

THE OVERHEATED ARC

- A Critical Analysis of the Cambridge-Milton Keynes-Oxford-Newbury "Growth Corridor"

Part 1

A report by Smart Growth UK FEBRUARY 2019

http://www.smartgrowthuk.org

Contents

Executive summary	3
1. Introduction	7
2. What they propose	10
3. The damage it would do	16
4. Transport implications	23
5. The evolution of a bad idea	30
6. An idea founded on sand	54
7. Conclusions	63



"The Brain Belt" [Stella Stafford]

Executive Summary

Introduction The so-called "Brain Belt" has been evolved by a small and unrepresentative clique in Whitehall and beyond, virtually without consultation. There has been little or no consideration of the huge environmental damage it would do or the loss of food production involved. Misleading claims have been made about it having the highest productivity or it being the centre of the knowledge economy yet no-one apparently has asked whether, if the Arc concept is a sound one, there are other places in the UK it could be applied more productively and less damagingly.

What they propose The Arc has grown since its inception from the "blob on a map" proposed by the National Infrastructure Commission to five whole counties plus Peterborough and the ill-defined M4 and M11 corridors.

The NIC grew from a plan to link Oxford and Cambridge by motorway, via the NIC's plans for new settlements and a million sprawl homes, to the Government's plan to turn England's bread and vegetable basket into "a world-leading economic place".

A new motorway from Cambridge to Newbury is at the centre of the plan which also claims the long-hoped-for Oxford-Cambridge railway reopening as its own idea.

The NIC recommended increasing the 235,000 homes the Government judged the area should accommodate for what it said was the area's own needs to one million, part of which would house London overspill. It proposed massive expansion of existing settlements, a new city between Bletchley and Bicester and four other major new greenfield settlements. All are close to radial rail and trunk roads from London, facilitating commuting. The Government is yet to say how many homes it wants to impose on the expanded Arc.

There is continuing imprecision about what other infrastructure such major development would need.

The damage it would do Nowhere during the development of the Arc proposals has there been any consideration of the farmland to be destroyed, nor the food or ecosystem services it provides, and virtually none for the biodiversity under threat. Yet around 270km² would be threatened by the original Arc proposals, more by the Expressway and other new roads and more by the Arc's expansion.

A huge majority of the farmland in the Arc is in the most productive Grades 1-3, while Bedfordshire and Cambridgeshire are dominated by the very scarce and precious Grades 1-2, yet the Government continues to ignore the threat to agricultural production. There are many sites of biodiversity importance in the Arc yet no strategic environmental assessment has been carried out, prompting legal action.

Significant areas of the Arc, especially its expanded form, are under moderate or serious water stress already, including Cambridgeshire, while the Chilterns are the most water-stressed area in England. Significant areas of flood risk also lie within the Arc.

There is yet to be any serious assessment of the cost and challenge involved in providing such rapid development of a rural area with water, waste-water, electricity, gas, telecommunications, drainage, flood control or broadband, despite which the NIC and Treasury were still prepared to endorse the proposals.

Transport implications Despite the existence of dozens of east-west railway lines, only the Oxford-Cambridge route is called "East-West Rail". Much of it never closed, some reopened long ago and much of the rest has been the subject of reopening proposals which long predate the Arc. Only revival of stalled plans to rebuild Bedford-Cambridge is new.

The Bedford-Cambridge reopening would demonstrate that rebuilding long-closed rail links, even when they've been built over, is perfectly possible. Yet there are well over a dozen closed rail alignments within the Arc which could beneficially be reopened if the rhetoric about low-carbon development were genuine. But only a couple of short lengths are currently under consideration.

The Expressway aims to provide a motorway-standard route between Newbury and Cambridge, enabling car-dependent sprawl across a wide area. But it is clear it is also intended as the first stage of an "Outer M25" long sought by the Roads Lobby. It would disgorge huge volumes of traffic at either end, necessitating the next stages of what could link in both directions to the new Lower Thames Crossing - to create a new London orbital motorway.

Like all new roads, it would generate vast amounts of traffic, necessitating the building of other local roads.

The evolution of a bad idea The origins of the Arc lie in the late Sir Peter Hall's plan for a "Golden Doughnut" of major development outside London's green belt and since then ambitious quangos and local authorities have homed in on the area to push an environmentally destructive agenda. But it was a chance conversation between Lord Wolfson and David Cameron that set the Arc ball rolling.

HM Treasury quickly took over and told the NIC to make recommendations to secure "a single, knowledge intensive cluster that competes on the global stage" out of this agricultural area, even though the only thing linking Cambridge and Oxford was that both had ancient universities. The Treasury has continued to use its influence to enforce the idea and approved the NIC recommendations, with additions, in the 2018 Budget.

The Department for Transport and Highways England have also been central to the push for the new Expressway which fulfils its desire to expand the highway network, whatever the damage to environmental sustainability. It has continued to develop the scheme without any reference to local needs or wishes

The rest of Whitehall has also fallen in with the Treasury's instructions for the Arc. The Ministry of Housing, Communities and Local Government (MHCLG), the Department for Business, Energy & Industrial Strategy (DBEIS), LEPs and city and growth deals have all been enlisted to support the proposal. Within Whitehall, the Cities and Local Growth Unit has been prominent in pushing the plan. A lack of openness or consultation have been features throughout.

The National Infrastructure Commission was another public body instructed to come up with a scheme for the Arc and which duly complied. It rehashed the familiar arguments in an *Interim Report* and in *Partnering for Prosperity* which advocated the Expressway and a million new homes. Despite its supposed "independence", it recommended exactly what the Treasury had ordered.

Many of the local authorities in the Arc have also signed up to support it, aware that involvement in such central government projects is the only way to secure more than the starvation level funding Whitehall normally makes available to councils.

More unexpected was the role of the universities in the Arc which employ world experts on sustainable development. Despite this, the NIC attempted to involve most of them but quickly limited its efforts to the ancient universities of Cambridge and Oxford. These, and several of their colleges, quickly became closely involved, plainly thanks in no small part to the potential increase in value of their extensive land holdings in the Arc. Eventually the other universities began to come back on board.

Although there are nine universities in the Arc, it was plainly Oxford and Cambridge which earned the Arc the title of "Brain Belt", applied by those who had graduated from the two. Throughout the process, their alumni in Government, in quangos and in the Civil Service have been absolutely central to the decision making and enthusiasm for the Arc. Although Cambridge and Oxford have little in common apart from having ancient universities, the Arc has attempted to make an artificial construct of development between the two for reasons best understood by their graduates.

An idea founded on sand The NIC was given a narrow remit by the Treasury to develop "a single knowledge-intensive cluster that competes on the global stage". As a result, or perhaps because no-one thought of it, there was never any consideration of whether the idea was a sound one or whether there were other parts of the country that could better meet the Government's objectives.

The Government claimed the Arc is at "the heart of the UK's knowledge economy", but while there are important research facilities and business clusters in small parts of it, the NIC's own advisers showed that the strongest concentrations of the various elements of knowledge-intensive sectors are elsewhere. But ministers have joined in this chorus of praise for the supposed intellectual superiority of the Arc, despite the significant disparagement of the importance of those sectors located elsewhere.

The undoubted excellence of the Universities of Cambridge and Oxford has been central to selling the Arc concept, but their excellence is not unique in the UK. While the two appear consistently near the top of overall Research Excellence Framework rankings, they are by no means consistently always top and, across a range of subjects, they are often outstripped by

universities elsewhere, including in the subjects most relevant to the knowledge economy. Again, the concentration on Oxford and Cambridge effectively downgrades the excellence of all the country's other universities.

Productivity in the Arc has been claimed to be the second highest in the UK after London. Examination of the statistics disproves this, however. The second highest is probably the "Golden Corridor" between London and Swindon, which only just enters the Arc. Parts of the Arc, mainly around Cambridge, Milton Keynes and Oxford, have relatively high productivity but, taken as a whole, the Arc's productivity is not that high.

While parts of the Arc do suffer a shortage of both market and social housing, this is scarcely a unique problem. On the other hand there are other parts of the UK which could accommodate such growth as they do not currently suffer such serious shortages.

The same is true of the Arc's undoubted staff recruitment problems. Once again there are other areas capable of accommodating such growth with better reservoirs of labour.

The arguments about the Arc's alleged transport needs are some of the weakest. The NIC was warned that Cambridge-Milton Keynes-Oxford is not a growth corridor and these, anyway, bring unwanted challenges. Nor, it was told, do the three cities' economies necessarily complement one another. The Arc is a completely synthetic construct with separate labour markets and little demand to commute between them. To create artificial links, the Expressway is being promoted to facilitate new car-dependent sprawl settlements and long-distance freight haulage.

Published work on the Arc leaves the impression most of it is a vast barren desert of no economic importance. Admirers of new settlements hope the Government would introduce land value capture to reduce the embarrassingly vast profits land owners would make, but it shows little inclination to do so. Most of the land in the Arc is, however, ranked in the highest grades of agricultural land and much of that in Bedfordshire and Cambridgeshire in the rare and precious Grades 1 and 2. It also contains big areas of importance to biodiversity.

Conclusions The proposals for the Arc and Expressway have been developed by a small clique in Whitehall without reference to those most affected. The plans are vague, unsustainable, uncosted and hugely damaging to the environment. The area is largely deficient in the infrastructure required and the new motorway would strike a huge blow against decarbonisation of our transport system. Although there are other parts of the UK in which the Arc concept might be beneficially applied without the environmental and social damage, the Government continues to ignore these possibilities and pursues its destructive scheme.

1. Introduction

If part of the UK were officially dubbed a "Brain Belt", you might expect it to be aglow with wise decision making and sustainable development. Sadly, you'd be mistaken.

The Brain Belt goes under a variety of names. It's been the "Oxford-Cambridge Growth Corridor", the "Growth Arc", the "Cambridge-Milton-Keynes-Oxford Belt", "England's Economic Heartland" etc.. Officially now it's the Cambridge-Milton Keynes-Oxford Arc", though it extends far beyond them to places like Peterborough, Newbury, Banbury and Aylesbury and even to Heathrow and Stansted Airports. Opponents have dubbed it "The Blob".



"England's economic heartland"

[Stella Stafford]

For the sake of simplicity in this report, we'll call it the Arc, though its shape bears little relation to one.

Behind these comforting names, however, lie a dangerous set of threats to a crab-shaped swathe of English countryside between the ancient cities of Cambridge and Oxford and far, far beyond for, after briefly threatening to bulge its way towards Bristol, the Brain Belt has now oozed its way southwards to Didcot and Newbury and extends far to the north and south of what is still misleadingly called the "Oxford-Cambridge Corridor".

No-one who understands British public life will need telling that the Brain Belt soubriquet owes its origins to the ancient universities in Cambridge and Oxford and, perhaps, to the spread of international companies that cluster around the two, hoping some of the sparkle will rub off.

Great intellects are actually found beyond the boundaries of Oxford and Cambridge and, although the two universities are undoubtedly home to many fine brains, creation of the Brain Belt shines an uncomfortable light on the way they use the influence they wield in British public life and the vast inheritance of money and land centuries of history have endowed on many of their colleges. While many of their first-class academic minds can no doubt tell you what environmental sustainability entails, the Universities have become embroiled by central government and its quangos in plans for car-dependent sprawl and destruction of the farmland that feeds us on a truly massive scale.

There are three fundamental problems with the Arc project:-

- It has been developed, approved and imposed by a small and unrepresentative clique in Whitehall while local wishes have counted for little or nothing.
- It would be extremely destructive in environmental terms.
- There are far better locations around the United Kingdom within which to achieve its economic objectives, without all the damage.

Even by British standards, the development of the Arc idea has been spectacular by its lack of public engagement. Apart from a restricted consultation by the National Infrastructure Commission in early 2016 before the full destructive ambition of the Arc proposals was generally known, there has been little in the way of consultation apart from stakeholder groups and secret contacts with local authorities and local enterprise partnerships. There hasn't even been a strategic environmental assessment, as required by law, and this has been the subject of attempted litigation. The Campaign to Protect Rural England is also calling¹ for proper public and Parliamentary debate about whether this level of spending – currently estimated at over £5bn – is justified in an area already attractive to employers with a buoyant housing market.

The Government has continued to eschew the possibility of serious public consultation despite the hugely damaging effect the plans would have on the many thousands of people who live between Cambridge and Newbury and their environment. The ministries and quangos involved have been keen to develop a scheme with a minimum of public input, apart from the dissemination of limited information to carefully chosen "stakeholder groups" and discussions, mostly in private, with supportive local authorities and the unelected local enterprise partnerships.

As a result, millions of pounds have already been wasted on the usual slew of consultants to develop a destructive scheme in an entirely unsuitable place. The Government describes the farmland which characterises the vast majority of the Arc as "England's economic heartland", yet it still plans to destroy swathes of it.

Ever since the prime minister and chancellor first decreed it should happen, no-one at all in central Government, it appears, has ever stopped to ask if the Arc is actually a good idea. And no-one has asked the other vital question: if the concept has merit, are there more suitable places where it could be implemented beneficially without all the damage?

For the nation's actual economic heartlands lie elsewhere. Many of them are both crying out for the public investment proposed and actually able to deliver the economic benefits claimed, yet they struggle with a tiny fraction of the public investment. In the second part of this report – to follow - we will identify a number of them that fully meet the selective criteria which led to the Arc project, but which also meet four important sustainability criteria: plenty of brownfield land, no acute housing shortage, good public transport and a genuine need for economic regeneration. Indeed, if some of the Arc's narrow criteria were set aside, quite a large number of alternative arcs could be identified. Meanwhile billions of pounds of public investment which are desperately needed elsewhere are earmarked for the Arc.

We believe, however, there is a better way to develop the homes and the transport systems the country needs. The Arc proposals are at odds with the Smart Growth approach and seriously unsustainable:-

- The Arc proposal is based around a new three billion pound, 150km motorway which would generate huge volumes of car and goods vehicle traffic, rather than the public transport (rail-based where possible), walking and cycling that should underpin any sustainable major development.
- There is little brownfield land within the Arc so most of the development would have to take place on highly productive farmland and/or land important for natural capital.
- Most of the Arc lacks sufficient housing and infrastructure even to support current populations, let alone existing growth plans, so it would be one of the most costly and destructive places in the country for major development.
- The economy in major parts of the Arc is already seriously overheated and it lacks either the need or the capacity for major economic development.
- Many other parts of the UK are crying out for such major investment and development and have advanced knowledge economies, housing, infrastructure, brownfield land and public transport to accommodate it.

Subjecting the Arc proposals to the powerful light of the Smart Growth criteria clearly reveals the shortcomings of the project. On the other hand, however, there are parts of the UK where a modified version of it might yield big benefits to the economy, the environment and society by choosing places that, as well as the Arc's alleged advantages, meet certain sustainability criteria as well.

The opening chapters of this report examine what is proposed and the damage it would do. The second part looks at the tortuous and secretive way the Arc was developed and approved, and the actors in that process. It also examines the case put forward for the Arc and finds it is built on sand.

In a second part of this report, to be published subsequently, we will look at alternative arcs. These have been variously dubbed brownfield arcs, public transport arcs, arcs of sustainability etc., the alternative names reflecting how the concept might be usefully applied to secure real benefits out of a process which has been misconceived and misapplied from the very start.

2. What they propose

2.1 The extent of the Arc

Ever since its inception, the Arc's boundaries have been fluid. In the early days it was just a "corridor" between Oxford and Cambridge, but the development of the Expressway concept quickly extended that southwards to just outside Newbury. Then came talk of extending it southwestwards from Oxford to Swindon and Bristol.

The National Infrastructure Commission's main definition³ of the Arc in its *Partnering for Prosperity* report only confirmed the imprecision: "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".

This may have come as a surprise to those who live in East Anglia or Wiltshire, although the Expressway study did talk of improvements to the A421 from Oxford to Swindon. The massive sprawl being sought along the A40 west from Oxford to Witney was also mentioned in connection with the Arc, as were extensions east of Cambridge along the "East-West Rail". The maps on page 21 of *Partnering for Prosperity* showed the full ambition. But like some shape-shifting amoeba, the Arc tended to mean whatever a politician wanted it to mean.

Then, on 29 October 2018, the Budget made clear the full intent of HM Treasury's ambitions as it defined the Arc as a very much larger chunk of England even than the NIC had proposed: "The area between Oxford and Cambridge, incorporating the ceremonial county areas of Oxfordshire, Buckinghamshire, Bedfordshire, Northamptonshire and Cambridgeshire forms a core spine that the government recognises as the Oxford-Cambridge Arc," it said⁴. "While this is the area we define as the Arc, we also recognise important links to the north, south, east and west. For example, there are important strategic transport connections to other parts of East Anglia, to Stansted and the M11 corridor, and to Heathrow and the M4 corridor."

A footnote made clear that it was slightly bigger even than that: "Notwithstanding ongoing consideration of potential local government reform, this area is currently defined as Oxfordshire County Council and the constituent districts, Buckinghamshire County Council and the constituent districts, Northamptonshire County Council and the constituent districts, Bedford Borough Council, Central Bedfordshire Council, Luton Borough Council, Milton Keynes Council, and Cambridgeshire and Peterborough Combined Authority and the constituent councils," it said.

2.2 The NIC vision

"The Commission's central finding is that rates of house building will need to double if the arc is to achieve its economic potential," said the NIC in *Partnering for Prosperity*⁵. "... East West Rail and

the Oxford-Cambridge Expressway provide a once-in-a-generation opportunity to unlock land for new settlements."

In truth, the Arc grew out of an idea to link Oxford with Cambridge by a new motorway which was supposed to generate a "Silicon Valley", although the prime reason for the Expressway in the Commission's eyes was more prosaic: "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."

2.3 The Government's vision

The Government published⁶ what it called an "overarching vision for the Cambridge-Milton Keynes-Oxford Corridor" (as usual its southern extension wasn't mentioned) alongside the Autumn Budget in 2017⁷. It welcomed the NIC recommendation that up to a million homes could be built in the corridor by 2050, it noted the deal with Oxfordshire to build 100,000 homes by 2031 and it promised deals with the central and eastern parts of the Arc. It's worth noting that building a million new homes would require almost ten new settlements the size of Milton Keynes, or their equivalent.

On the infrastructure front, it noted plans for the Expressway, East-West Rail, Cambridge South station and other possible investments. The paper contained much rhetoric about the economic potential of the Arc, but little or nothing on the basic utility and other public services needed to underpin a million new homes and more than two million extra people. The Arc lies in a region where water supplies are already under stress and there would need to be extensive new facilities to handle their sewage. It has also been suggested that such growth would necessitate provision of at least one new large power station, though how this would be fuelled must remain speculative.



The Treasury's response to the NIC report in the October 2018 Budget laid out the familiar arguments for the Arc, expanded its geographical extent and expressed a most unexpected vision for this belt of agricultural southern English countryside. "The Government will build on learning from successful regional economies, such as the Ruhr Valley and The Massachusetts Brain Train to position the Arc as the top innovative economy in the world," it said. And just to confirm the environmental dangers and general unsuitability of building in a rural area it said: "There are also regional economies, such as Silicon Valley, where their very success is threatened by environmental degradation and unaffordable homes".

"With the right interventions and investment, we believe there is a transformational opportunity to amplify the Arc's position as a world-leading economic place and support the Government's Industrial Strategy aim to boost the productivity and earning power of people across the UK," it said but followed that by expressing doubts as to the Arc's actual economic value: "To achieve

this the Government has designated the Oxford-Cambridge Arc as a key economic priority and will consider ways of maximising growth opportunities in the Arc."

2.4 Transport

At the heart of the Arc project is the former Silicon Valley motorway between Cambridge and Oxford – and Didcot and Newbury. The Arc's promoters like to couple the Expressway with reopening of the Oxford-Cambridge railway line, parts of which never actually shut. The two schemes have nothing in common except proximity, are not dependent on one another and have no real relationship to one another apart from the potential threat to rail traffic that road competition threatens. The scheme to reopen the railway long predates the Arc and is entirely worthwhile, although virtually none of the other many closed rail lines in the Arc is proposed for action. The Expressway, however, is far more sinister, having traffic implications far beyond the Arc and is set, like any major road scheme, to increase traffic, congestion, emissions and accidents.

2.5 Housing and new towns

In *Partnering for Prosperity* in November 2017, the NIC judged that its plans to accommodate 1.4 to 1.7 million more people in the Arc would necessitate between 782,000 and 1,020,000 new homes by 2050, compared to local authorities' current development plans, which envisage 235,000.

"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," said the report. "Towns and cities across the Arc will struggle to succeed amongst their global competitors if they do not support a high quality of life."

But instead of realising the implications of this, it decided that the level and quality of development it aspired to could not be delivered on the fringes of existing towns and cities because it would be unpopular, would fail to generate the infrastructure needed and would reduce potential for land value capture. Instead it recommended construction of garden communities which, in reality, would be still more unpopular, would require even more infrastructure and have yet to demonstrate they can secure land value capture.

Having spent half a page explaining why new developments could not be delivered on urban fringes, it urged planning for "major urban extensions and large new settlements". These, it said, would include the first new towns for a generation.

Some critics of the Arc say its principal purpose is to provide overspill housing for London beyond the Metropolitan Green Belt, a sort of "grey belt", despite all the rhetoric about economic benefits of linking places which have little in common and little need for connection. The NIC is curiously ambivalent about this, being keen to stress both the self-contained nature of the Arc and its contribution to wider housing demand. "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," said *Partnering for Prosperity*. "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."



Harlestone Firs in Northamptonshire is next to a "sustainable" urban extension [Clive Hawes]

The Commission recommended 23,000-30,000 net new homes a year in the Arc, with the lower figure apparently "sufficient to meet the needs of the Arc's own future workforce". It said that as London employment continued 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)."

The NIC recommendation of one million new homes is in excess of even 30,000/y, so it must be assumed it believes much of the new house building in the Arc would be intended to meet the needs of Londoners prepared to commute longer distances.

In the report, the Commission recommended:-

- further expansion of Milton Keynes to a population of at least 500,000;
- a development between Bicester and Bletchley to grow to "city-scale";
- growth in the Marston Vale;
- major development around Bedford;
- a large town in the Sandy area;
- a garden town west of Cambridge.

It is perhaps significant that the locations mentioned are all close to mainline rail and major trunk road links to London. Already developers are homing in on a new "garden city" around Calvert, where the Bletchley-Bicester railway crosses HS2 and the new line from Bletchley to Aylesbury would provide a good rail link to London. Developer Urban & Civic (a developer involved in

several major sprawl sites in the Arc) announced it has secured agreements on around 800ha of land near Calvert.



"Calvert Garden City"

[Stella Stafford]

All this makes clear that a significant purpose of the Arc is to provide overspill housing for London, which is singularly at odds the protestations about creating an internationally significant economic growth corridor the propaganda would suggest.

The NIC said central and local government should work together "through a robust and transparent process" to designate locations for new and expanded settlements by 2020. Housing and planning minister Kit Malthouse wrote⁸ a confidential letter to local authorities in the Arc on 26 July 2018 (when Parliament was already in recess) inviting them to bring forward "ambitious proposals for transformational housing growth, including new settlements". This was certainly robust, though not at all transparent. The minister urged the councils to work with LEPs, universities and colleges, land owners, businesses etc. and respond by 14 September.

The Government's 2017 vision document accepted the NIC recommendation that it consider: "opportunities for one or more major new settlements in the corridor. It will do so by bringing together public and private capital to build new locally-proposed garden towns, using appropriate delivery vehicles such as development corporations. The Government will work closely with the Homes and Communities Agency and local partners to explore such opportunities".

The Government has yet to say how many homes it wants to impose on the expanded Arc as defined in the 2018 Budget.

2.6 Infrastructure

The Expressway and East-West Rail apart, there has been a substantial degree of imprecision about the infrastructure needs of two million people it is intended to move to the Arc. "Infrastructure will be a necessary part of any investment package – but it will not be sufficient on its own," said *Partnering for Prosperity*. To secure new settlements, the report said upfront infrastructure investment would be needed to provide clarity and certainty on transport, utilities and digital. It recommended exploring a "full range of options" for funding land assembly and upfront infrastructure. It was, however, even less precise about what the infrastructure involved would be.

3. The damage it would do

3.1 The land under threat

Partnering for Prosperity showed virtually no interest in the land to be taken for the Arc. Most is likely to be agricultural land, however, an extraordinary proposal given the fact that the Arc is a major part of the UK breadbasket and, indeed, its vegetable basket. Its only mentions of agriculture were in the context of capturing the uplift in financial value of land secured by consent to develop. Its only mention of a farm was of an educational family farm in Letchworth.



In the same way, the research the Commission secured on the economic rationale for investment in the Arc failed to mention the loss of farm production that building a million new homes and a motorway, plus supporting development, would cause. Indeed, the agricultural economy was barely mentioned in what is supposed to be "England's economic heartland". But with plans for new development, and especially new developments, so nebulous, it is impossible to assess precisely how much farmland would be destroyed. Despite some rhetoric in Partnering for Prosperity about the virtues of higher housing densities, it is clear that what is proposed is "garden communities" and these are likely to reflect the low, or ultra-low, densities the garden city movement has relentlessly pursued for more than a century.

The Arc plan involves building a million new homes in the next 32 years. Some idea of the space they might occupy, together with associated development, could be calculated from the city of Milton Keynes. Its population was around 255,000 in 2013 and, given its current growth is now around 266,000. Its housing stock in 2016 was 109,547. The total area of Milton Keynes borough is about 309km², but not all of it is developed and it is hard to find what proportion of that is soil-sealed.

The current Arc proposal envisages around a million new homes, or about nine times the current total in Milton Keynes. The "garden community" type development envisaged in the Arc is likely to mirror the low-density garden city type development employed in most of Milton Keynes. Even without detailed proposals, we are clearly looking at development of well over 200km², almost all of it greenfield given the nature of the area. The Campaign to Protect Rural England estimates a slightly larger area of 270km² of farmland and woodland is threatened by the housing proposals. To that would have to be added the area occupied by the Expressway plus the sort of development – service areas and large distribution depots which follow motorway construction, plus other infrastructure.

Northamptonshire Matters

Charlotte Mackaness of the Northamptonshire Matters group and Daventry District Councillor Rupert Frost explain one county's experience of "transformational growth".

Northamptonshire Matters is a Facebook group set up to make Northamptonshire residents aware of development issues in this county and to assist interest and campaign groups in sharing information.

Northamptonshire is a county without any green belt situated in the middle of the country with excellent rail freight and motorway links. Its location, combined with the well-documented financial crisis afflicting Northamptonshire County Council, has made the county vulnerable to massive development, much of it speculative. Much of this is unsustainable and offers little benefit to the county's residents while delivering short term gains to cash-strapped local authorities and large profits for private companies.



One thousand homes are being built on this farmland

[Angela Bartlett]

Another factor that marks out Northamptonshire from other counties is the way in which services have been "federated" and run by or in partnership with private companies: a system at which the blame for much of the County Council's financial crisis has been laid. This includes KierWSP (a private construction and consultancy firm) running Northamptonshire Highways.

Many residents of the county question whether a company with such a vested interest in new development should be empowered with advising planning committees. They also question why applications in allocated sites are routinely passed without any real regard to mitigation schemes, particularly those intended to ameliorate highways issues.

All too often development comes before infrastructure or the supporting services and the infrastructure never materialises. In a ludicrous circular argument, developers and councillors often argue that housing is required to pay for services and infrastructure, yet this wouldn't be necessary without the massive development. To most ordinary citizens, the planning system appears skewed in favour of large developers. Planning committees referencing their fear of losing costly appeals does nothing to assuage this perception.

The Oxford-Cambridge Expressway and Growth Arc is a project that the vast majority of Northamptonshire residents are either totally unaware of or are oblivious to its potential impact. When faced with large-scale developments, apathy is common place. Perhaps this isn't surprising given the relentless development and issues outlined above that illustrate how local communities have been disenfranchised from any meaningful part of the planning process.

A stark illustration of this is Part Two of Daventry District Council's *Settlements and Countryside Plan*, which has been submitted recently to James Brokenshire. (The irony in his nomenclature has not been lost on Northamptonshire Matters!) It is our opinion that public consultation on this important plan was nothing more than a box ticking exercise with residents and, it would appear, virtually all parish councils being oblivious to its importance. The Council committee running the process contented themselves that making information available by Internet searching constituted a meaningful consultation.

There were 278 representations made to the most recent consultation. A small handful were from private individuals or local councils/councillors. The overwhelming majority were submitted by builders, agents, planning consultants and property developers, all highly skilled, motivated and fully aware of the significance of this plan. No wonder there is a fear that such a state of affairs will lead to our county being developed to suit the interests of such commercial organisations over those of residents.

When Daventry's Local Plan Part 2 was voted on at a Daventry District Council meeting on 6^t December, only one member (Rupert Frost) voted against. In Rupert Frost's view four villages had been done a huge disservice by being wrongly classified in the "settlement hierarchy". Those villages are Badby, Boughton, PItsford and Staverton. Many of the "most important services and facilities" cited as existing in these villages simply don't exist. These "secondary service" villages are said to be sustainable settlements that can meet needs for future housing and employment development. There is real concern that this definition will be exploited to push through all sorts of speculative developments, often outside the village confines.

There has been no consultation on the Oxford-Cambridge Expressway or Growth Arc and it is debatable whether those currently running Northamptonshire's various district and borough councils have any kind of mandate to move forward with the plan, especially given elections have been suspended in the county until Northamptonshire is divided into two unitary authorities.

What will be West Northamptonshire has committed to build 70,000 new houses by 2050 in the targets set for the Oxford-Cambridge Arc. However, late last year, Daventry District Council – no doubt keen to attract central government goodwill and funding - raised this figure to 100,000. The first many district councillors heard of this was when an announcement was made to local media.

3.2 Loss of farm production and biodiversity

A huge majority of the farmland in the Arc is in the most productive grades 1-3, but the Government has shown no interest whatsoever in the loss of farm production or the damage to the agricultural economy. The 2018 Budget document⁹ on the Arc makes no mention whatsoever of farming.

That document did finally admit, however, that: "The Arc is valued for its wildlife and natural places, from the ancient woodlands and parklands". It admitted that "the wild natural places... play critical roles in providing the needs of businesses and communities more widely for clean water and air, flood regulation, healthier lifestyles and climate change adaptation". Quite how they are to be protected from having a motorway, one million homes and huge associated development dumped on them was less clear. "The Government recognises the potential role that a pan-Arc spatial vision underpinned by a local natural capital plan could play in coordinating investment in housing, infrastructure and the environment to support the delivery of transformational growth across the Arc," said the Treasury.

But the natural capital involved in producing the nation's food is not something the Arc's promoters are interested in. A look at Natural England's Regional Agricultural Land Classification Maps shows just how irresponsible this policy is.

The London and South East map¹⁰, which covers Buckinghamshire and Oxfordshire, shows that the majority of farmland in those two counties is rated in the Grade 3 "good to moderate" category. There are smaller areas of Grade 4 "poor", mostly in north Bucks, but equally significant areas of Grade 2 "very good" in the Vale of Oxford and elsewhere. The East Midlands map¹¹ which covers Northamptonshire reveals a similar picture with a large majority of land in Grade 3, with smaller areas rated Grade 2.

But what is most shocking is the East of England map¹² covering Bedfordshire and Cambridgeshire. This reveals that a clear majority of the agricultural land in those counties, under intense threat from the new Arc settlements, is either Grade 2 "very good" or Grade 1 "excellent". Nearly all of the rest is Grade 3. This is England's bread basket and, indeed, its vegetable basket, yet the Government shows no interest at all in the damage its proposals its proposals would do to food production. It doesn't even rate a mention.

Like most areas where population density is comparatively low, the Arc has substantial biodiversity despite the claims of those with a vested interest in development that it is all intensively worked farmland which, they erroneously claim, has little or no importance for biodiversity. They allege that building garden communities would be environmentally superior, despite their extensive soil sealing, air, noise and light pollution and intense disturbance of wildlife.

The Berks, Bucks and Oxon Wildlife Trust and the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire have been seeking judicial review of the decision to go ahead with the Expressway without the assessment of the environmental impact required by law. BBOWT points out that the corridor selected for the Expressway contains many protected areas for wildlife, including three special areas of conservation, 50 SSSIs and 280 local wildlife sites.

The routes to the west of Oxford would affect sensitive areas such as Oxford Meadows, Cothill Fen and Wytham Woods while the alternative south and east of Oxford would potentially impact on important areas for nature conservation including Bagley Wood, Sandford Brake, Brasenose Wood and Shotover Hill.



The Arc is a major part of England's bread basket

[Stella Stafford]

The Berks, Bucks and Oxon Wildlife Trust and the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire have been seeking judicial review of the decision to go ahead with the Expressway without the assessment of the environmental impact required by law. BBOWT points out that the corridor selected for the Expressway contains many protected areas for wildlife, including three special areas of conservation, 50 SSSIs and 280 local wildlife sites. The routes to the west of Oxford would affect sensitive areas such as Oxford Meadows, Cothill Fen and Wytham Woods while the alternative south and east of Oxford would potentially impact on important areas for nature conservation including Bagley Wood, Sandford Brake, Brasenose Wood and Shotover Hill.

The Trust says¹³ the area east of Oxford is characterized by a mosaic of ancient woodlands, species-rich grassland, open water, scrub and hedgerows, which form part of the former Royal Hunting Forest of Bernwood. It is one of the most undisturbed and wildlife-rich areas of Buckinghamshire. The Upper Ray Valley would be at risk, along with ancient woodlands in the vicinity of Calvert, including Finemere Wood nature reserve. Designated sites around Cothill Fen, Oxford Meadows, the Otmoor Basin, the Upper Ray Valley and Bernwood Forest contain rare habitats and wildlife.

These assessments just cover the Expressway corridor. A far wider range of wildlife sites is under threat from the much larger area of the five county+ Arc.

3.3 Water and electricity

Under the original plans for the somewhat smaller Arc considered by the NIC, parts of it, mostly around Cambridge, fell in the area classified as moderate or serious water stress areas ¹⁴. The water demands of a million more homes and associated development would, however, certainly have increased the areas so rated. Extending the Arc to the whole of Buckinghamshire, north Cambridgeshire and Peterborough has extended the threat to even larger areas already under water stress. Much of Cambridgeshire is under moderate or severe stress already and the chalk downland of the Chilterns, now virtually all within the Arc, is severely stressed, the most water-stressed area in England. Plainly the availability of water was not considered when defining the Arc.

Providing generating capacity and distribution infrastructure for gas and electricity for a million new homes and other development would also be a huge challenge, especially given the fast-changing nature of power generation and the NIC's enthusiasm for electric cars.

Some parts of the Arc are also at significant risk of flooding. There are big potential problems around Oxford, along the valleys of the Nene and Ouse and north of Cambridge¹⁵.



Several parts of the Arc suffer from flood risk

[Stella Stafford]

Partnering for Prosperity offers virtually nothing about strategic infrastructure other than transport. It urges development of an Arc-wide plan for strategic infrastructure on the lines of its Strategic Transport Forum via England's Economic Heartland Strategic Alliance. "This work will, however, need to be extended or augmented to include digital infrastructure, utilities and strategic flood risk," it said. "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."

The 2018 Budget document called for work between central and local government to prepare statutory strategic spatial plans. "Local enterprise partnerships and utilities providers should be included in the development of these strategic spatial plans," it said. In other words the Arc was designated before anyone had any idea of utility needs or costs of its imposition.

At a conference on investment in the Arc in Oxford on 4 December 2018, SEMLEP chief executive Hilary Chipping noted that lack of energy generation is a problem in the Arc and would have a major impact on where new settlements went.

So no-one has any real idea of the scale or cost of providing an area largely lacking in development with water, waste-water, electricity, gas, telecommunications, drainage, flood control and broadband. Despite this lack, however, and its own official role as Government advisor on strategic infrastructure, the NIC and Treasury were still prepared to endorse the Arc project

4. Transport implications

4.1 East-West Rail – a red herring

There are dozens of railway lines in the UK which run east to west, but only one route has achieved the distinction of being officially named "East-West Rail", despite the obvious fact that part of it doesn't even currently exist. But right from the start of the Expressway project, the Government was keen to stress that East-West Rail is an integral and equally important factor in its considerations. This is one of the most misleading claims made about the whole Arc project.

The Oxford-Cambridge direct railway, opened in the mid-19th century, provided a vitally useful cross-country route and the most important orbital route in the northern Home Counties. It saw significant modernization in the 1950s, including a costly new flyover across the West Coast Main Line at Bletchley, so as to provide an improved route for freight traffic between regions without entering the congested London network.

Despite this, however, despite the fact the line was not included in the 1963 Beeching Plan and despite very strenuous opposition, the Government closed much of the railway in 1968. The section between Bletchley and Bedford down the Marston Vale kept its passenger service and short other sections remained open for freight. But the section from Bedford eastwards to Cambridge via Sandy was demolished and parts of the formation subsequently built on.

In the half century or so since the closure, there has been significant and sustained pressure to reopen part, or all, of this useful route. That pressure began to succeed with reopening of passenger services between Oxford and Bicester as long ago as 1987

Chiltern Railways' new service from London Marylebone to Bicester and along the reopened Bicester-Oxford line opened in 2015, before the Arc proposal took shape. A scheme to reopen the section from Bletchley to Bicester, and to use part of that for a link from Milton Keynes to Aylesbury, had also already been under development for some years and is now the subject of a Transport and Works Act application by Chiltern Railways.

There have also been a number of attempts to address the challenge of the demolished eastern section of the route despite a waterpark built on the formation near Bedford and radio telescopes between Sandy and Cambridge. Earlier proposals included plans to reopen the line from Bedford to Sandy, or the abandoned route between Bedford and Hitchin and to create a new chord at Hitchin to allow east-west trains to use the Hitchin-Cambridge line. These came to nothing, as did a plan for a new Bedford-Cambridge route via Luton Airport.

The Oxford-Cambridge line is, however, far from even being the only defunct east-west rail route in the Arc as defined by the NIC. There are many others which could also usefully be reopened which don't run even approximately east-west. Not all north-south orientated railways are main lines from London.

Oxford-Cowley-Thame-Princes Risborough One of the most obvious case for reopening which has been mostly ignored by the NIC is the Oxford-Cowley-Thame-Princes Risborough line. This was closed by the Beeching Axe in 1963 and only short sections at either end retained for freight movements. The rest was demolished and building has been allowed on parts of the formation, especially around Thame and Wheatley. Various attempts have been made to reopen all or part of the line. It was considered as a new direct route to Oxford but rejected in favour of the line through Bicester. Most recently, in 2014, came an unsuccessful attempt by Chiltern Railways to introduce a passenger service from Oxford to Oxford Science Park and the Oxford Business Park at Cowley.



East-West Rail? The Oxford-Thame-Princes Risborough line

[Stella Stafford]

Banbury-Buckingham-Bletchley A branch off the Oxford-Cambridge line diverged from it between Bicester and Bletchley and ran westwards to Buckingham and Banbury. This was closed between 1961 and 1964.

Banbury-Towcester-Bedford and Bedford-Olney-Northampton A direct line from Bedford to Northampton ran via Olney and was joined by another line running east from Banbury to Towcester and Bedford; these lines closed between 1951 and 1962. In 2000, train operating company Connex commissioned Capita Symonds to conduct an engineering study for reopening the Bedford-Olney-Northampton line. It concluded the formation was generally intact though new alignments would be necessary at Olney and Turvey. A complex scheme involving double track and electrification was costed at £275M in 2004, but it was admitted a simpler scheme could cost substantially less.

Northampton-Wellingborough A direct line formerly ran between Northampton and Wellingborough but was closed in 1964.

Bedford-Hitchin The line between Bedford and Hitchin shut to passengers in 1961 and was completely closed in 1964.

Cambridge-St Ives-Huntingdon-Kettering One of the most glaring omissions is the line that ran west from Cambridge to St Ives and Huntingdon. Despite well–advanced proposals to turn the then still extant Cambridge-St Ives section into the first stage of a light rail system for Cambridge, the city decided instead on an expensive guided busway, precluding rail-based transit here.

Luton-Dunstable-Leighton Buzzard Another line partly turned into a busway ran between Luton and Leighton Buzzard via Dunstable. It lost its rail services in 1965 and various attempts to reopen the Luton-Dunstable section have come to nought.

Didcot-Newbury A line running southwards from Didcot ran parallel with the A34 southwards to Newbury, thence to Winchester, providing a shorter freight route to Southampton. It closed to passengers in 1962 and to freight in 1967.

The big expansion of the geographical spread of the Arc announced by HM Treasury in October 2018 brought a significant number of other disused rail alignments within its boundaries.

Fairford-Lechlade-Oxford The branch line to Fairford closed in 1962, but has since been the subject of feasibility studies for reopening.

Wellingborough-Peterborough The Northampton-Wellingborough line, referred to above, also continued to Peterborough, serving Oundle.

Wisbech-March The line from March to Wisbech, and thence to Kings Lynn were not recommended for closure in the Beeching Plan but the anti-rail policies of the time saw it closed to passengers in 1969, although the March-Wisbech section remained open for freight until 2000. There have been long and vigorous campaigns to reopen this section. In recent years the Association of Train Operating Companies suggested a service could be reinstated between Wisbech, March and Peterborough in 2009. Since then there have been expressions of support by local and national politicians. In November 2018, combined authority mayor James Palmer called for a detailed study, but so far a definitive scheme remains elusive.

Haverhill-Cambridge The Stour Valley railway from Cambridge to Colchester via Haverhill closed in 1967. There is, however, today a vigorous campaign to reopen the link between Cambridge and Haverhill The proposal is gaining support from local politicians and it is seen as a key way of linking two fast growing towns.

St Ives-Ely, March & Ramsey Lines formerly radiated from St Ives north-eastwards to Ramsey, March and Ely.

In fact, most of the large towns in the Arc were formerly at the centre of lines radiating in several directions. Cambridge had lines radiating in eight directions, while Bedford, Northampton and Oxford each had six. But closures in the 1950s and 1960s reduced them to little more than the main lines radiating from London.

None of the formal proposals for the Arc has included reviving any of these lines, apart from the NIC recommending the short branch from Oxford to Cowley and some proposals for Wisbech-March. It could, of course, be objected that most have been long closed, the track demolished and, here and there, buildings constructed on the formation. This is true, but it is also true of the Bedford-Cambridge section, so plainly it is possible. Rebuilding that would, of course, be extremely welcome and route options for the section were put forward in January 2019. However, it's worth pointing out that the Treasury document¹⁶ in October 2018 said that, while £3.5bn has been committed for the Expressway and £1bn for the west section of East-West Rail, not a penny has yet been committed for reopening Bedford-Cambridge.

Reopening of the whole Oxford-Cambridge route would be very welcome, but should be the basis of a comprehensive programme of rail reopenings plus light rail systems in and around the major towns, all of which could be funded from the money earmarked for the Expressway.

4.2 The Expressway

As things stand with the Expressway, the intention is to secure a "motorway standard" route between Cambridge and Newbury via Milton Keynes and Oxford. This would include entirely new stretches of road on new alignments - the A428 between the A1 at Black Cat and Caxton Gibbet and from east of Milton Keynes to south of Oxford. The effect would be to create a "motorway standard route" between Cambridge and Newbury.

There is, to put it mildly, a degree of circularity in the arguments for the Expressway and the Arc. "The Oxford-Milton Keynes-Cambridge region is also one of the most significant growth corridors in the country with substantial growth in jobs and housing planned," says the Oxford to Cambridge Expressway Strategic Outline Business Case¹⁷. But it then admits that: "east-west connectivity is currently poor, resulting in Oxford, Milton Keynes and Cambridge being better connected to London than each other. Subsequently, the delivery of an Expressway alongside improved east-west rail links has the potential to bring knowledge intensive firms closer together boosting access to labour and product markets." So it's not actually a growth corridor at present in any meaningful sense.

Officially, according to the NIC¹⁸, the aim is "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". But *Partnering for Prosperity* let a rather large cat out of the back. It is clear that the Expressway would create nearly a third of the "Outer M25" the Roads Lobby has long dreamed of [See box]. "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," it admitted.

The Strategic Outline Business Case for the Expressway skirts this issue and spends many pages extolling its benefits to traffic movement between Didcot and Cambridge (Newbury doesn't rate a mention). But finally it does address the issue, saying the existing east-west route: "provides a national and regional link for freight movements between the southern and eastern ports and the strategic freight (TEN-T) routes including M4, M40, M1, A1(M), M11 and A14 and provides a route option for long-distance journeys between the East of England and the South West. However, given the current route constraints, these long-distance movements will predominantly use the M25 or M5/M42/M6 alternatives."

It goes on to talk about the important strategic freight functions with the southern and eastern ports via the A34 and A14. "In particular, the A34 within the study area has a relatively high freight flow which is likely to continue to grow as the southern ports have aspirations to expand along with the economy as a whole," says the *Strategic Outline Business Case*. "Time savings, shorter distances and more reliable journeys are critical for freight operators and have a direct impact on their operating costs."

The report even warns that more sustainable policies might follow a decision not to pursue the Expressway. "In the longer term, households may choose to relocate closer to employment opportunities, thus placing pressure on the local housing market," it says. "Alternatively, businesses may choose to relocate to locations which support a deeper pool of labour, and which have better links to suppliers and customers."

So, astonishingly, section 2.5 of the *Strategic Outline Business Case* thus admits the Expressway's proponents regard the movement of economic activity and population to parts of the UK that need them and can accommodate them as a bad thing. In microcosm, this is an indictment of the whole Arc project.

The Outer M25

The current M25 London Orbital Motorway is heavily congested and the Roads Lobby has long dreamed of building an outer orbital motorway round the capital.



The M25 is heavily congested

[Jon Reeds]

Already Highways England has consulted on what could easily become the first section of an Outer M25 - the Lower Thames Crossing. This is being progressed and would form a 23km section of any new orbital link, running from the A2/M2 in the south, northwards across the Thames to the A13, with a link to the M25.

The 150km Cambridge-Newbury Expressway would form an even more important section of the new orbital route, creating nearly a third of it at one stroke. It would link the M11 to the A1(M), M1, A41, M40, A34 and M4. At Newbury, it would disgorge lots more traffic on to the already overloaded A34 to Southampton, creating immediate pressure to extend it to the M3. That, in turn, would overload the M3 in both directions, and probably the southern part of the M25 too, so the Expressway would then need extending east to the M23 and M20, offering a new link to the Channel Tunnel.

The Expressway's other new termination at Cambridge with the M11 and the newly upgraded A14 would also increase congestion on those roads and the congested network in East Anglia. An obvious extension would link it south-eastwards to the Haven Ports and thence to Tilbury to handle their ever-growing lorry traffic. At Tilbury it would meet the Lower Thames Crossing and from there it would need just a short link to the other end of the extended Expressway at the M20. That would complete the Outer M25 at a cost which could probably rise to near £20bn. The effect in traffic generation, congestion on the rest of the network, accidents and pollution is incalculable.

"Growth of the scale required to realise the potential of the Arc may result in higher demands on different parts of the transport network," says *Partnering for Prosperity*. "Therefore, it is important that opportunities for easy expansion are designed into the Expressway...". Including, presumably, expansion at either end.

4.3 Traffic generation

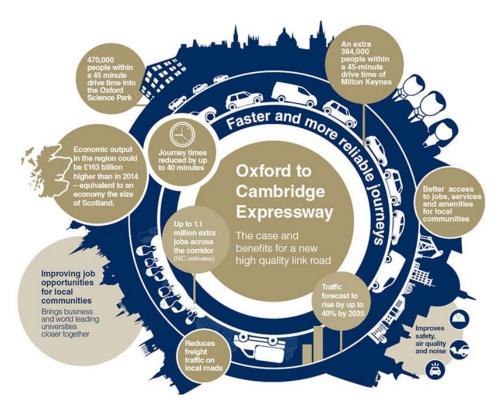
The NIC explicitly accepted that the Expressway would generate traffic and impact adversely on the rest of the network. "Whilst new east-west transport will increase capacity, and help to unlock housing growth, wider network improvements will be required to ensure that the system as a whole continues to function and new communities remain connected and sustainable," says *Partnering for Prosperity*.

The Oxford to Cambridge Expressway Strategic Outline Business Case¹⁹ underlined this, admitting the current network limits the amount of growth possible. "Additional growth in traffic will inevitably increase delays further leading to lower average speeds than currently experienced," it says. Traffic, it says, will grow 40% by 2035 even without the "transformational growth" envisaged in the NIC report. "If no improvements are made to the existing east-west corridor, future traffic growth will result in substantial increases in journey times, delay, congestion and capacity issues across the route. Sections of the A34 and single carriageway sections of the A421 and A428 are forecast to be operating over capacity by 2035," it says.

"In order to unlock maximum benefit, it is likely that local transport infrastructure improvements will be needed in addition to delivery of the Expressway," it continues. "This is why the government is commissioning EEH to analyse how communities not on the route of

the Expressway can benefit from it. The provision of local infrastructure improvements may help ensure that benefits are felt across the region and not just in locations immediately adjacent to the Expressway."

Virtually every major highway improvement everywhere in the world has generated large numbers of new, or longer, vehicle journeys that would not have been made had the road not been built or improved. This has an inevitable knock-on effect on the rest of the surrounding network and any benefits from rerouting of traffic is likely to be short term.



The Expressway's promoters make no secret of their intention to actually generate traffic [Department for Transport]

Yet the *Strategic Outline Business Case* essentially ignores this effect. In the section on Objectives, it sets a target for "Planning for the Future" to "reduce traffic on local roads to improve the environment for communities and contribute to better safety, security and health whilst promoting sustainable transport modes". There is no suggestion, however, that the very extensive traffic restraint measures this would necessitate are under consideration and indeed the Objectives also include a desire to deliver "enhanced connectivity through faster, safer and more reliable connections across the corridor in a broad arc from Oxford to Cambridge via Milton Keynes".

5. The evolution of a bad idea

5.1 The idea is born

One early source of the Arc idea is cited in a Cambridge Econometrics' economic analysis²⁰ for the National Infrastructure Commission. This idea, formulated by the late Sir Peter Hall, was that there existed around the Greater London area a ring, more than 25 miles away and hence outside the green belt and historic commuter belt surrounding the M25, but within 75 miles, roughly 60 to 90 minutes' journey time, which enjoyed high employment and high productivity. He called this the "Golden Doughnut"

The existence of such a ring around the nation's largest and wealthiest city is inevitable given the existence of the Metropolitan Green Belt, although much of his so-called Golden Doughnut ring actually lies in the North Sea or English Channel, or is occupied by parts of two national parks and several AONBs. Of course, random sections of a random arc could be designated almost anywhere in southern England or the rest of the UK, but taking a segment of Prof Hall's ring in the north-west and north happens to link Oxford with Cambridge and the two ancient university cities evidently continue to weave their spell, especially amongst those who studied there.

The actual idea for the Arc probably originated in the late 1990s when the South-East England Development Agency included the Oxfordshire-Milton Keynes/Luton/Bedfordshire/Aylesbury Vale area as one of seven sub-regional drivers in its regional economic strategy for the South East, which led the Economic Partnerships for Oxfordshire and Milton Keynes to develop a "Technology Arc" idea. The Bedford Convention and Cranfield University developed a website which sought to demonstrate the technological expertise across the Arc, while a Central Innovation Network tried to promote Bedfordshire and Milton Keynes.

A study of the "Oxford-Cambridge Arc" was commissioned in 2000-1 by a range of organisations with the aim of actually realising some kind of vision for the Arc to enhance its economic potential. The O2C Arc initiative sparked the most support in the Milton Keynes area. New Labour's 2003 growth areas included a "Milton Keynes-South Midlands Growth Area" but the Arc idea attracted little attention and the three then regional development agencies tried to revive the idea with another study in 2006. Among its recommendations was the setting up of a "smart growth coalition". But this would have had nothing to do with Smart Growth as internationally understood and simply aimed to bring knowledge-intensive businesses together.

The O2C initiative even had an executive director for a couple of years, but the lack of anything to link the area together in reality saw it closed in 2008.

The first real stirrings of the current Arc initiative as a much more ambitious attempt to build what has become almost an archetype of car-dependent sprawl lie in a conversation between prime minister David Cameron and Next plc chief executive Lord Wolfson which the latter relayed in a speech to the British Chamber of Commerce in 2011. He called for a motorway to be built between Cambridge and Oxford.

"Long before he became prime minister, David Cameron asked me why Britain didn't have a Silicon Valley," Lord Wolfson told delegates. "Half jokingly, I replied if the idea were mooted in Britain, it would never get planning permission. It takes three hours to drive from Oxford to Cambridge, yet they are barely 75 miles apart."

It's actually an 84 mile drive between the two cities, or 125 miles if you insist on joining the queues on the M25. Yet this is how the "Oxford-Cambridge Expressway" idea entered the Whitehall conveyor belt.

5.2 The role of HM Treasury

In March 2016, the then chancellor of the Exchequer, George Osborne, asked the National Infrastructure Commission to: "... make recommendations to maximise the potential of the Cambridge–Milton Keynes–Oxford corridor as a single, knowledge-intensive cluster that competes on the global stage, whilst protecting the area's high quality environment and securing the homes and jobs the area needs. The Commission will look at the priority infrastructure improvements needed and assess the economic case for which investments would generate the most growth".

There was no attempt to consider whether this was a good idea but it was tacit acknowledgment that the "corridor" wasn't a single cluster of anything; it was just a corridor drawn on a map. The only thing linking Oxford and Cambridge was that they both have ancient universities. Subsequent work was to demonstrate this.



For a long period the Treasury has remained the effective cheer-leader for the Arc. In November 2017 it published Helping the Cambridge, Milton Keynes and Oxford Corridor reach its Potential²¹. Eventually it gave final approval to the Arc in the autumn of 2018 with a document entitled Government Response to Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc²².

The Government says it is exploring options for a single spatial plan for the Arc and there is due to be a corridor-wide Joint Vision Statement in spring 2019. But the Treasury has continued to demonstrate the Arc is essentially its own brainchild and that, as it leads on it, opposition within central or local government will not be tolerated. On 4 December 2018, treasury minister Robert Jenrick made the keynote speech at a conference organised by property consultants on investment in the Arc. He described it as: "the biggest economic growth opportunity in Europe today" and ministers have repeated this claim despite any supporting documentation to justify it.

5.3 The role of the Department for Transport (DfT)

Ever since its beginnings, some kind of major road improvement between Oxford and Cambridge has been central to the Arc project. Initially, however, the Government did not back the new motorway that the idea has morphed into.

The first serious published DfT reference came in the Government's *Road Investment Strategy* in December 2014²³. This proposed increasing capacity on a number of A-roads by improving them to "expressway" standard "with inconsistencies, bottlenecks and pinch-points tackled". It explained that expressways would generally be dual-carriageways and "largely" grade-separated, claiming this would mean "an end to tailbacks", although those who regularly sit in queues on grade-separated dual-carriageways might disagree.

The RIS proposed: "upgrading the A428 to create an Expressway link between Cambridge and Milton Keynes" and also a new strategic study to "investigate the case for linking existing roads and creating an Oxford to Cambridge Expressway which would create a high-quality link between Oxford and Cambridge, via Bedford and Milton Keynes". This was, however, a long way short of a new motorway and was for the most part just upgrading of existing roads.

In February 2015, the prime minister published a long-term economic plan for the East of England which included a number of strategic road schemes. These included "A428 Black Cat to Caxton Gibbet – improvement of the A428 near St Neots, linking the A421 to Milton Keynes with the existing dual carriageway section of the A428 to Cambridge, creating an Expressway standard link between the two cities via Bedford. The scheme is expected to include significant improvements to the Black Cat roundabout, where the A1 currently meets the A421". At that stage the rest of the Expressway was still improvements to existing roads and limited to Cambridge-Milton Keynes.

As part of the study, an Oxford to Cambridge Expressway – Stakeholder Reference Group was established and meetings were held "throughout 2015 and 2016" to tell participants what the DfΓ had decided to do. A presentation to the meeting on 12 November 2015 said the study's objectives would be a report that:-

- has clear and concise conclusions;
- supports growth objectives along the route;
- whose analysis is relevant, robust and trusted;
- will gain the confidence of ministers;
- is timely and within budget;
- recognises and is consistent with the other strategic studies.

Significantly, there was no reference to sustainable development, the environment or the support of local people.

The Stakeholder Reference Group's composition was given as:-

- study sponsors and project managers (DfT, Highways England and project consultants);
- local authorities (transport and planning authorities directly affected by improvements to the corridor);
- local enterprise partnerships;

- statutory bodies;
- other transport operators (Network Rail and Stagecoach);
- road users (freight groups, road users and motoring organisations);
- trade and industry (business associations);
- environment and amenity groups.

Local residents were not included.

The Expressway strategic study's *Terms of Reference*²⁴ were eventually published in August 2016, along with the *Interim Report*²⁵. They described its purpose as examining "the case for creating an Expressway to connect the towns and cities of the 'Brain Belt' together. It will also look at other enhancements on existing roads along the route, including the A34 around Oxford".

What was clear was that, right from the start, the ambition stretched well south of Oxford; Figure 1 of the document showed a corridor stretching south of the city to the M4 at Chieveley, passing through the North Wessex Downs AONB. So, in reality, there never was an Oxford-Cambridge Expressway, it was a Newbury-Cambridge Expressway from the start. As the Expressway Stakeholder Reference Group on 25 February 2016 was told²⁶: "The study area also includes the south of the region such as West Berkshire and the Vale of White Horse".

Yet a press release²⁷ issued on 18 August 2016 to publicise the *Interim Report* was accompanied by a simple plan showing three crude lines between Oxford and Milton Keynes and two around Oxford. But although it was clear these would form part of an Oxford to Cambridge Expressway, there was absolutely no mention of it continuing a further 20 miles south across the Downs to the M4.



The Expressway scheme started as improvements to existing roads but became a full-blown motorway

[Stella Stafford]

The *Interim Report* claimed to show, to its authors' own satisfaction at any rate, that the study had established a "case for intervention". But it did admit that "currently there are very low levels of strategic commuter travel demand between Oxford, Cambridge and Milton Keynes, suggesting the route has a limited strategic function". However, it noted current plans to build 235,000 houses and to create 270,000 jobs in the corridor. It also noted considerable congestion on parts of the network, although it admitted the A34 north and south of Oxford, the M40 J9-10, the A421 (M1-A1) and the A428 (A1198-A14) were already "of an Expressway standard". But it concluded "these functional areas are playing an increasingly important role in the national economy and good transport connectivity is vital to support their continuing economic success".

It was already clear that demand for growth in housing and employment between Oxford and Cambridge was limited by geographical factors. But what was also clear was that senior people in Whitehall were obsessed with Oxford and Cambridge and a belief existed in Government that their housing and employment growth should be inflated as a way of concentrating economic growth in the area.

But while the *Interim Report* of August 2016 was careful not to spell out Government intentions for the new road, it was becoming clear that a decision had already been taken to create an entirely new motorway, much of it on completely new alignment.

Although the Stakeholder Reference Group on 25 February 2016 was told: "an expressway can generally be regarded as a trunk road with similar characteristics to a motorway", the Group's meeting on 7 July 2016²⁸, a month before the *Interim Report*, heard that the study team had been reviewing evidence and had developed a long list of 40 multi-modal options. Then, it was told, the DfT's "Early Appraisal Sifting Toolkit" had assessed them and this had resulted in "an emerging short list of three possible road based interventions"²⁹. So, without any public consultation at all, a series of on-line improvements to existing roads had become a new motorway. The DfT had decided the question to its own satisfaction; that was all that mattered.

The meeting heard that there was a: "three road-based emerging short list":-

- **Road Option A:** This option took a southern approach to connecting Oxford to Milton Keynes, north of Aylesbury.
- **Road Option B**: This option broadly followed the East West Rail alignment.
- Road Option C: This option was expected to be a more northern approaching connecting Oxford to Milton Keynes, to the south of Bicester and Buckingham.

But at least the meeting was offered a clue about the wider ambitions for the new motorway, being told: "initial output from the model suggests that there will be significant changes to freight movement as a result of improved East West connectivity".

By the autumn of 2016 the National Infrastructure Commission was wholly engaged with the Expressway concept and was working closely with the Department. In the Autumn Statement that year, chancellor Philip Hammond committed to delivering an Oxford-Cambridge Expressway and by the time the report on the strategic study³⁰ appeared in November, the three short-listed corridors were confirmed, with the aim of creating motorway standard roads along existing alignments between Newbury and Abingdon and from east of Milton Keynes to Cambridge and three alignments for entirely new stretches of motorway between Abingdon and

Aspley Guise. But despite the DfT obviously being clear in its own mind about where it wanted to build, it rejected a Freedom of Information request to release detailed route proposals in December 2016.

"The material produced forms part of our decision making process which is still in the course of completion," it responded³¹. "A copy of the Public Interest Test favouring non-disclosure is attached for information. As the material forms part of our decision making process, we have also decided that we require the safe space in which to do this away from public scrutiny. We believe that to release the information now will mislead land and property owners into believing they will be adversely affected by proposals when this may not be the case. This may in turn divert project resources by responding to a disproportionate volume of enquiries that would require a response".

So, as ever, those most affected would be the last to know.

Once on Highway England's conveyor belt, the Expressway scheme's progress has been relentless. It is aimed at the Second Road Investment Strategy which will set out the Government's plans to spend tens of billions of pounds on building roads between 2020 and 2025. The Expressway Strategic Study was included in the list of 18 strategic studies intended to inform it.

Highways England's document on its approach to route strategies³² explains how the public is consulted during the strategic study process: "... we will continue to work closely with motorists, local communities, construction partners and environmental groups to support our understanding of the road network, and identify where users and communities feel the greatest priorities for investment are needed," it says. "Surveys will be carried out very soon around the country at motorway service areas, retail parks, and other similar locations, collecting customer information that will feed directly into route strategies."

That dealt with the views of motorists and others who want roads built. What about local residents who don't want a road built? "We will lead a nationwide programme of engagement, allowing national and local groups to contribute their views and build up a comprehensive picture of the needs of the different parts of the network." In other words, tell us where you want roads built, otherwise remain silent.

By March 2017, the Stakeholder Reference Group could be told the short-listed options had been costed and strategic and transport cases for intervention had been developed, together with an outline economic case. A presentation by WSP and Parsons Brinckerhoff³³ added a new concept to the Brain Belt in discussing the key new Expressway alignment between Oxford and Milton Keynes. This was "The Knowledge Spine" which followed the A34 between Bicester, Oxford and "The Science Vale" around Culham, Milton Park, Didcot and Harwell.

Many scientists, of course, are well aware of the challenges of climate change, but the contribution that car-dependent sprawl makes appears to have escaped central Government.

Finally a "non-statutory consultation" was held on the scheme to replace the A428 between Black Cat and Caxton Gibbet in March-April 2017. All three options are on entirely new alignments.

By the time of the Stakeholder Group's last meeting in October 2017, a DfT presentation³⁴ was dubbing the Arc "England's Economic Heartland", despite the surprise and indignation this might cause in the rest of the UK. A further £27M of scarce public money had been committed just to develop the next stage of the Expressway - an options assessment. While it continued to be called an Oxford-Cambridge Expressway, the maps included in the presentation clearly showed it, as always, as a Cambridge-Newbury Expressway.

Highways England Ox-Cam project director Matt Stafford told the meeting that: "Initial assessment of the benefits of three options showed enough promise to take forward to the next stage". There was no need for him to say to whom enough promise had been shown, no doubt those present knew exactly who he meant and that didn't include local people. He said the next stage would be a more detailed qualitative and quantitative assessment of the short-listed options. A timetable was set out together with a list of the seven key decision points in the "Major Projects Lifecycle". An "Engagement and Communications Strategy" was also presented though, curiously, there were no plans to consult the public on whether the Expressway was a good idea.

The Buckinghamshire Expressway Action Group

The Buckinghamshire Expressway Action Group is one of the organisations campaigning against the Expressway. Here the Group's co-ordinator Deborah Lovatt states the case against.

The Group was formed in the autumn of 2018 by local residents opposed to the proposed new Expressway and "Growth Arc".

Not only would the Expressway create a vast corridor of tarmac across our countryside, the scheme would also see at least 250,000 houses built in north Buckinghamshire. To put that in perspective, the current housing stock of Milton Keynes is 112,000.

BEAG and its supporters are appalled by the way in which the scheme's policy-makers, planners and pushers have seriously undermined the Vale of Aylesbury's local plan process. We object to the way in which Highways England has consulted only with a carefully selected group of "stakeholders", many of whom appear to have vested interests in the scheme.

We are well aware that the UK, like the world over, is seeing frightening losses of wildlife and biodiversity. The Berks, Bucks and Oxon Wildlife Trust was very clear that, in terms of harm to wildlife, the preferred option was the worst. Highly sensitive wildlife sites in Buckinghamshire, such as Finemere Wood and Bernwood Forest, are now at risk. BEAG supports BBOWT's legal challenge to the Government, which, if successful, would result in a Strategic Environmental Assessment that would subject the scheme to proper public scrutiny – which the Government and its advisers have been keen to avoid.

Connectivity between Oxford and Cambridge was meant to be enhanced by the East-West rail link, which has broad support in north Buckinghamshire. We find it incredible that the Government wishes to build a new, massively damaging expressway in addition to the rail link. There is not coherent rationale for this, or for the scheme, at all.

Recently, the UN's Intergovernmental Panel on Climate Change warned that we have just 12 years to take action to avert climate chaos. BEAG is astonished that the Government has ignored these warnings in its relentless pursuit of limitless growth (paying the usual lip-service to "sustainability").

The proposals are backward, reckless and wrong.

5.4 The role of the Ministry of Housing, Communities and Local Government (MHCLG), the Department for Business, Energy & Industrial Strategy (DBEIS), LEPs and city and growth deals

At some stage, the Cities and Local Growth Unit, a 160-strong joint unit of MHCLG (formerly DCLG) and DBEIS was appointed to lead Government work on the Arc. Under the watchful eye of HM Treasury, it is supposed oversee and co-ordinate the Government's devolution agenda, including negotiation and implementation of devolution deals, which devolve – or restore – some powers, funding and responsibilities to local areas. It has been central to the Arc project.

CLGU is also responsible for local enterprise partnerships and they too, far more than local authorities, have been central to the progression of the Arc initiative although they are shadowy bodies and much less transparent. In 2016, the Commons Public Accounts Committee³⁵ said it was "alarming that LEPs are not meeting basic standards of governance and transparency, such as disclosing conflicts of interest to the public".

This lack of transparency reflects the Whitehall control behind what are supposed to be joint bodies of central and local government and local business. Set up to replace the regional development agencies abolished in 2010, they have much less funding or power.

"City deals", "growth deals" or "devolution deals" have been a feature of the Arc's development. As a form of devolution to local government, they often leave a lot to be desired, with cash-starved local government agreeing to do pretty much what central government wants in return for cash.

The Arc missed out on Wave 1 of the City deals, but Wave 2, announced in July 2013 included deals for "Greater Cambridge" and Oxford & Oxfordshire, though a putative deal for Milton Keynes and the South-East Midlands who wanted to "deliver significant, sustainable growth in housing" allowing them "to attract and find homes for high-skilled workers to drive economic growth", announced by the deputy prime minister in February 2013³⁶ did not make the final list in Wave 2 as its deal was subsumed into the South East Midlands LEP deal.

The Oxford and Oxfordshire City Deal was agreed in January 2014 and agreed to speed up development of 7,500 homes, various employment initiatives and a plan for the first phase of the "Science Transit" proposal. This was designed to improve public transport among a newly identified "Knowledge Spine", linking Didcot to Bicester, via Oxford - curiously almost exactly along the arc of Peter Hall's "Golden Doughnut". The plan was to improve bus and train services with electronic ticketing, though in part of the country where the only railway was the Didcot-Newbury-Worcester line and the branch to Bicester, proposals for new rail-based transport to qualify for the name "transit" were significantly lacking. And while there are science-based bodies around Didcot and Oxford, it was difficult to see why a "Knowledge Spine" should continue north-east to Bicester – unless it was simply knowledge of plans for urban sprawl.

Oxfordshire's six councils produced a report in 2014 stating they needed 32,000 more homes by 2031 and wondering where these could be dumped. The six, together with "key strategic partners" in the county, set up the Oxfordshire Growth Board in 2015 to "facilitate and enable joint working on economic development, strategic planning and growth" at a time the Government was realising that growth deals couldn't be left to LEPs to deliver on their own.

The Growth Board published its report³⁷ in September 2016, but it drew criticism³⁸ for concentrating on numbers rather than locations and failing to demand sprawl be spread around. It even drew criticism from the development industry for trying to locate development as near the city as possible, rather than spreading it unsustainably far away.

Faced with an impossible level of growth around an historic city with a green belt, itself surrounded by sparsely populated and high landscape value countryside, debate has ground on, with central government insisting on unsustainable levels of growth, even before the Arc was agreed.

In the 2017 Budget, chancellor Philip Hammond announced the "Housing and Growth Deal for Oxfordshire" would involve the county receiving £150M for infrastructure, £60M for affordable housing and £5M for a new strategic plan. In return for this £215M, however, the councils would commit to building no less than 100,000 new houses in the county by 2031, more than three times the previously proposed level of construction and nearly 50% above the Government's own "objectively assessed need" figure of 68,000 for Oxfordshire.

It took until March 2018 before the Oxfordshire Growth Deal was signed and it confirmed the offer of just £215M, a tiny fraction of the infrastructure the envisaged level of development would necessitate.

The Greater Cambridge City Deal was also approved in 2014 and involved £100M for infrastructure, though with vague promises of a further £200M from 2020 and £200M from 2025. It was supposed to help build 33,480 homes, plus 1,000 more.

Cambridge too got a new body over and above the LEPs which were supposed originally to take growth deals forward. The Greater Cambridge Partnership includes the County Council, district councils in Cambridge and South Cambridgeshire and the University of Cambridge. "Greater Cambridge is one of only a handful of city regions which contribute to the UK economy," says

the Partnership's website³⁹, which might come as a surprise to many other city regions, apparently accused of contributing nothing.

In 2017, the Cambridgeshire authorities and Peterborough agreed a "devolution deal" with £600M for the economy and £170M for housing, in return for agreeing to have an elected mayor imposed. Milton Keynes fared less well, and in 2015 was promised £25M under the South East Midlands LEP growth deal for regeneration in Bletchley and dualling of the A421 to Junction 13 of the M1.

By September 2017, the CLGU was working closely with the Department for Transport on the transport schemes⁴⁰ for the Arc. Three meetings were held that month with representatives from Oxfordshire, the "Central Area" and Cambridgeshire. Invitees were told the meeting was "to discuss ways to meet the full potential of the corridor containing Oxford, Milton Keynes and Cambridge" and there would be an opportunity "to discuss with Government the full range of issues being considered by the National Infrastructure Commission (NIC), including local economic growth, ambition for new homes, governance and planning, transport connectivity and innovative approaches to funding infrastructure".

"The Government asked the NIC to undertake this study in order to identify ways of ensuring this high growth corridor can meet its full long-term potential, and the Cities and Local Growth Unit is leading work to agree a Government response to the report," invitees were told. Given that this was two months before the NIC reported, it is unclear what the Government expected the quango to add, apart from its support. Plainly decisions had been taken long before. "As a joint unit across both [DBEIS and DCLG, the Cities and Local Growth Unit is well positioned to consider the steps that could be taken to maximize the economic potential of the corridor and the growth in new homes that will be needed to underpin this."

5.5 The role of the National Infrastructure Commission (NIC)

The National Infrastructure Commission was set up in November 2015 at a time the Government was reorganising its infrastructure advice bodies. The NIC is a quango but was supposed to provide "independent" advice to Government (unlike the Infrastructure and Projects Authority which is part of the Cabinet Office). The NIC was instructed to concentrate on northern connectivity, London's transport infrastructure and energy supply.

But in March 2016 those important issues were diluted with a fourth, namely how to "maximize the potential of the Cambridge-Milton Keynes-Oxford corridor as a single knowledge-intensive cluster that competes on a global stage". Presumably the rest of the national economy was no longer expected to compete internationally.

In November of 2016, the Commission published its *Interim Report⁴¹* on the "Corridor". Building on Lord Wolfson's comments, it suggested the "Corridor" could be the UK's Silicon Valley but lack of housing and connectivity was putting future success at risk. It urged a "joined-up strategy" linking infrastructure and homes.

The report contained the now-familiar arguments about the need for vast new areas of housing, "a multi-modal transport corridor" (basically the Expressway plus a fully reopened Oxford-

Cambridge local rail link) and infrastructure to support what would, in reality, be a massive area of car-dependent sprawl. It concluded, essentially, that the area had insufficient housing to accommodate its workforce, but that it needed further economic stimulation to create even more jobs, requiring even more housing.

"Without a joined-up plan for housing, jobs and infrastructure across the corridor, it will be left behind by its international competitors," said the Commission. The possibility that it might be left behind, or even just matched, by "competitors" elsewhere in the UK was not considered. Nowhere in the report were alternatives looked at, nor was there any attempt to analyse whether the idea was basically sound. Decisions had been taken.

That same month chancellor Philip Hammond wrote to NIC chair Lord Adonis and said he was backing the Commission's recommendations for the Corridor.

Thus empowered, the NIC set about developing the concept. It appointed itself as co-ordinator to the other public bodies involved in the Arc and planned its work carefully. "It was accepted that under current governance arrangements transport links would only be built with the consent of local authorities. There was a need for local planning decisions and spatial strategies to align at a regional level," the Commission meeting on 27 January 2017⁴² agreed. "Care would need to be taken not to identify individual sites or schemes when exploring how future housing need could be met."

So here was a quango engaged in planning how to impose a million homes and a motorway across a swathe of rural England telling itself these things shouldn't be imposed from above.

Work on the Arc continued throughout 2017. By March a "cross-Whitehall programme board" had been established to create a "joined-up programme" while respecting the NIC's "independence". But as all seemed agreed and decisions had effectively already been taken, the risk of that was obviously low.

That spring the Commission received reports from consultants on the Arc. Cambridge Econometrics submitted a report⁴³ setting out an "economic rationale" for infrastructure investment in the Cambridge, Oxford, Milton Keynes and Northampton area. Metro-Dynamics reported on the *Finance and Investment Workstream*⁴⁴. Arup, Savills and Metro-Dynamics provided a *Transport Workstream*⁴⁵.

By July draft recommendations and a narrative for the final report were ready, but the Commission meeting on 27 July 2017⁴⁶ was still concerned there might be a whiff of ordering local authorities how many houses they had to build when, of course, that was a job for central Government.

"Guidance to local authorities on how to accelerate housing growth should avoid being too prescriptive in order to allow local solutions to be developed wherever possible," say the minutes. "There remained a case for government intervention where local solutions could not be found." Basically councils would be free to do what they wanted, so long as it was what Whitehall wanted.



The Commission's report on the Arc was eventually published on 17 November to a torrent of congratulation from those involved, though Lord Adonis' press statement unwittingly highlighted the big weaknesses⁴⁷.

"The Arc spanning Cambridge, Milton Keynes and Oxford attracts the brightest and best from some of the most cutting edge industries," he said. "But the area also suffers from a lack of available homes and an infrastructure network that is feeling the strain – pricing local people out of the market, making it difficult for businesses to recruit staff, and threatening the future competitiveness of one of the most successful parts of the country."

In other words it is a wholly unsuitable place for further heavy development at a time of national austerity as it would

cost billions of pounds to provide housing and infrastructure when such assets are available in other parts of the UK and are under-utilized. This possibility was, however, nowhere addressed in the report.

But Partnering for Prosperity: a New Deal for the Cambridge – Milton Keynes – Oxford Are was accompanied by plaudits, not least from those who stood to gain commercially. "Collaboration and co-ordination between central and local government and stakeholders is key if we are to develop sustainable solutions to our housing shortage," said Home Builders Federation executive chairman Stewart Baseley ". "Integrating the planning of infrastructure and housing will deliver more homes and help create communities that benefit both new and existing residents. Housebuilders are committed to working with all parties to help deliver the right number of homes with the facilities their residents need, in the right places."

The report finally addressed itself to where to build all the homes created to accommodate the workers in the jobs created by further overheating in the Arc or moving to it from depressed areas which desperately needed those jobs.

"East West Rail and the Oxford-Cambridge Expressway provide a once-in-a-generation opportunity to unlock land for new settlements," it said. "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."

That "must" was all too significant. No opposition was to be brooked. And finally came the admission that, such was the scale of house building the Arc would demand, new settlements would be necessary. Previously, the local authorities in the area had been forced to accept they would have to build a massive 235,000 homes, the equivalent of a medium-sized city, in the countryside between Newbury and Cambridge. But now the dreams of sprawl had moved to another dimension.

"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," said the report, the very roundness

of the figure demonstrating all too clearly that this was show-boating rather than any considered and worked out estimate of need.

But how to deliver a million homes in 30 years in what is mostly open country? "Without intervention, there is little chance that the market will deliver major new and expanded settlements at the scale and pace required," said the report. "The risks associated with large-scale land assembly, master-planning and upfront infrastructure investment make this commercially unattractive, even to the largest developers."

Given the sheer numbers of new homes demanded, it was obvious new settlements would be needed. That was not up for discussion – but where should they be planted? "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," it said.

But plainly their establishment couldn't be left to locally elected bodies. "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," pronounced the report. But the appearance of local democracy would need to be maintained.

"Neither the location of new settlements, nor the form taken by development corporations should be imposed 'top-down'," said the report. But in case anyone was in any doubt about what would happen to local attempts to actually influence the process, it warned: "The Secretary of State should, however, retain the power to designate new settlements in the national interest where voluntary agreements cannot be reached". It said locations for new and expanded settlements should be designated by 2020.

The Commission has continued to engage, both as a body and as individual commissioners, in development of the Arc. Never has there been the slightest questioning of the basic soundness of the idea; the NIC is an executive agency of HM Treasury, however "independent", and is never going to challenge the Treasury's orders.

Basically the Commission had done what it had been ordered to do by central government in March 2016 – to "maximize the potential of the Cambridge-Milton Keynes-Oxford corridor as a single knowledge-intensive cluster that competes on a global stage". Never once in the two years that followed did it question the wisdom of that, or even the scale of the intervention proposed. Its commissioners continue to provide powerful advocacy for the plan. As a form of "independence", it clearly has limitations.

5.6 The role of local authorities

The role allocated by central government to local authorities in the Arc project is basically that of cheer leaders, implementers and providing legitimacy to decisions taken in Whitehall. Some have tried to stand out against this; others have accepted their role as "pro-growth authorities".

From quite early on, however, it was clear that many councils in the Arc would be supportive, even though they hadn't asked their own residents about it. In response to the National

Infrastructure Commission consultation in the first half of 2016, when few were aware of the gathering threat from the Arc, still less just how "transformational" it was intended to be, several local authorities were supportive.

Many of the councils made supportive noises and stressed the growth they were already supporting. The joint Buckinghamshire submission said: "Large scale and ambitious growth, including transformative infrastructure is already planned for Buckinghamshire" and set out in particular Aylesbury Vale's very rapid housing development. While, in some cases, this may have been an attempt to divert fresh growth elsewhere, it undoubtedly reinforced the NIC view that local authorities in the Arc were ready to support its "transformational growth".

Other councils were also keen to show they were on board from the start. Central Bedfordshire said: "We recognise the importance of the corridor continuing its critical focus and investment, and remain fully committed to continuing our work across the backbone of the corridor to further strengthen a "single, knowledge-intensive cluster that competes on a global stage". Bedford said it was: "well placed to play a major role in maximising the potential of the corridor".

Generally this anxiety to please the Government has continued against the background of austerity placing huge limits on the amount of financial support local authorities receive from central government and small increases for those prepared to support its push for housing.

The responses to housing minister Kit Malthouse's July 2018 letter asking councils in the Arc to put forward sites for new settlements have generally not been made public, but are believed to be generally supportive. One exception was South Oxfordshire District Council⁵⁰ which expressed surprise at the request when the route of the Expressway was undecided and while the local plan was still under review.

Most local authorities in the Arc, however, look as if they are falling in line with the Government's instructions. Milton Keynes Borough Council has committed to reviewing its local plan to support the Arc's proposals and to meet its long-held ambition to expand its own population to 500,000; a draft plan is to be submitted for examination before 2023. Central Bedfordshire Council's emerging plan commits it to a partial plan review, with proposals for more sprawl at Aspley Guise, Tempsford, south of Sutton and west of Luton. Bedford Borough Council has also committed to a plan review. Aylesbury Vale District Council has meanwhile been warned by an examiner that its submitted plan does not make allowance for the Arc's effects and an early review is likely.

Eynsham Planning Improvement Campaign

Some local authorities have fallen in with the Government's demands. Nigel Pearce of the Eynsham Planning Improvement Campaign describes the experience of West Oxfordshire.

On 27 September 2018, West Oxfordshire District Council (WODC) formally adopted its *Local Plan* for 2011–2031. The Plan includes the misnamed "Oxfordshire Cotswolds Garden Village" of 2,200 new homes immediately north of Eynsham – misnamed because it is not in the

Cotswolds. Eynsham village is also being expanded to the west in the *Plan* to accommodate another 1,000 new homes. Through the middle of this "Greater Eynsham" – an increase in the size of the village of 150% – runs the already famously congested A40.

When you look at maps of the Cambridge–Milton Keynes–Oxford Corridor, or Arc, with its proposed Expressway and East-West rail connection, the shaded area does not seem to stretch as far west as West Oxfordshire and the Cotswolds. However, the Government response to *Partnering for Prosperity* makes clear on page 1 that the whole of the "ceremonial county area" of Oxfordshire is in the Arc, including West Oxfordshire. So you would think it would make sense to ensure proper coordination between WODC, Oxfordshire County Council, the county's other local authorities and the plans for the Arc.

The bigger picture The first stirrings of the current Arc initiative go back to a speech Lord Wolfson made to the British Chamber of Commerce in 2011, when he called for a motorway between Cambridge and Oxford. However, it was perfectly reasonable at that stage, and for the next three years or so, for the Oxfordshire councils to examine local economic growth and housing needs without reference to what was still a nebulous concept.

Thus, in April 2014, the Oxfordshire local authorities published a *Strategic Housing Market Assessment* (SHMA), which suggested that demographic trends and the growth of the county economy would necessitate 100,060 additional new homes in Oxfordshire between 2011 and 2031. These new homes broken down, by district council, are as follows:

Cherwell (north of Oxford)	22,800
Oxford City	28,000
South Oxfordshire	15,500
Vale of the White House (south-west of Oxford)	20,560
West Oxfordshire	<u>13,200</u>
Total	<u>100,060</u>

In November 2014, a project team was set up "to consider the implications of the SHMA and how best to meet the identified unmet housing need of Oxford" on the basis of the Duty to Cooperate – because, apparently, Oxford City could not accommodate all 28,000 new homes. The "evidence-based apportionment" to meet the unmet housing need of Oxford (15,000 homes) broke down as follows:

Cherwell (north of Oxford)	4,400
Oxford City	550
South Oxfordshire	4,950
Vale of the White House (south-west of Oxford)	2,200
West Oxfordshire	<u>2,750</u>
Total	<u>14,850</u>

Of the 4,400 new homes in Cherwell District, many are for Oxford's 'unmet need', and would in any case result in the merging of two villages – Begbroke and Yarnton – into a 'Greater Kidlington', creating a sprawling suburb of Oxford and engulfing the separate identities of the

.

¹ Post SHMA Strategic Work Programme – final report [Oxford Growth Board, 26 September 2016]

component parts. The other new homes – in Woodstock, Cutteslowe, Kidlington and North Oxford – would place even greater strain on already congested roads to the north of Oxford City.

The 2,750 new homes in West Oxfordshire include the 2,200 in the "garden village" at Eynsham, all apparently to meet Oxford's "unmet need" (together with 550 of the 1,000 homes in West Eynsham), thus contravening several 'garden village principles', including the stipulation that they should not be "dormitory suburbs".

Since 2014, official statistics have shown a significant fall in the projected increase in households in the country, but the Government is insisting that 2014 data be used as the basis for planning.² Meanwhile, Oxford City Council has failed to release the most up-to-date figure for the City's objectively assessed housing need (OAN). As the Harbord Road Area Residents Association, which is mounting a legal challenge, says in a press release of 7 January 2019: "This is a critical piece of information which will determine the number of new houses to be built, not only in Oxford but in the surrounding districts which are charged with providing houses for Oxford's so-called 'unmet needs'. What is more this figure is almost certainly significantly lower than the OAN from the 2014 SHMA. We are taking this unprecedented step because so much of what is happening around Oxford, not least the potential loss of huge swathes of the green belt, is based on the OAN figure which the City Council won't declare."

[STOP PRESS/end January: Oxford City's OAN has finally been released, and the number of new dwellings per annum has almost halved from 1,400 to 776.]

The Arc In early 2015, the Oxford to Cambridge Expressway – Stakeholder Reference Group was established, and held meetings throughout that year and 2016. Membership of the group included the local authorities that would be affected by it. So the Oxfordshire local authorities would have been well aware of the size and ambition of the Arc, and the impact it would have on their districts.

Nevertheless, they decided not to reassess or revise their housing figures, and on 26 September 2016, the Oxfordshire Growth Board, on which all six councils have a senior representative, resolved by five votes to one to "approve the apportionment of the agreed working figure for unmet housing need for Oxford, in the interest of complying with the Duty to Co-operate".³

In November 2016, the National Infrastructure Commission's *Interim Report into the Cambridge – Milton Keynes – Oxford Corridor* noted that: "The delivery of new homes and communities must be a core objective of this strategy". Did this prompt an objective reappraisal by the Oxfordshire local authorities of their need for new housing and where it should go?

 $\underline{\text{http://www.bartonwillmore.co.uk/Knowledge/Intelligence/2018/Housing-need-will-fall-in-light-of-new-household-p}}$

_

² According to Barton Willmore ("The UK's leading independent planning and design consultancy") a change in the Government's proposed Standard Method for assessing housing need in local authorities has resulted in a significantly lower projection of household growth across England. In West Oxfordshire, for example, it has fallen from 601 dwellings per annum to 347.

³ Oxford Growth Board minutes, 26 September 2016.

In November 2017, the Commission's final report, *Partnering for Prosperity*, noted the opportunities to deliver: "one million new homes and jobs in the area by 2050 . . . the first new towns in this country for 50 years". So did this prompt an objective reappraisal by the Oxfordshire LAs of their need for new housing and where it should go?

On the contrary, they are continuing to press ahead with their self-imposed maximalist growth targets (not forecasts) quite separately from the massive development that the Arc will bring. In late December 2018, South Oxfordshire District Council reversed its previous opposition to huge housing development on the green belt, and approved by 21 votes to 9 a Local Plan for consultation that includes all sites in the previous, aborted 2017 version plus additional major sites within the green belt. As objectors have pointed out, this means a plan to build "what they know to be more than twice as many houses as we need in the district according to government figures. By our calculations, we are building four times as many houses as can be filled. These are not for people living in Oxfordshire. They destroy our environment and create 'planning blight'."

It is clear that, between them, the supporters of the Arc and the Oxfordshire local authorities have decided, even if by default rather than design, to allow an unchecked feeding frenzy for developers – and their consultants - that would turn much of Oxfordshire into a Los Angelesstyle urban sprawl. You would have thought, surely, that Oxfordshire's proportion of the million new homes to be provided by the Arc would cover both Oxford City's "unmet need" (while providing super new road and rail links for commuters) and much of the local authorities' broader housing need, as projected in the 2014 SHMA, itself now an over-estimate. But no, coordination of this kind, and questioning of assumptions, are evidently too much to expect.

The smaller picture Meanwhile, Oxfordshire County Council has completed a six-week public consultation on its plans for improving the A40 "corridor" west of Oxford and into West Oxfordshire. There is no doubt that the A40 between Witney and Oxford, and especially around Eynsham, is a congestion black spot. The County Council says in its consultation document that it is seeking to deliver an A40 Strategy "which will increase the number of trips passing through the corridor per hour". Issues such as climate change, species decline, air pollution and food security would suggest that a more sensible strategy would be one that *reduced* development, commuting and other traffic along the A40 by investing in rail, not least for freight, in working close to home and in the creation of jobs and journeys in the opposite direction to the prevailing magnet locations in the east.

The OCC plans for the A40 include a Park & Ride – apparently the first "rural" one, if a large expanse of tarmac, artificial lighting, and up to 1,000 cars can be so described – bus lanes, dualling, and junction improvements. Much of this improvement, especially in Phase 1, is immediately to the north of Eynsham and its western extension, and immediately to the south of the proposed "garden village". WODC has consistently described the Park & Ride as an "integral part" of the garden village – not a pleasant prospect for future residents. A 40-hectare "science park" is also planned for this "Greater Eynsham" complex.

Astonishingly, the A40 consultation document has just a single reference to "housing development at Eynsham totalling around 3,200 homes", but nothing else about the impact that these homes on either side of the A40 will have on the road. Thus, there is absolutely no

indication in the document, or in accompanying video produced by the ubiquitous consultants AECOM, of:-

- where the vehicle access to the garden village would be;
- where the vehicle access to the West Eynsham extension would be;
- where WODC's spine road/western bypass through Eynsham is going to be;
- where access to the 40 hectare 'science park' would be; or
- whether WODC's "iconic" bridge is still being planned.
- Nor does is there any mention of OCC's own *Minerals and Waste Strategy*, which may result in new quarries either side of the A40 just east of Eynsham.

How can Oxfordshire County Council expect to consult sensibly, and how are the public supposed to respond sensibly, if no one is in possession of all the facts and their impact?

Two reasons have been given by Oxfordshire County Council officials for this extraordinary hiatus. First, it seems that the A40 strategy has to be stove-piped into Department of Transport guidance parameters, and so cannot attempt to accommodate likely developments outside the stovepipe. Second, and more important, unless the County Council meets a Government deadline for presenting the business case for the strategy, it is in danger of losing the funding for it. In other words, it does not matter how blinkered the strategy is; it simply has to get through.

If ever there was a recipe for bad planning and decision-making that will prove to be budget-busting and regrettable, this is it. According to Bent Flyvbjerg, professor of major programme management at Oxford University's Saïd Business School: "Political-economic explanations see project planners and promoters as deliberately and strategically overestimating benefits and underestimating costs when forecasting the outcomes of projects. They do this in order to increase the likelihood that it is their projects, and not the competition's, that gain approval and funding".

Appropriately, the article in which this quotation appears is called *Survival of the unfittest: why the worst infrastructure gets built – and what we can do about it.* Planners in Oxfordshire and the Arc do not seem to have read it.

5.7 The role of the universities

Ever since the idea of the Arc first entered the Whitehall conveyor belt, it has always stretched from Cambridge right down to Newbury and it has now extended to five whole counties plus. Yet it has always been referred to as the "Oxford-Cambridge" Arc, Growth Corridor etc.. Sometimes Milton Keynes gets a mention, but Aylesbury, Banbury, Bedford, Buckingham, Didcot, Ely, Luton, Newbury, Northampton, Peterborough, Wellingborough etc. seldom, if at all.

This cannot simply be because one argument advanced in favour of the Arc is that it does not affect a protected area like a national park or AONB whereas, in reality, the original southward extension cut a swathe through the North Wessex Downs AONB. There are green belts around Cambridge and Oxford and the expanded Arc takes in nearly all of the Chilterns AONB and part

of the Cotswold. The truth is that the main selling point of "The Brain Belt" is the two ancient universities of Oxford and Cambridge.

Although the Arc's boundaries have always been (deliberately) fluid, there appear to be nine universities based within it, plus the private University of Buckingham. But the NIC's reports on the Arc left little doubt which ones were the focus of its interest.

The NIC's *Interim Report* listed among the Arc's assets: "World leading universities and research institutes – Oxford and Cambridge Universities rank consistently amongst the top four in the world, and Cranfield University is a global leader in engineering disciplines". *Partnering for Prosperity* also cited those three universities, but the other universities did not even rate a mention.

To be fair to the Commission, it did at first try to engage some of the other universities. A meeting held at Cranfield on 1 June 2016⁵¹ included representatives from the Universities of Bedfordshire, Buckingham, Cambridge, Cranfield, Northampton and the OU (Anglia Ruskin and Oxford Brookes weren't present). The meeting heard about the Commission's plans which included a claim it was interested in local solutions as well as corridor-wide ones. The senior university staff told the NIC they were interested in improving academia/industry links and set out examples of where the universities were already succeeding with this. The meeting heard the usual litany of complaints about housing, traffic congestion and global competitors in the Far East, as if these were unique to the Arc and some made supportive noises in the NIC consultation.

But enthusiasm for involving any university other than Oxford or Cambridge quickly waned and for a long period that was the end of their engagement. The two ancient universities, however, quickly became the focus of intense efforts to get them onside in the Arc project, efforts that were met with enthusiasm from both.

On 24 June 2016, three commissioners plus the Commission's chief executive and other staff members toured Cambridge's biomedical campus and held discussions with the University's provice-chancellor for external affairs as part of a visit organised by the then Homes and Communities Agency.

Officially, the reason for engaging closely with the two universities was their importance in the high-tech businesses which cluster around the two cities, seen as the basis of further growth in the Arc. But long ago it was said that you could walk from Oxford to Cambridge without leaving land owned by Oxford or Cambridge colleges. While this was probably never literally true, some of the colleges did own a great deal of land between the two cities, and still do, and that would obviously be of great interest to any body, public or private, planning massive housing sprawl in the corridor.

Engagement with the two universities really fired up in 2017. On 27 February, a meeting organised by the NIC was held in the elegant surroundings of the Dodgson Room in Christ Church College, Oxford. It was attended by Oxford's pro-vice-chancellor for planning and resources, William James, and senior staff from six colleges: Christ Church treasurer James Lawrie, Exeter finance and estates bursar William Jensen, Magdalen bursar Rory Maw, Merton

land agent & estates bursar John Gloag, Nuffield head of the endowment office and investment bursar Gwilym Hughes and a representative from St John's College. All of these colleges are major land owners in the Arc.

The NIC asked⁵² five major questions of the University:-

- To what extent do current challenges with housing supply and affordability impact upon the colleges and the University (e.g. in terms of their ability to recruit and retain postdocs, academics and key workers)?
- To what extent have the colleges and University considered using their own land/property holdings to tackle this issue?
- To what extent are the colleges and University looking to bring forward land for development are there any major sites or enabling infrastructure worth focusing on?
- What have been your experiences in bringing forward development?
- Looking beyond land use, housing and planning issues, do the colleges and University see themselves as "investors in Oxford" and its surrounding area? To what extent does that influence investment decisions taken by college treasurers?

It is perhaps possible, though unlikely, that the University representatives were outraged at the



suggestion they are anything other than respected and learned academic institutions rather than property developers; we can't know for sure. All of the public bodies involved deny that any note of the meeting is held by them. Perhaps the property consultant, Savills, who also had two representatives at the meeting including head of planning David Jackson, kept a note. We do not know.

The University of Oxford's keenness to be involved did pose problems for one NIC commissioner, however. The Commission meeting on 29 March 2017 received a presentation on conflicts of interest. Following this, one of the commissioners, Prof Tim Besley, raised a potential personal conflict of interest as a member of the governing body of All Souls College, Oxford, which might hold land in the area. But the commissioners decided Prof Besley could continue to participate pending confirmation of the exact nature of All Souls' land holdings.

Learned institutions or property developers?

Next up was the University of Cambridge and two commissioners met pro-vice-chancellor (enterprise and business relations) Prof Andy Neely, head of the School of Humanities and Social Sciences Prof Phil Allmendinger and regional public affairs manager Aaron Cohn-Gold on 31 May 2017.

The three University representatives made a presentation on its priorities. The presentation included "Why Invest in Cambridge?", "Why Cambridge is Overheating – three core problems", "What Cambridge needs to do in overcoming these challenges", "What UoC is doing to address these challenges" and "How can EWR and the NIC help Cambridge?"

The University also says there were no notes or minutes for this meeting, which seems to have been a regular, albeit irregular, feature of the Commission's engagement with the two universities. But the presentation by the three senior staff members left no doubt of the University's enthusiasm for massive growth in fresh directions.

"UoC the heart of the most successful University ecosystem in Europe," said the presentation and it was plainly not thinking of the Arc's *natural* ecosystems threatened by urbanization.

The presentation set out its perception of housing problems in the city and said: "University staff increasingly live 20 miles outside Cambridge, adding to congestion and potentially laying the seeds for a future recruitment and retention issue," it said. Its solution to commuting? "The University supports the development of satellite towns as a means to make Cambridge more accessible," it said – i.e. the solution to long-distance commuting should be increased long-distance commuting.

The presentation went through the usual litany of proposals like East-West Rail, the Biomedical Campus station and Cambridge South, together with the University's own contribution to sprawl in the North West Cambridge Development. But the University had other "asks" of the Commission. It sought: "adequate housing provision with sufficient transport, cultural and infrastructural provision".

"We are willing to work with University counterparts and Government officials to investigate how future employment sites, research hubs, and staff housing could be pursued as part of the corridor's development," said the presentation. "We would like the Government to facilitate more follow-on space for post-incubation companies across the region, esp. in proximity to Oxford and Cambridge. Such space could form part of future satellite towns."

It suggested identifying where scope lay for "University-led infrastructure, employment or skills programmes". But what did it identify as the basic problem with Cambridge's economy the University identified? In a word "overheating".

"The huge growth of the Cambridge economy and population has put great pressure on the city's infrastructure," it admitted. So what's the solution to unsustainable growth in the economy and the population? Obviously, increase them further through action in three critical areas:-

- Housing supply and affordability.
- Transport gridlock.
- Skills shortages.

And the University was plainly determined to be included in any further action to overheat the area. "It is important for universities to be involved in the strategic planning and direction of this

corridor," it concluded. "Can the government identify what future governance structures might develop and what role might exist for University involvement?"

The NIC has continued to interact with the Universities of Oxford and Cambridge since then. On 5-6 June 2017, Commissioner Bridget Rosewell attended a dinner with the pro-vice-chancellor of Oxford University and other members. They were joined by NIC chair Lord Adonis and members of the NIC secretariat on a tour of The Big Data Institute and discussed the University's role in supporting local employment, housing and economic growth. Three months later, on 5 September, Lord Adonis, together with commissioners Sadie Morgan and Bridget Rosewell and members of the NIC secretariat met "representatives of the University of Oxford" to consider the first/last mile transport challenges in Oxford.

Later that month the University of Oxford was involved in another meeting at which the Arc was discussed. This involved a meeting in London on 14 September with DCLG and the Cities and Local Growth Unit, together with Oxfordshire local authorities, Oxford LEP and, unusually, Oxford Brookes University, to discuss local economic growth, ambition for new homes, governance and planning, transport connectivity and innovative approaches to funding infrastructure in the corridor. Although this was one of three DCLG meetings on the three areas identified between Oxford and Cambridge, it was clear the University was considered a key player in the development.

In July 2018, a meeting was organised at Fitzwilliam College, Cambridge, to hear a presentation by speakers including commissioner Sadie Morgan on: "Good Infrastructure and Growth – the Potential of the Oxford to Cambridge Corridor".

A submission⁵³ made to the National Infrastructure Commission's *Call for Evidence* in 2016 by Wavendon Residential Properties and Merton College, Oxford, demonstrates the appetite to promote building on their land. The submission explains that the College and the developer own 55ha of land forming the Wavendon Golf Academy south-east of Milton Keynes and it sets out in detail a case for development of the site and suggestions for the best route to ensure development.

Further evidence comes from developer Urban & Civic's Annual Report and Accounts 2017⁵⁴. In his report, chief executive Nigel Hugill said the company had concluded an off-market purchase earlier in the year of a 33% equity interest in a near-3,000 unit Wintringham project at St Neots. "There can be no mistaking where your Company has set its stall," he told shareholders. "The 400-acre site had been in the ownership of trusts associated with Nuffield College, Oxford, since the 1940s and was bequeathed by the late Lord Nuffield. Urban & Civic plc has taken charge of project delivery with a collective determination that the partnership can provide an appropriate financial and environmental legacy."

As a Factsheet issued by Universities UK⁵⁵ says: "Devolution and localism are important because they open up opportunities for universities to become more engaged in their local area, through their leadership roles, education provision, skills training, co-ordination of economic and social activity, provision of evidence and analysis, and national and international links". The appetite of certain colleges to substantially increase the value of their rural land holdings was possibly not what they had in mind.

The two ancient universities continue to promote their potential investments in the Arc vigorously. On 4 December 2018, St Antony's College, Oxford, played host to a major conference on investment opportunities in the Arc. Gradually the other universities in the Arc are now trying to play catch-up.

5.8 The role of the alumni

There are nine publicly funded universities based within the Arc's boundaries, but no-one who has read the literature will have any doubt about which two earned it the soubriquet "The Brain Belt". Cranfield gets an occasional nod from the government bodies and quangos involved, but it's the two ancient universities of Cambridge and Oxford which enjoy a well-deserved international reputation and are home to many fine brains that are plainly at the front of the minds of those promoting the Arc. As the Treasury's October 2018 document⁵⁶ put it: "Oxford and Cambridge universities are two of the world's greatest and most internationally recognisable centres of learning. However, they are just part of a wider innovation and learning ecosystem across the Arc, with eight further universities that include world leading specialisms in automotive and aerospace engineering."



The danger, of course, of making the two universities into uniquely important institutions is that it downgrades every other one. Anglia Ruskin, Bedfordshire, Buckinghamshire New University, Cranfield, Northampton, Oxford Brookes Universities and the OU also employ many fine brains and carry out internationally important research as, for that matter, do dozens of other fine universities in the rest of the UK. Indeed, 22 out of the 24 members of the top universities' Russell Group lie outside the Arc, but none, apparently, qualifies for membership of "The Brain Belt" or "England's Economic Heartland".

Much is made of the two universities' deserved world-wide reputation, but they are very far from being the only UK universities with an international reputation. So why has there been such a bizarre concentration on those two despite their location in areas wholly unsuitable for major growth - and when other universities are situated in areas crying out for economic growth?

One reason could be that, ever since its inception, alumni of the two ancient universities have been central to the Arc's adoption. It grew out of a conversation between Lord Wolfson (Trinity, Cambridge) and prime minister David Cameron (Brasenose, Oxford). It gained support from chancellors George Osborne (Magdalen, Oxford) and Philip Hammond (University, Oxford), while the Expressway has been endorsed by transport secretary Chris Grayling (Sidney Sussex, Cambridge). Of the cabinet members closely involved, only Sajid Javid and James Brokenshire graduated elsewhere.

The NIC, central to the process, is also so dominated. Its *Interim Report* was signed off by Lord Adonis (Keble, Christ Church and Nuffield, Oxford), Sir Tim Besley (Keble and All Souls, Oxford), Demis Hassabis (Queens, Cambridge), Lord Heseltine (Pembroke, Oxford), Bridget Rosewell (St Hugh's, Oxford) and Sir Paul Ruddock (Mansfield, Oxford). At the time Sir Tim was a fellow of All Souls, Oxford, and Sir Paul was chairman of the University of Oxford Endowment Fund. The only exceptions were Sir John Armitt and Sadie Morgan. The Commission's membership has changed over time, but the influence of Oxford and Cambridge has persisted.

The preponderance of graduates of the two universities in the upper echelons of the Civil Service has long been the subject of comment. A 2014 report⁵⁷ by the Government's Social Mobility & Child Poverty Commission noted that 59% of the Cabinet, 57% of permanent secretaries, 44% of public body chairs and 26% of public body chief executives attended the University of Cambridge or Oxford, compared to less than 1% of the wider public.



One of the UK's many fine universities

[Stella Stafford]

The academic and intellectual excellence of graduates from the two universities is beyond doubt. But they don't have a monopoly on these qualities and the entrenchment of their graduates in top positions effectively downgrades all other universities (and their alumni) and undermines their potential to help the UK's competitive position. Most graduates look kindly upon the institutions which awarded them degrees and are happy to help them. It is hard to avoid the conclusion that many people in positions of power and influence are willing to assist the Universities of Oxford and Cambridge in both the development of their research and commercial spin-off activities - and the potential for wealth generated by development of their very extensive land holdings. The effect of such a competitive advantage over other academic institutions and poorer (though less overheated) regions of the UK is evidently a less significant factor in their decision making.

6. An idea founded on sand

6.1 The justification offered for the Arc

A very great deal of ink has been spilled offering justifications for the Arc project. These arguments might be summarized as follows:-

- The Arc's concentration of research facilities, business clusters, track record in innovation and entrepreneurship and workforce skills put it at the heart of the UK knowledge economy.
- Its universities and research facilities are internationally significant.
- Gross value added (GVA) per worker is greater than the UK average.
- There is a shortage of housing in Oxford and Cambridge.
- Firms are unable to recruit all the staff they need.
- Poor east-west communications exacerbate labour shortages.
- Undeveloped land is available, unconstrained by protection designations, to build a million houses.

The Commission was constrained by its original remit from the chancellor of the Exchequer in March 2016 who ordered it to: "... make recommendations to maximise the potential of the Cambridge–Milton Keynes–Oxford corridor as a single, knowledge-intensive cluster that competes on the global stage, whilst protecting the area's high quality environment and securing the homes and jobs the area needs. The Commission will look at the priority infrastructure improvements needed and assess the economic case for which investments would generate the most growth".

Whether as a result of that narrow remit, or simply because no-one thought of it, the NIC failed to consider important aspects:-

- What do the communities affected think?
- What would the damage to the environment would be?
- What harm would it do to our food production?
- Are there other places in the UK where the concept would work with less harm and more benefit?

6.2 The UK knowledge economy

"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," says *Partnering for Prosperity*.

Few would disagree with this, insofar as it goes. Nor would there be much disagreement with the claim 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".

What is more contentious, however, is the claim that the Arc is "the heart of the UK's knowledge economy", though it is a claim local authorities in the area have been keen to push. In 2016, they set up a partnership covering a slightly larger area which included Swindon, Hertfordshire, Peterborough and all of Buckinghamshire, Cambridgeshire, Northamptonshire and Oxfordshire. It is called the England's Economic Heartland Strategic Alliance.



"The heart of the UK's knowledge economy"

[Stella Stafford]

National politicians have also joined the chorus of those who suggest the Arc's importance is economically unique in the UK. At the launch in February 2018 of the All-Party Parliamentary Group for the Oxford-Milton Keynes-Cambridge Corridor, its chair, Iain Stewart MP, repeated the claim⁵⁸ the Arc could be "the UK's answer to Silicon Valley".

"I have met with Sajid Javid and the Government sees enormous potential for this new 'Silicon Valley' to drive the nation's economic growth," he said.

Ministers too have joined this chorus of voices effectively downgrading the economy in the rest of England, and indeed the UK economy as a whole, in their eagerness to promote the Arc. "The Government believes that the corridor between Cambridge and Oxford has the potential to be a globally significant economy," said housing and planning minister Kit Malthouse in his letter⁵⁹ calling for sites from local authorities in July 2018. Read literally, this implies the current UK economy is not globally significant, which is presumably not what the minister meant.

The Arc's unique importance in the UK knowledge economy, however, is not born out in the NIC's specialist input. The Commission's economic analysis report from Cambridge Econometrics⁶⁰ split employment in knowledge intensive sectors into knowledge-intensive business services, high-tech manufacturing and scientific R&D.

It said business services are distributed most strongly in Greater London and surrounding areas, especially to its south and west and in the West Midlands. "There is some limited evidence of it in the corridor between Oxford and Cambridge, across east Cambridgeshire and at the southern end of the M1 corridor."

High-tech manufacturing, however, has particular strengths in the West Midlands, stretching down to the south-west towards Bristol. There is some in Cambridgeshire and around Swindon and Northamptonshire.

Scientific R&D is even more localized, although four of the strongest concentrations are in the Arc: Cambridgeshire, South Cambridgeshire, Stevenage and the Vale of White Horse. However, the sector is a very small one and only in those four local authority districts does it account for more than 4% of employment.

The report put the three sectors together and provided a map of them. "Putting the sectoral concentration data together, as seen in Figure 1-6, provides limited evidence of an area with knowledge-based industrial specialisations activity stretching from Swindon in the South West, via Oxford, the M1 corridor region and across to Cambridge in the East," it said.

Indeed, putting them together shows that Greater London and the area to the west and south-west are the main concentrations in southern England, although there is a small concentration in the M11 corridor running from London to Cambridge; perhaps this is why the M4 and M11 corridors were, somewhat bizarrely, tacked on to the Arc in October 2018.

It might have been more revealing if the NIC maps had covered all of England, or Great Britain. Without them it is impossible to assess the comparative importance of the Arc in knowledge-intensive employment. But, in terms of southern England, it is a relatively small one.

6.3 Internationally significant universities

Central to the Arc project has been the excellence of the Universities of Cambridge and Oxford. "Oxford and Cambridge Universities rank consistently amongst the top four in the world," says *Partnering for Prosperity*.

There are various ranking methods for universities, both in the UK and internationally. The two universities top the three UK rankings, the *Complete University Guide* and guides published annually by *The Guardian* and jointly by *The Times* and *Sunday Times*. These are based on a range of criteria including entry requirements, student satisfaction, staff:student ratios, academic services, expenditure per student, research quality, exam results, completion rates and student destinations. The two universities also top the *Times Higher Education Supplement (THE)* table of tables.

But while the two also figure highly in international rankings, there is a plain disparity in the way they are calculated, as UK rankings tend to give most weight to the institutions' undergraduate offer. Global rankings have been criticised for favouring large institutions and for giving more weight to research. Research, however, is what is likely to be of most importance in relation to development of the knowledge economy which is supposed to be the central point of the Arc.

In the UK, university research is ranked by the Research Excellence Framework which replaced the former Research Assessment Exercise in 2014. It has been criticised for giving too much weight to the impact research has outside the university system, but that is of prime importance in regional economic development terms; indeed one of the aims of the change was: "to produce

robust UK-wide indicators of research excellence for all disciplines which can be used to benchmark quality against international standards and to drive the Council's funding for research" 61.

The REF assesses submissions in individual subjects and both *The Guardian* and *THE* have produced overall rankings based on power and quality. The two ancient universities consistently appear at or near the top in such rankings⁶² but they are not, as publications on the Arc would have you believe, consistently always top, with the others nowhere. The results vary widely in the different subjects, but it is clear there is research excellence in a significant number of our universities and much of it is both of commercial value and international quality.

This is not to disparage the academic excellence of the Universities of Cambridge and Oxford in any way, but singling them out in this fashion merely downgrades and even insults the work of all our other higher educational institutions.

6.4 Productivity

"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," says *Partnering for Prosperity*. "Milton Keynes has the highest productivity per worker within the arc, almost 25% higher than the national average."

Such major regional inequalities are one of the main reasons the UK economy does not function to its maximum capacity. But the Commission seems keen to exacerbate the problem. "Enabling the continued growth and development of these towns and cities is one of the key ways in which infrastructure can support the economy," says the report.

The Government's 2017 *Industrial Strategy* white paper⁶³, however, says any serious strategy should address weaknesses that keep us from achieving our full potential. "For all the excellence of our world-beating companies, the high calibre of our workforce and the prosperity of many areas, we have businesses, people and places whose level of productivity is well below what can be achieved," noted business secretary Greg Clark in his introduction.

The white paper noted that the UK has greater disparities in regional productivity than other European countries, affecting pay, work opportunities and life chances. One of its three bullet points summarizing the Government's approach was "to take greater account of disparities in productivity and economic opportunity between different places, ensuring our investments drive growth across all regions of the UK".

Then, having identified this key problem, it set out one of the ways it plans to make things worse by including the Arc as a case study. It also included a productivity map of GVA per hour, showing the Arc as slightly above average, although it is still well short of the "Golden Corridor" between London, Reading and Swindon.

There are various ways of assessing productivity. It can be GVA per hour worked or GVA per filled job, for instance and there are several other variables. GVA per hour worked is probably the most widely used. ONS statistics⁶⁴, published in February 2018, discuss various ways of

measuring productivity, but none of it provides comfort for those who like to claim the Five Counties as England's second-best productivity powerhouse.

What does emerge is that, after London, the "Golden Corridor" which runs roughly from London Docklands westwards through the capital to Reading and Swindon is probably the area with the second highest productivity. Very little of the National Infrastructure Commission's original Arc lies within this, just a strip in southern Oxfordshire. Now the Treasury has annexed all of Buckinghamshire, a little bit more has been added, although the Treasury has yet to reveal what it means by the "M4 corridor".

Making the best case for the Arc and looking at simple smoothed GVA per hour worked, the four highest ranking sub-regions in the country were in London, while the Berkshire, Buckinghamshire and Oxfordshire sub-region comes in sixth, though how much of that is due to Berkshire's booming economy is unclear. But there's no sign of the rest of the Arc in the national top 10. On gross value added per hour worked in the south of England, the highest outside London was Berkshire, still not in the Arc, followed likewise by West Surrey and East Surrey. Buckinghamshire sneaks in at fourth (although the claims were being made for the Arc before much of that county was annexed). None of the other Arc sub-regions appears in the top five for the south, which includes much of the East of England region. Neither do any of them get into the ONS Midlands top five.

Nor can the productivity statistics per local enterprise partnership rescue the Arc's alleged Number Two standing. London is top and Thames Valley Berkshire takes second place, just brushing the Arc. Buckinghamshire Thames Valley, now in the Arc, is ranked number three and Oxfordshire number five. None of the other Arc LEPs even gets in the top 10. Cambridgeshire and Peterborough sneaks in the large city regions rankings at number five, behind London, Aberdeen, Edinburgh and West of England. The ONS also includes figures which exclude imputed rental income which do distort the meaning of the statistics, but it doesn't save the Arc. The claim about it having the country's second highest productivity cannot be sustained.

It is certainly true that parts of the Arc suffer from the problem widespread in the south of England that job growth has run ahead of housing and infrastructure, while job growth in the majority of the UK, where this is much less of a problem, has lagged behind. Yet to some, this is all the ammunition they need to demand much of our productive farming economy is destroyed to make way for unproductive houses.

Other case studies in the *Industrial Strategy*, however, show that there are other possible "arcs" where investment in infrastructure, skills etc. would yield more rapid benefits unconstrained by the housing and infrastructure challenges which all the reports on the Arc keep complaining about. These included industrial regeneration in the Tees Valley, Stoke-on-Trent's ceramics cluster, offshore energy in Grimsby, advanced manufacturing in Sheffield, research and agri-tech innovation in Norwich, oil and gas in Aberdeen etc.. Yet the Government apparently prefers to concentrate investment in places where productivity is already at satisfactory levels but where growth is seriously constrained and could only be achieved by serious environmental damage. We will look at this further in a second part of this report.

6.5 Housing

It is incontrovertible that the Arc suffers housing shortage and need for both market and social housing is high in much of the area. "...a lack of sufficient and suitable housing presents a fundamental risk to future economic growth," says *Partnering for Prosperity*. "The Commission's central finding is that rates of house building will need to double if the Arc is to achieve its economic potential."

The very obvious riposte to this is that there are many areas in the UK without such acute shortages which could substantially improve their economic performance and accommodate significant growth without having to identify land upon which to build a million homes. Such areas could help the UK to compete better on the global stage, with a lower capital spend than the Arc which, to advance its economy, would need some of the highest capital spend in the country.

6.6 Recruitment

"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," says *Partnering for Prosperity*.

The argument here is exactly the same as for housing. There are many areas across the UK which have people ready, willing and able to take up vacancies and homes for them to live in. Accelerating growth in an area where recruitment is already a problem when other areas with potential don't suffer in this way is rash in the extreme.

6.7 Communications

Some of the weakest arguments advanced in support of the Arc project concern the alleged lack of suitable east-west transport links. It is a recurring theme in the published material.

The Cambridge Econometrics report⁶⁵ for the NIC discusses the whole question of "growth corridors" at some length and defines them as "high performing areas extending along major routes from major metropolitan centres". It says: "... the area currently operates principally as several largely-independent 'wedges', extending outwards from London on radial routes, with transport infrastructure providing several major road (e.g. M11, A1, M1, M40, M4) and rail routes cutting across. Commuting patterns also point to the current dominance of London affecting the direction of travel..."

It continues: "As such the area comprising Cambridge, Milton Keynes, Oxford and Northampton cannot currently be defined as a functioning growth corridor [Our italics]. Just because the study area does not currently function as a growth corridor does not mean the potential does not exist for it to do so." London, it says, acts as: "the host node to a particularly large portion of these growth corridors", exemplified by the proposed London-Stansted-Cambridge Corridor. And it admits that growth corridors in any case bring their own challenges: "Housing shortages have led to high surges in



housing prices, the transport system has in many instances not been able to keep up with population growth and there has been a continuing demand for more skilled workers".

Having thus undermined the whole basis for the Arc, the report then goes on to undermine the case for trying to create it. "Increasing the connection between these existing transport corridors, as opposed to any of the others around London, *may* offer some unique opportunities," it continued. "With the intensive knowledge base of Cambridge on one end, Oxford on the other, and the growing Milton Keynes in the middle, these three *may* be able to complement each other in a way others cannot." [Our italics]

Or, of course, billions might be spent and huge damage done before it was discovered the Arc "may" not be able to achieve those things at all.

Growth corridor or cul-de-sac?

"Increasing the connection between the corridors therefore might serve to benefit all the areas," it concludes, in an endorsement of the idea which is far from supportive. "Milton Keynes on the other hand, while it may not possess any world leading universities (although it does have a vibrant economy despite this), has plenty of room for expansion," it says (ignoring the world-class research carried out at the Open University and nearby Cranfield). The "room for expansion" is of course the highly productive farmland in the area.

The Cambridge Econometrics report noted particular constraints in both Oxford and Cambridge, particularly in Oxford from its lack of developable land, flood risk and designated countryside. Despite these fundamental objections to the Arc in a report the Commission itself had ordered, it still recommended in favour of the Arc, as required by the Treasury.

Other published work underlines the point that the Arc is a synthetic construct, rather than a geographical or economic entity. "Despite the corridor's economic strengths, as the NIC's study has found, the area is characterised by separate labour markets and commuting between hubs is minimal," said the Government's own vision⁶⁶ which accompanied the 2017 Budget.

But an actual motive for improving east-west transport links, or at least those between Cambridge, Milton Keynes and Oxford, and north-south between Oxford and Newbury was admitted in *Partnering for Prosperity*. "East West Rail and the Oxford-Cambridge Expressway provide a once-in-a-generation opportunity to unlock land for new settlements," it says. And, of course, as we've seen, the Expressway has wider ambitions as part of an Outer M25.

"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," says *Partnering for Prosperity*. Meanwhile there is little or nothing about reopening rail links in other parts of the Arc.

6.8 Land availability

Reading the published material on the Arc proposals one might assume that, urban areas apart, this enormous area of southern England and the south-east Midlands is one vast barren space, of little or no economic value, entirely lacking in natural capital and providing no ecosystem services.



No mention is made of the importance of farmland

[Stella Stafford]

Indeed, virtually all of a lengthy consideration of the land involved in *Partnering for Prosperity* is concerned with how to capture some of the uplift in value occasioned by a change of use from greenfield to residential. "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," it says.

It discusses the inadequacies of Section 106 and the Community Infrastructure Levy for capturing this uplift and proposes a new system, but the Arc's promoters may be stuck with them. When housing and planning minister Kit Malthouse addressed the Commons Housing, Communities and Local Government Committee in September 2018, he was less than enthusiastic about a new system.

Asked whether the 1961 Land Compensation Act needs amending to make a new generation of new towns successful, he said the Government would like to see how the current system, intended to compensate for land sales on the same basis as sold voluntarily, starts to operate. He said the history of attempts at land value capture is not brilliant in terms of stimulating activity. "We have an obligation to consider the human rights implications and we think the balance is about right," he told⁶⁷ the MPs.

Despite this, in its September 2018 report the Committee recommended⁶⁸ measures to reform taxes and charges and create mechanisms for land value capture. But in its response two months later, ministers said that, while there is scope for claiming a higher proportion of land value increases, their priority was "to evolve the existing system of developer contributions to make them more transparent, efficient and accountable"⁶⁹. Committee chair Clive Betts described the response as "a wasted opportunity".

The 2018 Budget document⁷⁰ did, however, finally admit in eight lines on "Environmental Assets" that the Arc does contain ancient woodlands, parklands, wetland habitats and flower-rich floodplain meadows", though it made absolutely no mention of the importance of farmland to natural capital or the national economy. It did agree that "wild natural places, wildlife and the local green spaces near where people live are greatly enjoyed by existing communities and visitors". And the environmental importance of this importance of this? "They play critical roles in providing the needs of businesses and communities more widely for clean water and air, flood regulation, healthier lifestyles and climate change adaptation – creating attractive, resilient and productive places to live and work in," it said.

7. Conclusions

The proposals for the Arc have been led by a small clique in Whitehall controlled from the Treasury and developed mostly behind closed doors, with little or no public consultation. Even statutory processes like Strategic Environmental Assessment have been ignored. The plans were proposed by cabinet ministers without consultation, developed by an unelected quango, approved by the Treasury, again without consultation, and supported by local enterprise partnerships which are not, legally speaking, even public bodies. The only elected bodies that have given it support are some of the local authorities in the area who understand very well that compliance with central government's diktats is a way of getting more money out of the Treasury at a time of painful austerity.

The development of the idea shines an uncomfortable light on the way the country is governed. The keenness of the ancient universities of Cambridge and Oxford, and their colleges, to support the idea reflects not only their desire to further overheat their local economies through substantial growth, but also to profit from the massive increase in the commercial value of their very extensive land holdings in the Arc. A majority of those in central government supporting the plan appear to be graduates of one or the other university.



Much of the Arc has high biodiversity value

[Stella Stafford]

The plans for the actual development of the Arc are vague, apart from very limited, but highly unsustainable, plans for transportation. These centre on a new 150km motorway between Newbury and Cambridge which would form the first stage of an "Outer M25". Beyond that is the reopening of rail services between Bicester and Bletchley and Bedford and Cambridge which, while desirable, have been in the pipeline for many years and long predate the Arc project.

The other driver for the Arc project is an ill-defined plan for a million new homes in an area which is wretchedly ill-suited to accommodate them. Virtually all would have to be located on farmland or other greenfield land of high value in natural capital terms. Given the plans for the Expressway, this is nakedly car-dependent sprawl.

The Arc area is desperately lacking in infrastructure of all kinds to accommodate such major development and parts of it are subject to flood risk. It harks back to an earlier age of cardependent sprawl. Climate change, the nutritional needs of a rising population, the low levels of natural capital in England and the need to adapt our transport system to more sustainable modes all militate against it.

The Arc is also a region of significantly above-average prosperity, much of its economy is significantly overheated and it is seriously lacking in housing and infrastructure even for its current needs. On a whole range of criteria it is one of the *least* suitable parts of the UK for such development.

Application of the Smart Growth approach, however, points to other parts of the UK which could accommodate the desired growth much more sustainably. There are places which meet the NIC's four criteria for the Arc (outstanding universities and research institutions, knowledge-intensive business, skilled workforce and historic cities), but which could meet four other criteria to achieve its objectives in a positive way: brownfield land availability, no acute housing shortage, high-quality public transport and a need for economic regeneration.

We will identify some of these areas in Part 2 of this report. Their existence, and the shortcomings of the current proposals, demonstrate clearly that now is the time to drop the existing Arc project before more public money is wasted on its development.

References

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/66 1401/Helping the Cambridge Milton Keynes Oxford corridor reach its potential digicomms.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661401/ Helping the Cambridge Milton Keynes Oxford corridor reach its potential digicomms.pdf

¹ Oxford-Cambridge Arc Puts Birmingham Sized Area of Countryside at Risk [London: Campaign to Protect Rural England news release, October 2018] http://www.cpre.org.uk/media-centre/latest-news-releases/item/4988-oxford-cambridge-arc-puts-birmingham-sized-area-countryside-at-risk

² Corridor Announced to Unlock Full Potential of England's Economic Heartland [Department for Transport press release, 12 September 2018] https://www.gov.uk/government/news/corridor-announced-to-unlock-full-potential-of-englands-economic-heartland

³ Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc [London, National Infrastructure Commission, November 2017] https://www.nic.org.uk/publications/partnering-prosperity-new-deal-cambridge-milton-keynes-oxford-arc/

⁴ Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc' [London: HM Treasury, October 2018] https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response

⁵ Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc [London, National Infrastructure Commission, November 2017] https://www.nic.org.uk/publications/partnering-prosperity-new-deal-cambridge-milton-keynes-oxford-arc/

⁶ Helping the Cambridge, Milton Keynes and Oxford corridor reach its potential [London: HM Treasury, November 2017]

⁷ Helping the Cambridge, Milton Keynes and Oxford Corridor Reach its Potential [London: HM Treasury, November 2017]

⁸ Kit Malthouse letter to local authorities [unpublished, 26 July 2018]

⁹ Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc' [London: HM Treasury, October 2018] https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response

¹⁰ Agricultural Land Classification Map London and the South East (ALC007) [Natural England, 2010] http://publications.naturalengland.org.uk/publication/141047?category=5954148537204736

¹¹ Agricultural Land Classification Map East Midlands Region (ALC005) [Natural England, 2010] http://publications.naturalengland.org.uk/publication/143027?category=5954148537204736

¹² Agricultural Land Classification Map Eastern Region (ALC008) [Natural England, 2010] http://publications.naturalengland.org.uk/publication/127056?category=5954148537204736

¹³ Berks Bucks and Oxon Wildlife Trust website [Accessed January 2019] https://www.bbowt.org.uk/wildlife/nature-matters/oxford-cambridge-expressway

Water Stressed Areas – Final Classification [London: DEFRA, August 2013]
https://www.gov.uk/government/publications/water-stressed-areas-2013-classification

¹⁵ Long term flood risk assessment for locations in England [Environment Agency] https://flood-warning-information.service.gov.uk/long-term-flood-risk

¹⁶ Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc' [London: HM Treasury, October 2018] https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response

¹⁷ Oxford to Cambridge Expressway Strategic Outline Business Case [London: Highways England, September 2018] https://www.gov.uk/government/publications/oxford-to-cambridge-expressway-strategic-study-strategic-outline-business-case

¹⁸ Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc [London, National Infrastructure Commission, November 2017] https://www.nic.org.uk/publications/partnering-prosperity-new-deal-cambridge-milton-keynes-oxford-arc/

- ¹⁹ Oxford to Cambridge Expressway Strategic Outline Business Case [London: Highways England, September 2018] https://www.gov.uk/government/publications/oxford-to-cambridge-expressway-strategic-study-strategic-outline-business-case
- ²⁰ Anthony Barker and Ben Gardiner: *Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor* [London, National Infrastructure Commission, November 2016]

https://www.nic.org.uk/publications/economic-analysis-growth-corridor-report-nic/

- ²¹ Helping the Cambridge, Milton Keynes and Oxford Corridor Reach its Potential [London: HM Treasury, November 2017]
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661401/Helping_the_Cambridge_Milton_Keynes_Oxford_corridor_reach_its_potential_digicomms.pdf
- ²² Government Response to 'Partnering for Prosperity: a New Deal for the Cambridge-Milton Keynes—Oxford Arc' [London: HM Treasury, October 2018]
- https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response
- ²³ Road Investment Strategy: Overview [London: Department for Transport, December 2014]
- ²⁴ Oxford to Cambridge Expressway Study Terms of Reference [London: Department for Transport, August 2016]
- ²⁵ Interim Report of the Oxford to Cambridge Strategic Study [London, Department for Transport, August 2016] https://www.gov.uk/government/publications/oxford-to-cambridge-expressway-strategic-study-interim-report
- ²⁶ Oxford to Cambridge Expressway Strategic Study Stakeholder Reference Group Minutes 25th February 2016 [Highways England, unpublished]
- ²⁷ Study shows Oxford to Cambridge Expressway Improvements Could Boost the Economy [Department for Transport press release, 18 August 2016] https://www.gov.uk/government/news/study-shows-oxford-to-cambridge-expressway-improvements-could-boost-the-economy
- ²⁸ Oxford to Cambridge Expressway Strategic Study Stakeholder Reference Group Minutes 7th July 2016 [Highways England, unpublished]
- ²⁹ Oxford to Cambridge Expressway Strategic Study Stakeholder Reference Group Minutes 7th July 2016 [Highways England, unpublished]
- ³⁰ Oxford to Cambridge Expressway Strategic Study Stage 3 Report [London, Department for Transport and Highways England, November 2016] https://www.gov.uk/government/publications/oxford-to-cambridge-expressway-strategic-study-stage-3-report
- 31 Highways England letter dated 16 December 2016, addressee undisclosed.
- https://www.gov.uk/government/publications/oxford-to-cambridge-expressway-stage-3-report-foi
- ³² Route Strategies Our High-Level Approach to Informing Future Investment on Roads [Highways England, 2016]
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/610459/N160005 Route_Strategies_Approach2.pdf
- ³³ Highways England presentation to the Stakeholder Reference Group, 1 March 2017 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603496/
 A1-east-of-england-stakeholder-presentation-march-2017.pdf
- ³⁴ Highways England presentation to the Stakeholder Reference Group, 18 October 2017 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/657244/A1-east-of-england-stakeholder-presentation-oct-2017.pdf
- ³⁵ House of Commons Committee of Public Accounts: *Cities and Local Growth* [Sixth Report of Session 2016-17, HC296] https://publications.parliament.uk/pa/cm201617/cmselect/cmpubacc/296/296.pdf
- Deputy Prime Minister Launches More City Deals [Deputy Prime Minister's Office press release, 19 February 2013] https://www.gov.uk/government/news/deputy-prime-minister-launches-more-city-deals
- ³⁷ A Countywide Approach to Meeting the Unmet Housing Need of Oxford [Oxford: Oxfordshire Growth Board, September 2016]
- ³⁸ Oxford's Housing Needs The Sequel Makes No Sense [Barton Willmore Blog, 20 September 2016] http://www.bartonwillmore.co.uk/Knowledge/Blogs/OxfordsHousingNeeds
- ³⁹ "About" page.[Greater Cambridge Partnership website, viewed 19 September 2018] https://www.greatercambridge.org.uk/about-city-deal/
- ⁴⁰ Email from redacted individual inviting people to attend meeting on 14 September 2017 "to "discuss ways to meet the full potential of the corridor containing Oxford, Milton Keynes and Oxford".

- ⁴¹ Cambridge-Milton Keynes-Oxford Corridor: Interim Report [London: National Infrastructure Commission, November 2016] https://www.nic.org.uk/publications/national-infrastructure-commissions-interim-report-cambridge-milton-keynes-oxford-corridor/
- ⁴² National Infrastructure Commission minutes 27 January 2017. https://www.nic.org.uk/wp-content/uploads/Combined-Minutes-of-Commission-Meetings-January-2017-to-June-2018.pdf
- ⁴³ Anthony Barker and Ben Gardiner: *Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor* [London, National Infrastructure Commission, November 2016]

https://www.nic.org.uk/publications/economic-analysis-growth-corridor-report-nic/

- ⁴⁴ Finance and Investment Workstream [London: National Infrastructure Commission, March 2017] https://www.nic.org.uk/publications/funding-investment-analysis-report-nic/
- ⁴⁵ Simon Binks, David Pierce & Oliver Ricketts: *Cambridge-Milton Keynes-Oxford Corridor Transport Workstream* [London: National Infrastructure Commission, March 2017] https://www.nic.org.uk/publications/transport-analysis-report-nic/
- ⁴⁶ National Infrastructure Commission minutes 27 July 2017. https://www.nic.org.uk/wp-content/uploads/Combined-Minutes-of-Commission-Meetings-January-2017-to-June-2018.pdf
- ⁴⁷ Adonis: New infrastructure can bring first new towns for half a century and billions to national economy [London: National Infrastructure Commission press release, 17 November 2017] https://www.nic.org.uk/news/adonis-new-infrastructure-can-bring-first-new-towns-half-century-billions-national-economy/
- ⁴⁸ Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc [London, National Infrastructure Commission, November 2017] https://www.nic.org.uk/publications/partnering-prosperity-new-deal-cambridge-milton-keynes-oxford-arc/
- ⁴⁹ The Cambridge-Milton Keynes-Oxford Arc: Responses to the Commission's report [London: National Infrastructure Commission press release, 17 November 2017] https://www.nic.org.uk/news/cambridge-milton-keynes-oxford-arc-responses-commissions-report/
- ⁵⁰ Jane Murphy: *Leader Statement in Response to a Letter from the Minister of State for Housing* [Milton: South Oxfordshire District Council, August 2018] http://www.southoxon.gov.uk/news/2018/2018-08/leader-statement-response-letter-minister-state-housing
- ⁵¹ Universities' Meeting with National Infrastructure Commission, Wednesday 1st June 2016 [Cranfield: Cranfield University note of meeting, unpublished]
- ⁵² Oxfordshire Growth Strategy Meeting [Unpublished agenda, 27 February 2018]
- ⁵³ Cambridge-Milton Keynes-Oxford Phase 1 Call for Evidence Responses [London, National Infrastructure Commission, March 2017] https://www.nic.org.uk/publications/992/
- ⁵⁴ Annual Report and Accounts 2017 {London: Urban & Civic plc]
- ⁵⁵ Innovation and Growth Factsheet Series City Deals [Universities UK, June 2016] https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2016/city-deals-factsheet.pdf
- ⁵⁶ Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc' [London: HM Treasury, October 2018] https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response
- ⁵⁷ Elitist Britain? [London: Commission on Social Mobility and Child Poverty Commission, August 2014] https://www.gov.uk/government/publications/elitist-britain
- ⁵⁸ Oxford-Milton Keynes-Cambridge Corridor All-Party Parliamentary Group launched [England's Economic Heartland press release, 1 February 2018] http://www.englandseconomicheartland.com/latest-news/Pages/oxford-milton-keynes-cambridge-corridor-all-party-parliamentary-group-launched.aspx
- ⁵⁹ Kit Malthouse letter to local authorities [unpublished, 26 July 2018]
- ⁶⁰ Anthony Barker and Ben Gardiner: *Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor* [London, National Infrastructure Commission, November 2016]

 $\underline{\text{https://www.nic.org.uk/publications/economic-analysis-growth-corridor-report-nic/}}$

- ⁶¹ Higher Education Funding Council for England: Circular letter, 6 March 2007.
 http://www.hefce.ac.uk/pubs/circlets/2007/cl06
 _07/
- ⁶² Research Excellence Framework 2014, Results and Submissions. http://results.ref.ac.uk/Results
- 63 Industrial Strategy {London: HM Government, November 2017, Cm 9528] https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future
- ⁶⁴ Office for National Statistics: *Regional and Sub-Regional Productivity in the UK: February 2018* [London; Office for National Statistics, 2018]

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionaland subregionalproductivityintheuk/february2018

⁶⁵ Anthony Barker and Ben Gardiner: *Cambridge, Milton Keynes, Oxford, Northampton Growth Corridor* [London, National Infrastructure Commission, November 2016]

https://www.nic.org.uk/publications/economic-analysis-growth-corridor-report-nic/

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/66140 1/Helping the Cambridge Milton Keynes Oxford corridor reach its potential digicomms.pdf

- ⁶⁷ Kit Malthouse MP [Evidence to the Commons Housing, Communities and Local Government Committee inquiry on land value capture, 5 September 2018]
- http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/housing-communities-and-local-government-committee/land-value-capture/oral/88749.html
- ⁶⁸ Land Value Capture [Commons Housing, Communities and Local Government Committee report, September 2018] https://www.parliament.uk/business/committees/committees-a-z/commons-select/housing-communities-and-local-government-committee/news/land-value-capture-report-published-17-19/
- ⁶⁹ Government Response to the Housing, Communities and Local Government Select Committee Inquiry on Land Value Capture [CM 9734, November 2018] https://www.gov.uk/government/publications/land-value-capture-government-response-to-the-select-committee-inquiry
- ⁷⁰ Government Response to 'Partnering for Prosperity: A New Deal for the Cambridge-Milton Keynes-Oxford Arc' [London: HM Treasury, October 2018] https://www.gov.uk/government/publications/cambridge-milton-keynes-oxford-arc-study-government-response

Edited by Jon Reeds Published by Smart Growth UK, 17 Clifton Road, Wallington, SM6 8AL February 2019

⁶⁶ Helping the Cambridge, Milton Keynes and Oxford Corridor Reach its Potential [London: HM Treasury, November 2017]