the use of contributions, the timely approval of reserved matters and the maintenance of reserve sites. This approach substantially reduced the need for time-consuming bilateral negotiations and gave partners increased confidence in delivery. These factors have helped tariff areas to achieve a scale and pace of housing delivery that has far outstripped other areas of Milton Keynes – including through periods of downturn and recession in 2008-2010.

English Partnerships forward-funded the cost of some of the required infrastructure ahead of the tariff payments being made. The tariff was collected as a fixed payment made under the terms of the s106 Agreement as a condition of outline planning consent.

Contributions were index linked, but initially set at £18,500 per dwelling and £260k per hectare of employment space. Tariff payments were also back-loaded with 75% of the total payable upon sale or occupation of new homes/commercial space. There was an option to deliver some of the tariff in-kind.

The tariff was intended to raise over £300m up to 2016. It was estimated that over £1.67bn would need to be spent to support the growth of Milton Keynes during that period. Thus, additional sources of public sector funding were needed, including from local councils, the Highways Agency, health bodies, and central government.

Changes introduced through the CIL Regulations in 2015 prohibit the pooling of s106 contributions and have the consequence that no new applications to enter tariff arrangements can be accepted. All new applications from developers must be dealt with as separate s106 agreements.

Attempts to fully address the short-comings of CIL and s106, or to introduce wholly new mechanisms for land value capture, would require new primary legislation. Any changes to primary legislation, or indeed to regulations governing CIL, would apply nationwide. The National Infrastructure Commission will explore options for more fundamentally reforming land-value capture mechanisms in its upcoming National Infrastructure Assessment.

However, a more flexible approach to the deployment of the Community Infrastructure Level and Section 106 agreements in the Cambridge-Milton Keynes-Oxford arc could increase the contribution that land value uplifts make to infrastructure funding. Immediate progress could be made if Government and groups of local authorities, working together through appropriate governance structures, were to negotiate greater freedom and flexibility over the deployment of the Community Infrastructure Levy (CIL) and Section 106 agreements. Enabling measures could be implemented relatively quickly within the arc, as part of a deal between local authorities and Government.

Engagement with stakeholders across local and national government, suggests that changes to existing mechanisms for land value capture should:

- allow groups of local authorities, working together through appropriate governance structures, the power to levy a ‘city-regional’ or ‘county-regional’ CIL – similar to London’s mayoral CIL – over and above those levied by individual local planning authorities.

While it will be for any new combined authority to design and develop any new CIL, it is likely that adverse impacts on development viability will be minimised, and revenues maximised, through the introduction of a targeted zonal CIL. Such a model would enable higher-levels of CIL to be charged in areas where the viability of development is greatest. Any revenues collected should be invested in enabling infrastructure at the city-regional or county-regional level.

- remove restrictions on the pooling of section 106 revenues and on the forward funding of infrastructure through borrowing against future receipts.

These changes would, in effect, enable local authorities to adopt a more strategic approach to the use of s106 revenues, using revenues to fund strategic as well as site specific infrastructure. This change may also enable local authorities to negotiate more favourable s106 agreements – anecdotal evidence shared with the Commission by planning officers from across the arc suggests that pooling restrictions have, in effect, exerted downward pressure on s106 revenues as LAs are unable to engage in negotiations with developers on their contribution to strategic infrastructure.

The changes would also allow local authorities to establish a tariff and prospectus approach to funding infrastructure – modelled on the MK Tariff approach. This model may be particularly powerful where LAs can finance the provision of infrastructure in advance of housing developments.

Taken together, these proposals would create a wider range of options for local authorities. These options could be applied individually or in combination, with local strategies tailored to reflect different circumstances and to maximise funding for infrastructure. They mean that, in addition to levying a CIL across its area, any given local authority within the arc could:

- establish a tariff and prospectus approach for large development areas or urban extensions. This may help to capture land values and increase certainty around infrastructure delivery in circumstances where land ownership is concentrated and there are a small number of developers. Under these arrangements, LAs may seek to forward fund infrastructure on the basis of higher – and relatively certain – repayments from developers. The balance of these payments may be made after new homes or commercial space is sold;

- use more flexible and ‘strategic’ s106 agreements for larger developments at key transport hubs and interchanges, enabling investment in the city-regional transport schemes that makes the development viable. A city-regional CIL, based on a zonal charging schedule, could be levied for smaller developments in these areas, ensuring that a share of land value uplifts are captured in highly viable development locations without the need for long and resource-intensive negotiations; and
- apply a city-regional or county-regional CIL in those cases where development is taken forward in green belt areas – ensuring that where such development is deemed necessary, and approved by the planning inspectorate, a substantial share of land value uplifts are captured to make a significant contribution to local infrastructure (including green infrastructure and natural capital), and enhancing quality of life across the town/city.

These changes are unlikely to raise sufficient funding to meet all local infrastructure costs. Nevertheless, if applied as part of a joined-up growth strategy, they should increase the resources available to local authorities and provide greater flexibility on the use of these resources. Crucially, they will create a greater incentive for local authorities and developers to integrate the delivery of new development and growth enabling infrastructure – a practice which can help increase the value and quality of development, and reduce the impacts that new development around existing towns and cities can have on the current population.

**Recommendation 5: Government should, through bespoke deals with local areas, make changes to the operation and application of CIL and s106 agreements across the arc that will:**

- **give groups of local authorities, working together through appropriate governance structures, the power to levy a city-regional CIL; and**
- **remove restrictions on the pooling of section 106 revenues and on the forward funding of infrastructure against future receipts. These changes should be agreed by 2020.**

## Local planning for well-designed, and well-connected communities.

Any deal under which local areas commit to accelerated housing growth must give local authorities the means to shape the character and distribution of this growth to ensure that it is sustainable, and that it contributes to the creation of well-designed, liveable communities. It is only by delivering ‘good growth’ that local authorities and Government can balance the needs of future residents, with those of existing communities.

It is vitally important, therefore, that the growth commitments set out in any deal are matched by measures to ensure that local planning authorities can manage the risks posed by ‘speculative developments’. Such developments are typically promoted on a piecemeal basis, are not provided for in local plans and bring minimal benefit to new and existing communities, whether through inefficient use of land or poor alignment with wider infrastructure. They can be granted planning permission in the absence of adequate development policies.

The National Planning Policy Framework (NPPF) states that planning permission should be granted when the local plan is ‘absent, silent or relevant policies are out of date’ unless ‘any adverse impacts of doing so would significantly and demonstrably outweigh the benefits [...] or specific policies in

this Framework indicate development should be restricted'. This is a vital part of the NPPF, enabling development in circumstances where local authorities are reluctant to promote growth. It means that local authorities which fail to produce a plan effectively surrender their ability to influence the development of their areas. The Commission's view is that, to enable a meaningful deal with Government, local authorities across the arc should take all steps necessary to ensure that robust local plans are in place.

But speculative development can remain a threat even when local authorities have prepared and adopted local plans. The NPPF requires local authorities to identify and update annually, a supply of specific deliverable sites to provide for five years housing against their overall housing requirement. Where a five-year supply is not identified, 'relevant policies for the supply of housing should not be considered up-to-date' and speculative development is more likely to be approved. Analysis conducted by Savills on planning appeals lodged between January 2014 and April 2015 found that over half of appeals upheld nationally cited lack of a five-year land supply as a material factor.<sup>59</sup>

It is, of course, essential that local authorities identify land for development to meet local housing needs for five years and beyond. Five years is not a long time to be planning for future housing. But sites can only be considered part of local authorities' five-year land supply when they are "available now, offer a suitable location for development now, and be achievable with a realistic prospect that housing will be delivered on the site within five years and in particular that development of the site is viable". The requirement that sites be available, deliverable and viable substantially diminishes the number of sites which can be considered part of local authorities' five-year land supplies, leaving many vulnerable to speculative development.\*

In the context of ambitious deals with Government under which groups of local authorities across the arc commit to provide for a substantially larger number of homes, the operation of the five-year land supply may need give rise to concerns regarding:

- **the quantum of land required:** as local authorities commit to higher levels of housing growth, the quantum of land required to demonstrate supply for the next five years will increase. Without safeguards, entering into a deal to bring forward more homes could have the unintended consequence of making the maintenance of a five-year land supply more difficult – increasing the risk of speculative development;
- **effective use of resources:** work to maintain a five-year supply of specific deliverable sites can become resource intensive, with time and money diverted towards updating and defending the local authority position against speculators and developers, rather than proactively bringing forward new developments;<sup>60</sup> and
- **the delivery of larger sites:** the development of large sites will be vital to realising the step change required in housing development across the arc, but the Commission has heard consistently that the requirement to maintain a five-year land supply can discourage the longer-term planning required to unlock for higher-capacity sites. The requirement to maintain a five-year land supply can focus local authorities on smaller sites that are more likely to deliver in shorter timescales.<sup>61</sup>

\* Savills analysis published in April 2015, suggested that 43% of local authorities across England have less than 4.5 years of supply. 26% are classed as borderline, having 4.5 to 5.5 years of supply. 31% have over 5.5 years of supply.

It is vital that local authorities maintain a supply of land to support housing development. But where local authorities commit to a major acceleration of housing growth, and work to reflect this commitment in local plans, it seems perverse that this commitment to additionality should increase the risk of speculative development. In some circumstances, therefore, selected, targeted freedoms may be necessary to ensure that additional local growth can be shaped in line with plans.

It seems equally perverse that the requirements of the NPPF should diminish the incentives that local authorities have to bring forward large development sites, and that communities should be exposed to speculative development because local plans support large development sites that take longer than five years to deliver in full. There is, therefore, a case for extending flexibility in five-year land supply requirements as part of any deal (although the extension of any freedoms should make clear the evidence that would be required by the Planning Inspectorate regarding progress in the delivery of large sites).

Safeguards and flexibilities should be extended sparingly and in exceptional circumstances through negotiation between local authorities and Government. They should reflect consideration of local land availability, current challenges in maintaining five-year land supplies and the potential to bring forward large scale housing sites.

**Recommendation 6: government should consider the need for agreements extending flexibilities in the application of five-year land supply requirements. These agreements should only be considered in cases where local authorities agree deals to accommodate significantly higher levels of housing growth. Flexibilities should:**

- help ensure that local areas are not exposed to increased risk of speculative development as a result of their commitment to additional growth; and
- be kept under review and made subject to local areas demonstrating progress in the delivery of major housing growth.

In all cases, agreement must preserve the requirement for local authorities to maintain a supply of land sufficient to enable house building at the rate that would have been required in the absence of any deal to support additional housing growth.





# PART FOUR: A LONG-TERM VISION FOR THE ARC AND ITS SUB-REGIONS

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**If any deal between local areas and Government is to succeed, it must be based on a shared vision for the arc. Jobs, homes and infrastructure must be planned together if the arc is to maximise the economic benefits of strategic infrastructure and new settlements, and deliver sustainable growth in its towns and cities.**

**Developing a fit-for-purpose vision and supporting plans will require local authorities and LEPs to work across administrative boundaries and to deepen existing collaborations. It will require them to put in place new governance structures enabling collective decision-making and signalling their long-term commitment to the success of the arc.**

If the arc is to double its current rate of house building in the period to 2050, support the continued growth of its key economic centres, and protect quality of life for new and existing residents, then it must maximise the benefits of new infrastructure investments and make the most of existing infrastructure assets. Infrastructure has the potential to:

- link homes and jobs, connecting the places where people live and work;
- open up both major strategic sites and smaller local sites for high quality housing development;
- co-ordinate patterns of new development, creating focused opportunities to build new communities around transport hubs and interchanges;
- create inclusive, liveable places, connecting people and communities with opportunities for work and leisure;
- provide a catalyst to private investment, unlocking broader local and national benefits; and
- increase land values, allowing local authorities and Government to capture a share of uplifts to support infrastructure investment.

But to realise these benefits, infrastructure must be conceived, designed and developed alongside plans for new jobs, new homes and new communities. It is vital therefore, that any deal linking accelerated housebuilding to infrastructure investment, should be supported by a robust arc-wide planning framework that integrates economic, land-use and infrastructure planning.

The development of such a framework will require a step-change in collaboration and commitment at all levels of government. Within the arc, local authorities will need to demonstrate leadership and take decisions on these issues collectively. Central government departments and their agencies will need to do the same, working together and with local partners to support the success of places within the arc.

As well as a step-change in collaboration, the development of an integrated planning framework will require a fundamental shift in the scale at which local authorities work on planning and infrastructure issues. Rather than focusing exclusively on development within their own communities, they will need to work together to plan at the strategic level. This will require trade-offs and compromise between local interests. It is vital, therefore, that the arc-wide planning framework be supported by robust and transparent governance structures that enable collective decision-making.

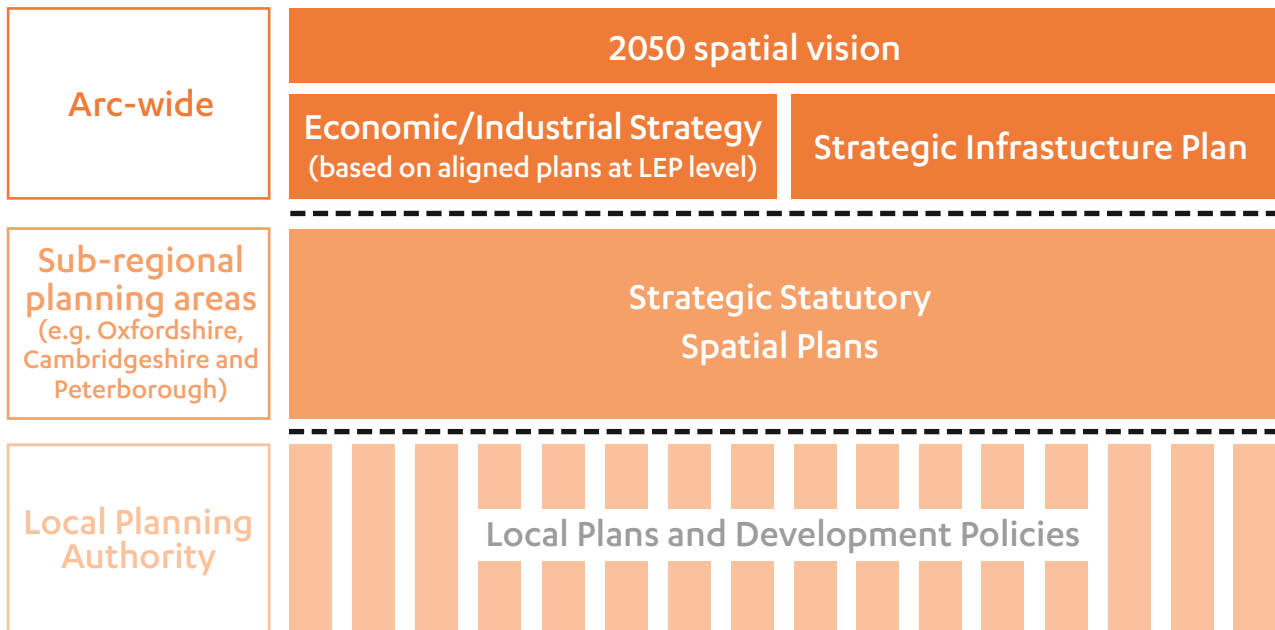
Without new mechanisms for collective decision-making, any plans for the arc will need to be formally agreed by around thirty separate local authorities, each with its own interests and decision-making processes. Working in this way will limit the pace with which any arc-wide plans can be developed and agreed. It will limit the transformational potential of these plans and, in all likelihood, limit the arc's ability to deliver significant additional housing growth.

But strengthening planning and governance structures across the arc does not require the imposition of an overarching, top-down decision-making body. Leadership will be required at different spatial scales. Indeed, the success of any arc-wide planning framework will be defined by the extent to which it can help deliver transformational growth across the arc driven through a combination of bottom-up collaboration and robust dialogue with Government.

## **A new arc-wide planning framework**

The starting point for any effective arc-wide planning framework must be the articulation of a clear spatial vision for the arc up to 2050. This vision should provide a mapped expression of the arc's long-term economic, spatial, physical and social development, reflecting major economic trends, and the aspirations and character of different (and new) cities, towns and villages. The vision should identify strategic locations for growth and investment in the short, medium and long-term, with a high-level articulation of enabling infrastructure requirements. It should set out the potential scale and distribution of population growth, commercial and residential development, across the arc to 2050. It should help build the identity of the arc – within the UK and with potential investors across the globe – giving a strong sense of its future direction and economic potential.

**Figure 12: an arc-wide strategic planning framework**



Crucially, the vision should be jointly owned by local stakeholders and by Government. It should be a material consideration in the development of plans at the sub-regional and local level (see below). It should be developed through the consideration of long-term growth scenarios, with input from local political leaders, government departments, business groups, potential investors, developers, infrastructure providers and independent experts. It should be articulated in terms that can be readily understood by local communities – not just by those involved professionally in planning and infrastructure.

Translating this arc-wide vision into a set of deliverable strategies and plans will require local authorities, LEPs and other key stakeholders to work together, and with Government, to:

- **develop consistent and aligned economic plans across LEP areas which, taken together, provide an economic/industrial strategy for the arc, supporting the UK-wide industrial strategy** – Local Enterprise Partnerships provide the natural lead for this work and are already beginning to align and integrate their Strategic Economic Plans to reflect arc-wide opportunities. This work must go further still – distilling a set of strategic arc-wide investment priorities as a basis for LEPs across the arc to submit joint bids for future funding;
- **develop an arc-wide plan for strategic infrastructure** – this should build on the momentum that has gathered behind the work of the Strategic Transport Forum operating as part of the England’s Economic Heartland Strategic Alliance. Through this forum, the arc’s transport authorities are already working to develop an overarching transport strategy – ensuring that communities across the arc can benefit from investment in East West Rail, the Expressway and the major road network. This work will, however, need to be extended or augmented to include digital infrastructure, utilities and strategic flood risk. Local authorities will need to engage positively with water, gas and electricity companies, digital providers and the Environment Agency, if they are to co-produce a robust arc-wide plan for strategic infrastructure. Similar positive engagement will be required from key Government agencies, not least Network Rail and Highways England.

The priority investments identified through the development of an arc-wide infrastructure plan and the alignment of economic plans will be key inputs into the development of a long-term strategic infrastructure pipeline to be agreed with Government under recommendation 4.

## Strategic planning for the arc's sub-regions

The most effective way to translate any arc-wide vision into policies and plans that guide the development of cities, towns and villages is through the preparation of statutory spatial plans. The planning system provides the single most powerful mechanism for translating places' aspirations for economic growth, residential development, environmental protection and enabling social and physical infrastructure into practical, place-based development policies. As part of any deal, local authorities must agree to have regard to the arc-wide spatial vision in developing statutory spatial plans.

But any vision for the arc risks being lost if its practical expression requires up to thirty separate local plans: each articulated at the district level and each focused on allocating land to meet specific local housing and employment needs. District level planning also risks embedding what many stakeholders have described as a disconnect between land use planning and infrastructure planning. It risks distributing development in a way that tackles the need for homes and jobs within administrative geographies separately, rather than looking across these areas and focusing growth in locations which exploit capacity on new and existing infrastructure links.

The alternative is to develop plans at the 'larger than local' level, developing a common planning approach, and joining up transport and land-use planning in defined, sub-regional, planning areas (e.g. Oxfordshire, Cambridgeshire and Peterborough). The development of statutory strategic spatial plans provides a vehicle through which local authorities can achieve this through bottom-up collaboration. An approach to collective planning is being advanced by Greater Manchester local authorities, working through the combined authority to develop the Greater Manchester Spatial Development Framework. Similar approaches are being taken forward in other areas where devolution deals have been agreed.

The purpose of these statutory strategic spatial plans is to define – in one place – the plans and policies which shape how each sub-region should develop over the next two decades. This will involve identifying the quantum and distribution of new commercial and housing development that will come forward across the sub-region, the enabling infrastructure required to support this development (e.g. transport, utilities, digital communications, flood defences), and identifying and protecting key environmental and cultural assets. Viewed in this way, the use of statutory strategic spatial plans has the potential to integrate many of the functions currently performed by local plans and local transport plans. They should also give spatial expression to the area's economic investment priorities, and policy objectives regarding skills development, inward investment and the growth of key business sectors.

It is vital that any strategic spatial plans be placed on a statutory footing. It is likely that individual district, borough and city councils will continue to prepare their own local plans and policies and, without statutory status, there can be no formal requirement for these local plans to conform with the wider spatial plan. If strategic spatial plans were developed on a non-statutory basis, it is conceivable that councils could co-operate through a collective planning process, fail to reach agreement, and prepare divergent local plans. There is no reason to suppose that the Planning Inspectorate would consider the authorities involved to have failed in their duty-to-co-operate. In agreeing to develop strategic statutory spatial plans, local authorities will, in effect, be committing to reach agreement on planning issues rather than simply to co-operate.

The development of statutory strategic spatial plans will require input and engagement from Network Rail, Highways England, providers of utilities and digital infrastructure, from business groups, developers and other institutions with a long-term stake in the area. Given the importance of enabling infrastructure in realising development, the Commission would welcome utilities providers being given a clear and influential role in the development of these plans.

## Defining the right planning areas

The Cambridge-Milton Keynes-Oxford arc is best understood as a series of overlapping economies, labour markets and housing markets – as an alignment of successful yet distinct towns and cities. Any robust planning framework for the arc must reflect this – focusing statutory planning activity on a series of sub-regional areas to reflect the arc’s polycentric geography.

But the definition of ‘sub-regional planning areas’ is far from straightforward. Wherever possible, these areas should be defined by stakeholders in the arc. They should be based on consensus and shaped to reflect existing administrative geographies and pre-existing collaborations. On this basis, there is a clear case for focusing strategic spatial planning on:

- **Oxfordshire:** local authorities across the county work together over this area through the Oxfordshire Growth Board. The county is also coterminous with the Oxfordshire LEP. The sub-region could be redefined at some future point to include Swindon, but this should be subject to the agreement of all local partners; and
- **Cambridgeshire and Peterborough:** the area covered by the new Mayoral Combined Authority, the Devolution Deal and broadly aligned with the area covered by the Greater Cambridgeshire and Greater Peterborough LEP.

The definition of sub-regional planning areas in the central section of the arc is more difficult. The area is substantially larger in size and in population than either Oxfordshire or Cambridgeshire and Peterborough. It is also more complex, including Luton, Bedford, Milton Keynes, Northampton and Aylesbury. It covers two overlapping LEPs – South East Midlands LEP and Bucks Thames Valley LEP.

Local partners are already engaged in debate on the definition of this sub-region. While there is widespread support for the view that the area should operate as a single geography, competing voices have made clear their preference that the area operates as two, or even three distinct sub-regions.

While it is necessary that this issue be resolved, it is vital that local disagreements about the scope and definition of strategic planning areas are not allowed to undermine the potential for growth across the arc or the realisation of economic benefits in the national interest. Government should work with local stakeholders with a view to brokering agreement within the next six months. Where agreement cannot be reached, the Secretary of State should define these sub-regional planning areas having considered which will best enable a step change in growth and development across the arc. Where necessary, they should also consider direct intervention by Government in the preparation of strategic statutory spatial plans.

Strategic statutory spatial plans will set out the plans and policies to guide development, but to ensure they can act as effective drivers of delivery, each should be supported by:

- an investment strategy that makes clear how partners across the sub-region propose to fund (and potentially ‘forward fund’) key enabling infrastructure. As a minimum, an effective investment plan would need to consider:
  - i. strategies through which local authorities and LEPs might pool resources, use s106, CIL or city/county-regional CIL revenues, and align their capital investment programmes – especially where key infrastructure crosses administrative boundaries;
  - ii. strategies for leveraging investment from private institutional investors to forward fund infrastructure – including strategies for pooling risk; and
  - iii. delivery models which may be employed in specific development locations, or on specific transport schemes, to manage demand (e.g. congestion charging in major centres) or to realise development.
- a phased delivery plan, defining the progress that stakeholders expect to secure in a series of five-year time horizons, and a timeline for reviewing the spatial plan itself. A robust delivery plan might include the delivery of major residential and commercial developments and key enabling infrastructure. This plan should also set out annual reporting arrangements, detailing how local partners would report on progress towards realising the arc’s spatial vision.

The development of any strategic statutory spatial plan will, quite rightly, need to follow a robust, evidence based process and be shaped by the requirements of a supporting appraisal framework. Such a framework will be important in helping decision-makers and local communities to understand the impacts of different development options. Supporting analysis might include strategic economic assessments, sustainability appraisals, health impact assessments and equality impact assessments. Undertaking such analyses and appraisals will also give individual planning authorities confidence to shape their local plans to conform with strategic spatial plans and delivery plan.

If designed and scoped in this way, the development of strategic spatial plans, in support of a clear arc-wide vision, should provide an effective mechanism through which neighbouring local authorities can reach agreement on the distribution of development across administrative boundaries within their own sub-regions. This could better enable patterns of development that reflect demand in the ‘real economy’. It should also provide a mechanism to support growth discussions in towns and cities where the continued expansion of urban areas would require growth across administrative boundaries.

There are wider benefits of this approach too. The definition of a 2050 spatial vision, and strategic statutory plans, will provide greater certainty to a range of stakeholders on the direction of development within the arc. This has the potential to:

- signal to the development industry the arc’s long-term commitment to growth at scale – enabling long-term investment in delivery capacity and encouraging investment in the development and scalability of new modes of construction;
- outline a clear direction of travel to providers of telecommunications and utilities infrastructure. By giving greater certainty on the long-term development of the arc, the plan would provide a platform for better strategic engagement;

- provide a basis for local partners to engage collectively with institutional investors, on how private capital can fund enabling infrastructure, with returns linked to long-term development; and
- give confidence to global businesses that local authorities, Local Enterprise Partnerships and the UK Government has a long-term plan to maximise the potential of this arc and tackle current obstacles to growth.

With the right deals in place between local and national government, these benefits can be secured without the top-down imposition of regional planning structures or substantive change to the national planning policy framework.

**Recommendation 7: Government should work with local authorities across the arc to secure agreement that:**

- **representatives of each of the arc's defined sub-regions will work together at the arc-wide level, and with Government, to develop an ambitious spatial vision covering the whole arc area up to 2050, identifying locations for growth and investment and enabling infrastructure requirements. This work should be completed no later than summer 2019. This vision should be supported by a set of arc-wide economic plans and an arc-wide plan for strategic infrastructure; and**
- **local planning and transport authorities will work together, in defined sub-regions, to prepare statutory strategic spatial plans and submit these for inspection by April 2020. These should be underpinned by a clear investment strategy and a phased delivery plan, and shaped by the requirements of a robust integrated appraisal framework. Local Enterprise Partnerships and utilities providers should be included in the development of these strategic spatial plans.**

Local authorities and LEPs should work collectively and seek to agree a definition for sub-regional planning areas by April 2018. If agreement cannot be reached by this date, the Secretary of State for Communities and Local Government should define the sub-regions based on consideration of the best areas for joined up economic, transport and land-use planning.

## Leadership and governance to support strategic planning

Any change to governance structures within the arc must be considered carefully. Wholly new structures will take time to define, to implement, and to bed in, before they can function effectively and optimise their performance. It is important that debate on new governance structures does not divert partners' attention from work to develop a powerful arc-wide vision and supporting plans. It is equally important that partners avoid changes to governance structures that would introduce delay, disruption and unnecessary cost.

In the short-term, partners within the arc should seek to:

- strengthen existing structures for collaborative governance and collective decision-making; and
- develop any new structures and mechanisms on the basis of consensus, and as part of a wider deal with Government.



It will also be important to ensure that any new governance structures allow local areas to take on new roles and functions as collective working practices reach a point of maturity. This should help avoid disruptive change in the future, and provide a stable platform for local leaders to take collective decisions on the development of the arc.

In Cambridgeshire and Peterborough, the Mayoral Combined Authority (MCA) provides a powerful platform for robust collective decision-making across district, city and county-level authorities. The MCA brings together the directly elected Mayor and a cabinet composed of the leaders of all local authorities in the Cambridgeshire and Peterborough area. The MCA provides an enduring, statutory mechanism for collective decision-making which will operate even as the leadership and policy priorities of its constituent members change over time. The Devolution Deal agreed between Government and local authorities in 2016 makes clear that the MCA is already responsible for the development of a non-statutory spatial framework – the adoption of which requires the unanimous support of the Mayor’s cabinet. The challenge in Cambridgeshire and Peterborough, therefore, will be to develop a statutory spatial framework under the leadership of the existing MCA.

In Oxfordshire, the district, city and county councils are already working together through the Oxfordshire Growth Board (OGB). The OGB is a locally constituted joint committee of the six Oxfordshire local authorities that brings together members of each council’s Executive (typically the council Leader) and other, non-voting, members from Oxfordshire LEP, the Homes and Communities Agency and from Oxford’s universities. Although the OGB aims to operate on the basis of consensus, it has established protocols to support and enable qualified majority voting.<sup>\*</sup> The Growth Board’s principal function is to facilitate collaboration between local authorities on economic development, strategic planning and growth issues, and to deliver cross-boundary programmes of work. However, individual authorities retain the capability to exercise all executive functions.

Local authorities across the central area of the arc are currently developing proposals for their own growth boards – modelled on the Oxfordshire example. Substantial progress on the development and definition of the concept has been made across summer 2017. The proposed model would see the growth board established as a formal joint committee with a specified local authority acting as the ‘accountable body’ for all financial, legal and governance issues. In Buckinghamshire, the County Council has expressed its commitment to the development of a distinct Buckinghamshire Growth Board, in partnership with the Buckinghamshire Thames Valley LEP. The stated purpose of this would be to drive forward delivery of the LEP’s recently published Buckinghamshire Growth Strategy.

Building on the momentum behind the development of growth board arrangements in Oxfordshire and across the central area of the arc is a sensible, pragmatic move. But it is unlikely that these growth boards, as currently constituted, will be sufficient to enable the delivery of ambitious statutory plans at the strategic level. As things stand the OGB, and the emerging growth board(s) in the central area of the arc, are not empowered to take decisions on such plans. They may provide a useful forum for discussion, but individual local authorities must still agree statutory plans through their own separate decision-making processes. Crucially, working through growth boards cannot bind partners into the development and delivery of such plans – individual local authorities would be free to withdraw from any joint plan-making process when local disagreements emerge and compromise is required. As respondents to the Commission’s call for evidence noted when describing the work of growth

<sup>\*</sup> For example, if voting on a proposition which would affect local transport infrastructure, the local transport authority (Oxfordshire County Council) would need to vote with the majority for the proposition to be agreed.

boards more generally, ‘it has been too easy for local authorities who disagree with the outcomes to disengage from the process and to seek to revert to individually-led more inward looking decision-making.’

Tackling this issue means enhancing growth board arrangements to ‘lock in’ partners to collective plan-making and to collective decision-making on strategic planning issues. Rather than relying on informal local agreements, local partners should reconstitute their growth boards as ‘planning joint committees’ under Section 29 of the Planning and Compulsory Purchase Act 2004. This will require the agreement of constituent authorities and for the Secretary of State to make an Order constituting the joint committee as the planning authority for the area with specific responsibilities. Constituted in this way, these ‘enhanced growth boards’ would bind their members into the collective development, adoption and delivery of a statutory plan. Having made the commitment to work collectively, individual member authorities will be unable to disengage without making a request to the Secretary of State, and without further secondary legislation. There is no reason why growth boards, constituted as planning joint committees, could not continue to perform their wider functions. Equally, with planning joint committees in place, local partners may wish to consider measures to build on their individual operational capacity and share specialist resources through, for example, joint planning units.

The development of ‘enhanced growth boards’ will require local authorities to make a long-term commitment to collaboration on strategic spatial planning. It is important that, in designing ‘enhanced growth boards’, local partners consider the long-term potential to develop these into statutory combined authorities, and mayoral combined authorities. This is unlikely to be a step that local partners opt to take in the short-term but, as collaborative working practices become the norm, and as levels of trust and understanding build between local authorities, combined authorities and directly elected mayors could provide a robust platform for city and county-regional governance.

The case for developing these structures is not about undermining local sovereignty or streamlining governance. It is not about overriding the views of individual districts, boroughs or cities by locating decision-making with a wider statutory body. Powerful safeguards are built into combined authorities’ operating practices to prevent this happening (e.g. the agreement of Greater Manchester’s Spatial Development Framework requires the unanimous support of all combined authority members). Rather, the case for the development of combined authority and mayoral structures rests on:

- **their permanence and durability.** Combined authorities provide an enduring vehicle for collective decision-making. While planning joint committees serve to bind local authorities into the development and delivery of a statutory plan, combined authorities bind local partners into a permanent structure capable of performing a wider range of public service functions and providing a platform for governance at the city-regional or county-regional level. Unlike planning joint committees which can be dissolved by the Secretary of State at the request of single member authority, the dissolution of combined authorities requires the consent of a majority of its members – there is even less scope for partners to quit when the going gets tough. This level of permanence and durability can provide confidence to developers and investors. They can have confidence in the arc’s governance structures – and the plans developed through these structures – knowing that they are not contingent on current relationships between local authority partners.
- **precedent for establishing combined authority and mayoral structures in other priority growth locations.** As a national growth priority, it is important that towns and cities across the Cambridge-Milton Keynes-Oxford arc are given the same advantages

as Greater Manchester, cities involved in the Northern Powerhouse initiative, and the towns and cities of the Midlands Engine. There is a risk that without ‘stronger reformed governance structures’ of the form that have been established in cities such as Manchester and Birmingham, towns and cities across the arc could miss out future opportunities and support.\*

In the longer-term, combined authorities in Oxfordshire and in areas across the central section of the arc could provide a strategic platform for wider city-regional governance, performing the full range of functions necessary to support the economic success of the arc’s fast growing cities. This might include responsibilities for transport operations, skills development and support for innovation and key business sectors. A combined authority, with or without mayoral leadership could more effectively tackle this wider set of issues than a planning joint committee, the powers of which would be specified – and potentially constrained – by a series of separate local authorities.

The principal benefits of combined authorities and directly-elected mayors can be secured without new structures becoming cumbersome, and without substantial impact on constituent authorities. Rather than take on a wide range of public service functions, new mayors and combined authorities could initially be established with a more limited scope, taking on functions around transport and economic development in addition to those required to deliver strategic statutory spatial plans. In many cases these functions could be held concurrently with existing local authorities.

The benefits of new mayors and/or combined authorities can also be secured without the need for substantial new bureaucracy or costly new management structures. Viewed as a forum for collective decision-making, rather than as an organisation with delivery responsibilities, the resources required to support the work of a new combined authority need not be substantially greater than those required to effectively operate an ‘enhanced growth board/ planning joint committee. While new combined authorities would need to fill a small number of statutory roles – e.g. s151 officer, Monitoring Officer – these roles could be played by designated officers in existing local authorities. The time and cost required to support the functions of a Combined Authority need not be substantially different to those incurred by a council acting as ‘accountable body’ for today’s growth boards, or supporting the work of a planning joint committee.

## Leadership and governance at the arc level

While leadership and supporting governance will be required at the arc-wide level, this cannot be imposed from the top-down. The imposition of cumbersome new structures risks diverting time and energy from work to secure a step change in growth and development across the arc. Arc-wide governance arrangements must work with the grain of extant collaborations, building upon enhanced growth boards and combined authorities, working with partners on those issues that cannot be adequately addressed at a more local level. This must include the articulation of a arc-wide spatial vision, the alignment of economic plans in support of the UK’s industrial strategy, and the development of a strategic infrastructure plan.

\* In April 2016 the then Communities Secretary wrote to Local Enterprise Partnerships across England outlining the process for submitting bids to the third round of the Local Growth Fund, and the terms under which government would evaluate bids. This letter made explicit that bids from areas with ‘stronger, reformed governance structures’ would have an advantage. While the focus of government policy may have shifted, there is a risk that a less ambitious commitment to collective governance could be interpreted as reason to prioritise investment in other growth areas.

It is encouraging that bottom-up collaborations between groups of local authorities and LEPs are already working to tackle key arc-wide issues. These include the East West Rail Consortium, the Fast Growth Cities group and the England's Economic Heartland Strategic Alliance (EEHSA).

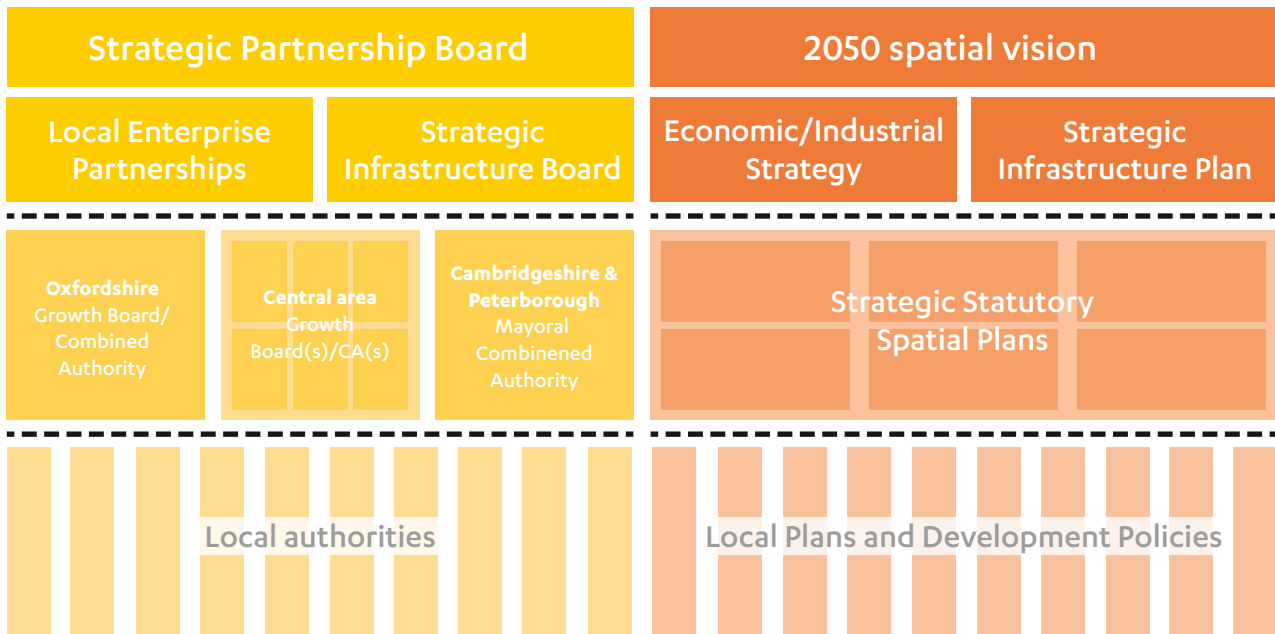
Local political leaders have successfully built the profile of EEHSA and, in particular, its Transport Forum, gaining recognition at national level, and securing buy-in from LEPs and transport authorities across the arc. The Forum has, since the publication of the Commission's interim report, received financial backing from the Department for Transport to advance an ambitious programme of work, including the development of an overarching transport strategy and work to identify and define a major road network across the arc. It is important that local and national government can capitalise on the hard work done to establish the Strategic Transport Forum, and on the momentum that has built behind its current work programme – this transport strategy should, therefore, form a key component of a Strategic Infrastructure Plan for the arc.

EEHSA partners are also developing proposals that could ultimately see the Transport Forum evolve into a Subnational Transport Body (STB). Proposals could be with the Department for Transport as early as 2019. Although it is encouraging that EEHSA partners have been proactive in engaging with LEPs and local planning authorities through this process, the development of a STB will not, on its own, deliver a model for arc-wide governance that is sufficient to deliver a joined-up spatial vision for the arc. The enabling legislation makes clear than membership of any STB will be restricted to local transport authorities (county councils, unitary councils and combined authorities).

Securing progress will require partners to go further, developing an arc-wide 'strategic partnership board' with membership drawn from sub-regional growth boards and combined authorities (including all types of local authority and LEPs). This board would provide a focal point for arc-wide engagement with Government, infrastructure providers, business groups and potential investors. It would also lead the development and delivery of the arc's 2050 spatial vision, and supported by:

- Local Enterprise Partnerships – working collectively to shape the arc's economic plans in support of the vision and the UK's industrial strategy; and
- a new strategic infrastructure board – building on the work of the Transport Forum to develop arc-wide strategic infrastructure plans covering transport, digital, utilities and flood management.

**Figure 13: arc-wide strategic planning framework and enabling governance**



\* The number and definition of sub-regional planning areas in the central section of the arc is currently a subject for debate amongst local partners. The Commission has argued that, in the first instance, local authorities and LEPs should work collectively and seek to agree a definition by April 2018 (see recommendation 7 above).

It is vital that Government takes an active role in this arc-wide strategic partnership board. Deep and detailed engagement with the strategic partnership board will be required from Highways England, Network Rail, the Homes and Communities Agency and a range of Whitehall departments, but a central point of co-ordination – potentially in the Cities and Local Growth Unit – will be needed to co-ordinate cross-Government engagement.

The success of this strategic partnership board will depend on partners’ appetite for ever deeper collaboration and their preparedness to compromise. Making this board work in practice will require a skilled and committed chair who can sustain the confidence of all stakeholders – including those who do not sit on the strategic board itself. It is far from obvious that a chair appointed from within the arc could sustain the confidence of all local stakeholders – particularly in the early stages. It is also highly likely that a chair appointed from within Government would fail to sustain confidence amongst these stakeholders.

To address this, the board should be chaired by a credible and respected independent party – appointed by Government and agreed by local partners following an open and competitive process. The chair should command respect at the highest level of Government, have the skill to convene disparate partners and achieve meaningful progress through stimulated consensus. He/she should be able to exert challenge locally and nationally without undermining relationships and without the suggestion that this challenge reflects the vested interests of any individual partner.

**Recommendation 8: Government should work with local authorities to put in place robust sub-regional and arc-wide governance arrangements. This will include:**

- reconstituting the Oxfordshire Growth Board as a planning joint committee by April 2018, ensuring it is empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan;
- establishing growth board arrangements for defined planning areas in the central section of the arc by April 2018, ensuring these are constituted as planning joint committees and empowered to take decisions on the development, adoption and delivery of a strategic statutory spatial plan(s);
- supporting the continued development of new and existing growth boards, with a view to their being constituted as statutory combined authorities, or mayoral combined authorities, as soon as possible and no later than 2022; and
- working with representatives of the Cambridgeshire and Peterborough Combined Authority, Oxfordshire Growth Board and other growth board(s) across the arc to establish an arc-wide 'Strategic Partnership Board' by Summer 2018. This should include recruiting an independent chair to convene the board and provide a clear link to Government, and agreeing this appointment with local partners.



# PART FIVE: NEXT STEPS

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**The success of the Cambridge-Milton Keynes-Oxford arc matters to communities across the UK. But its future depends as much on the decisions and actions of locally elected leaders as it does on central government. Local leaders must commit to work collectively, with Government, and in the national interest to realise the economic potential of the arc. Without this commitment, the arc risks being left behind its international competitors.**

The National Infrastructure Commission's work on this study has generated a sense of momentum within the Cambridge-Milton Keynes-Oxford arc. The Commission's engagement with local authorities, LEPs, business groups, infrastructure providers and higher education institutions has been a catalyst to action as well as an exercise in evidence gathering.

Similarly, central government departments have worked collectively to establish cross-Whitehall arrangements to consider the CaMkOx Arc and respond to the Commission's recommendations.

Where momentum has built, it must not be lost. It will be for Ministers, with the support of their officials, to work with stakeholders across the arc, equipping local partners to secure a step change in development and intervening directly where national action or investment is required. The Commission is, however, keen to play an ongoing role in supporting the success of the arc.

The recommendations set out in this report – whether they relate to the delivery of infrastructure, the designation of new settlements or the development of planning and governance arrangements – set out a deliberately ambitious timetable for action across the arc. Meeting this timetable will require Government, local authorities and their local partners to work together and at pace – recognising the urgency of the arc's housing crisis and the constraints this is already placing on economic growth and competitiveness.

To help maintain pace and focus, local partners should publish regular updates on the progress they have secured in delivering transformational growth across the arc. These reports should provide a public record of the actions taken by both local partners and national agencies to deliver the recommendations of this report and, more broadly:

- accelerate the delivery of growth-enabling infrastructure;
- deliver well connected, sensitively designed new communities; and
- realise a step change in housing development around the arc's existing towns and cities.

As part of its wider role in monitoring progress in the delivery of infrastructure projects and programmes, the Commission will assess these reports and, where it can add value, make independent recommendations to strengthen delivery and secure progress.



In line with its objectives, the Commission will continue to monitor Government's progress against all of the recommendations in this report and will report annually on these.

**Recommendation 9: Government should work with local authorities and any new delivery bodies from across the arc to prepare and publish a six-monthly update, with the first being published in April 2018, enabling the Commission to assess the progress achieved in delivering the recommendations set out in this report.**

## Endnotes

- <sup>1</sup> QS University rankings 2016
- <sup>2</sup> Centre for Cities (2016), Cities Outlook 2016
- <sup>3</sup> Based on patent applications (per 100,000 population) and published by postcode, 2015, PATSTAT; Intellectual Property Office – data accessed through Centre for Cities.
- <sup>4</sup> Centre for Cities (2016), Competing with the Continent.
- <sup>5</sup> Centre for Cities (2016), Competing with the Continent
- <sup>6</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>7</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>8</sup> Centre for Cities (2016) Cities Outlook.
- <sup>9</sup> Centre for Cities (2016), Competing with the Continent
- <sup>10</sup> Percentage of population aged 16-64 qualified to NVQ Level 4+. Annual Population Survey. National Statistics.
- <sup>11</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>12</sup> ONS, Mid-year population estimates 2016
- <sup>13</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>14</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>15</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>16</sup> Centre for Cities Data Tool (2015), Based on ONS, Regionalised estimates of UK service exports; HMRC, Regional Trade Statistics; ONS, Business Register of Employment Survey, accessed on 18th August 2017.
- <sup>17</sup> Centre for Cities, (2016) 10 years of tax: how cities contribute to the national exchequer.
- <sup>18</sup> Savills, (2016) The Property Market within the Cambridge – Milton Keynes – Oxford Corridor – Final report p23
- <sup>19</sup> ARUP, (2017) Cambridge- Milton Keynes – Oxford Corridor: Transport Workstream pp.19-20
- <sup>20</sup> Cambridge Econometrics and SQW (2016), Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor - Final Report for the National Infrastructure Commission.
- <sup>21</sup> Savills, (2016) The Property Market within the Cambridge-Milton Keynes-Oxford Corridor, final report.
- <sup>22</sup> Savills, (2016) The Property Market within the Cambridge-Milton Keynes-Oxford Corridor, final report.
- <sup>23</sup> DCLG, (2017) Live Table 256: Housebuilding: permanent dwellings started and completed by tenure 2016-17
- <sup>24</sup> Savills, (2016) The Property Market within the Cambridge-Milton Keynes-Oxford Corridor, final report.
- <sup>25</sup> DfT Expressway Stage 3 report
- <sup>26</sup> 5th Studio (2017) Cambridge, Milton Keynes and Oxford Future Planning Options, Final Report.
- <sup>27</sup> AECOM, (2017), Report for the National Infrastructure Commission: Cambridge – Milton Keynes – Oxford corridor, p 65.
- <sup>28</sup> AECOM, (2017), Report for the National Infrastructure Commission: Cambridge – Milton Keynes – Oxford corridor, p 65.
- <sup>29</sup> Metrodynamics, (2016) Report for the National Infrastructure Commission: Cambridge – Milton Keynes – Oxford corridor
- <sup>30</sup> See case study on Milton Keynes in AECOM, (2017), Report for the National Infrastructure Commission: Cambridge – Milton Keynes – Oxford corridor, pp 196-199.
- <sup>31</sup> Karimi K, Vaughan L, 2014, "An evidence-based approach to designing new cities: the English New Towns revisited", Chapter 22 in Explorations in urban design: an urban design research primer Ed M Carmona (Ashgate, Surrey, UK ; Burlington, VT) pp 261-276. An evidence-based approach to designing new cities: The English New Towns revisited. Available from: [https://www.researchgate.net/publication/292470641\\_An\\_evidencebased\\_approach\\_to\\_designing\\_new\\_cities\\_The\\_English\\_New\\_Towns\\_revisited](https://www.researchgate.net/publication/292470641_An_evidencebased_approach_to_designing_new_cities_The_English_New_Towns_revisited) [accessed Oct 27 2017].
- <sup>32</sup> Pastore, F. and I. Pozzo (2013) Concordia Discors: Understanding Conflict and Integration Outcomes of Intergroup Relations and Integration Policies in Selected Quarters of Five European Cities – Synthesis report. Turin: FIERI. Foresight Mental Capital and Wellbeing Project (2008) Final Project report. The Government Office for Science, London. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/292450/mental-capital-wellbeing-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292450/mental-capital-wellbeing-report.pdf) [last accessed: 12/09/2017]
- Halpern, D. (1995) Mental Health and the Built Environment: More than bricks and mortar? Taylor and Francis. Law, S., Penn, A., Karimi, K., Shen, Y (2017) THE ECONOMIC VALUE OF SPATIAL NETWORK ACCESSIBILITY FOR UK CITIES: A comparative analysis using the hedonic price approach. Proceedings of the 11th Space Syntax Symposium. Available from: <http://www.spacesyntax.com/wp-content/uploads/2017/09/The-Economic-Value-of-Spatial-Network-Accessibility-for-UK-Cities.pdf> [last accessed: 10/11/2017]
- Harvey, A. (2017) Building Homes, Growing Communities. London: New Local Government Network. Available from: <http://www.nlgn.org.uk/public/wp-content/uploads/Building-Homes-Growing-Communities-1.pdf> [last accessed: 31/08/2017]
- <sup>33</sup> Harvey, A. (2017) Building Homes, Growing Communities. London: New Local Government Network. Available from: <http://www.nlgn.org.uk/public/wp-content/uploads/Building-Homes-Growing-Communities-1.pdf> [last accessed: 31/08/2017]
- 5th Studio (2017) Cambridge, Milton Keynes and Oxford Future Planning Options, Final Report. Gilligan, A. (2017) [Title of report]
- <sup>34</sup> Milton Keynes Council (forthcoming) First/Last Mile Transport Strategy
- <sup>35</sup> Harvey, A. (2017) Building Homes, Growing Communities. London: New Local Government Network. Available from: <http://www.nlgn.org.uk/public/wp-content/uploads/Building-Homes-Growing-Communities-1.pdf> [last accessed: 31/08/2017]
- Insall, P. (2014) Active Travel in the City of the Future. Sustrans. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/367499/future-cities-active-travel.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/367499/future-cities-active-travel.pdf) [last accessed: 31/08/2017]
- Williams, K. (2014) Urban form and infrastructure: a morphological review. London: Government Office for Science. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/324161/14-808-urban-form-and-infrastructure-1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/324161/14-808-urban-form-and-infrastructure-1.pdf) [last accessed: 31/08/2017]
- <sup>36</sup> Harvey, A. (2017) Building Homes, Growing Communities. London: New Local Government Network. Available from: <http://www.nlgn.org.uk/public/wp-content/uploads/Building-Homes-Growing-Communities-1.pdf> [last accessed: 31/08/2017]

- <sup>37</sup> 5th Studio (2017) Cambridge, Milton Keynes and Oxford Future Planning Options, Final Report.
- <sup>38</sup> 5th Studio (2017) Cambridge, Milton Keynes and Oxford Future Planning Options, Final Report.  
Williams, K. (2014) Urban form and infrastructure: a morphological review. London: Government Office for Science. Available from: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/324161/14-808-urban-form-and-infrastructure-1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/324161/14-808-urban-form-and-infrastructure-1.pdf) [last accessed: 31/08/2017]
- <sup>39</sup> Mae (2017) A polycentric region in a natural environment. Submission to the NIC's Cambridge to Oxford Connection placemaking competition.
- <sup>40</sup> Barton Willmore (2017) The CaMkOx Innovation Hive. Submission to the NIC's Cambridge to Oxford Connection placemaking competition
- <sup>40</sup> HS2 Design Panel, Remit and Programme [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/571167/Design\\_Panel\\_remit.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571167/Design_Panel_remit.pdf)
- <sup>41</sup> TCPA (2015) New towns and garden cities: lessons for tomorrow. Stage 2: Lessons for Delivering a New Generation of Garden Cities. Available from: <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=62a09e12-6a24-4de3-973f-f4062e561e0a> [last accessed: 27/10/2017]
- <sup>42</sup> <http://www.theparkstrust.com/>
- <sup>43</sup> <http://www.letchworth.com/heritage-foundation/>
- <sup>44</sup> <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=62a09e12-6a24-4de3-973f-f4062e561e0a>
- <sup>45</sup> 'Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to) ... moving from a net loss of bio-diversity to achieving net gains for nature' [para 9]; 'Minimising impacts on biodiversity and providing net gains in biodiversity where possible' [para 109]; Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three' [para 152]
- <sup>46</sup> CIEEM (2017) Biodiversity Net Gain: Good practice principles for development. Available from: [https://www.cieem.net/data/files/Publications/Biodiversity\\_Net\\_Gain\\_Principles.pdf](https://www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf) [last accessed: 31/08/2017]
- <sup>47</sup> Berkeley Group (2017) 2017 Annual Report. Available from: [https://www.berkeleygroup.co.uk/media/pdf/o/2/Berkeley\\_Annual\\_Report\\_2017.pdf](https://www.berkeleygroup.co.uk/media/pdf/o/2/Berkeley_Annual_Report_2017.pdf) [last accessed: 01/09/2017]
- <sup>48</sup> Barratt Developments (2016) Sustainability Report 2016. Available from: <http://www.barrattdevelopments.co.uk/~media/Files/B/Barratt-Developments/documents/sustainability-report-2016.pdf> [last accessed: 01/09/2017]
- <sup>49</sup> <http://www.b-mkwaterway.org.uk/>
- <sup>50</sup> <https://lichfielddc.gov.uk/Council/Planning/The-local-plan-and-planning-policy/Supplementary-planning-documents/Downloads/Biodiversity-Development/Biodiversity-and-Development-SPD.pdf>
- <sup>51</sup> <http://www.warwickshire.gov.uk/biodiversityoffsetting>
- <sup>52</sup> ARUP, (2016) Cambridge-Milton Keynes-Oxford Corridor – Final Report, p 30.
- <sup>53</sup> See [Cambridge strategy, (2017)] [Northampton Strategy (2017)] [Oxford Strategy (2017)] [Milton Keynes Strategy (2017)]
- <sup>54</sup> Gilligan, A. (2017) [Title of report]
- <sup>55</sup> See HM Government, (2016), Cambridgeshire and Peterborough Devolution Deal p 7.
- <sup>56</sup> Metro-Dynamics (2016) Finance and investment Workstream: National Infrastructure Commission, p 36.
- <sup>57</sup> CIL Review (2016) A New Approach to Developer Contributions.
- <sup>58</sup> CIL Review (2016) A New Approach to Developer Contributions.
- <sup>59</sup> Savills (2015) Beyond the Election: What next for planning?
- <sup>60</sup> AECOM (2017) National Infrastructure Commission: Oxford Milton Keynes Cambridge Corridor
- <sup>61</sup> See AECOM (2017) National Infrastructure Commission: Oxford Milton Keynes Cambridge Corridor; RTPi (2014) Written evidence to the House of Commons Communities and Local Government Committee inquiry on the Operation of the National Planning Policy Framework, submitted by the Royal Town Planning Institute; Sarling J and Blyth R (2013) Delivering Large-Scale Housing, RTPi, London.