



RESEARCH &
INNOVATION

DAVID LOCK ASSOCIATES:

Delivering bespoke strategies for planning, masterplanning and placemaking

We are an independent town planning and urban design consultancy with a reputation for delivering successful, commercially aware projects at all scales.

Our projects represent bespoke strategies born out of our extensive industry expertise, our flair for innovation and our focus on excellent design. They influence decision making and investment choices by the public and private sectors. At the strategic scale they help to deliver infrastructure, transform economies and evolve the geography of towns, cities and sub-regions.



Our motivation is our desire to use our combined skills and experience in spatially-led planning, working collaboratively with trusted partners, to help deliver great and sustainable places where communities can grow and prosper.

We have been based in Milton Keynes since our inception in 1988.

Please get in touch if you would like to learn more about our unique offer.

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RESEARCH & INNOVATION

Investing in innovation and contributing to research helps to ensure that our practice stays at the forefront of planning and urban design.

We collaborate with economists, built environment experts and the public sector to help build a robust evidence base through well structured research commissions. And we apply our research findings to our own projects to promote better places. For example, our work on Active Design for Sport England now influences our masterplanning and our approach to green infrastructure.

Our skilled team includes a dedicated Communication and Mapping team who are constantly innovating to support our core business and deliver exciting opportunities within our projects, as well as something new for our clients. The recent expansion of our GIS team has brought this capability front and centre of our work. From communicating ideas, sharing information, encouraging collaboration to coordinating delivery, the GIS team are now invaluable within our project teams.

This booklet provides an insight into recent research commissions and innovations.

OXFORD – MILTON KEYNES – CAMBRIDGE ARC: NIC SUBMISSION

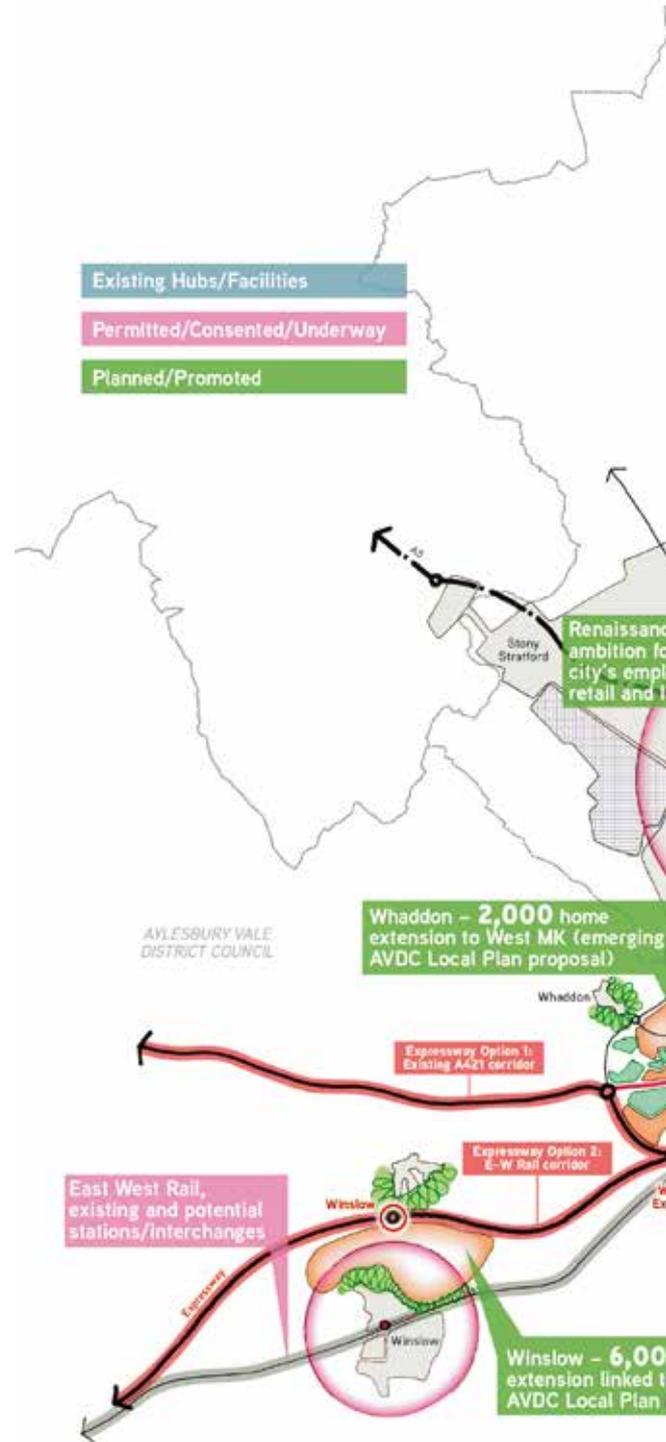
In 2016, the National Infrastructure Commission was tasked with gathering evidence on the reasons behind the failed potential of the Corridor to deliver planned levels of housing growth despite a buoyant economy and planned strategic infrastructure improvements, and the capacity of the Corridor to accommodate 'transformational' levels of growth to 2050.

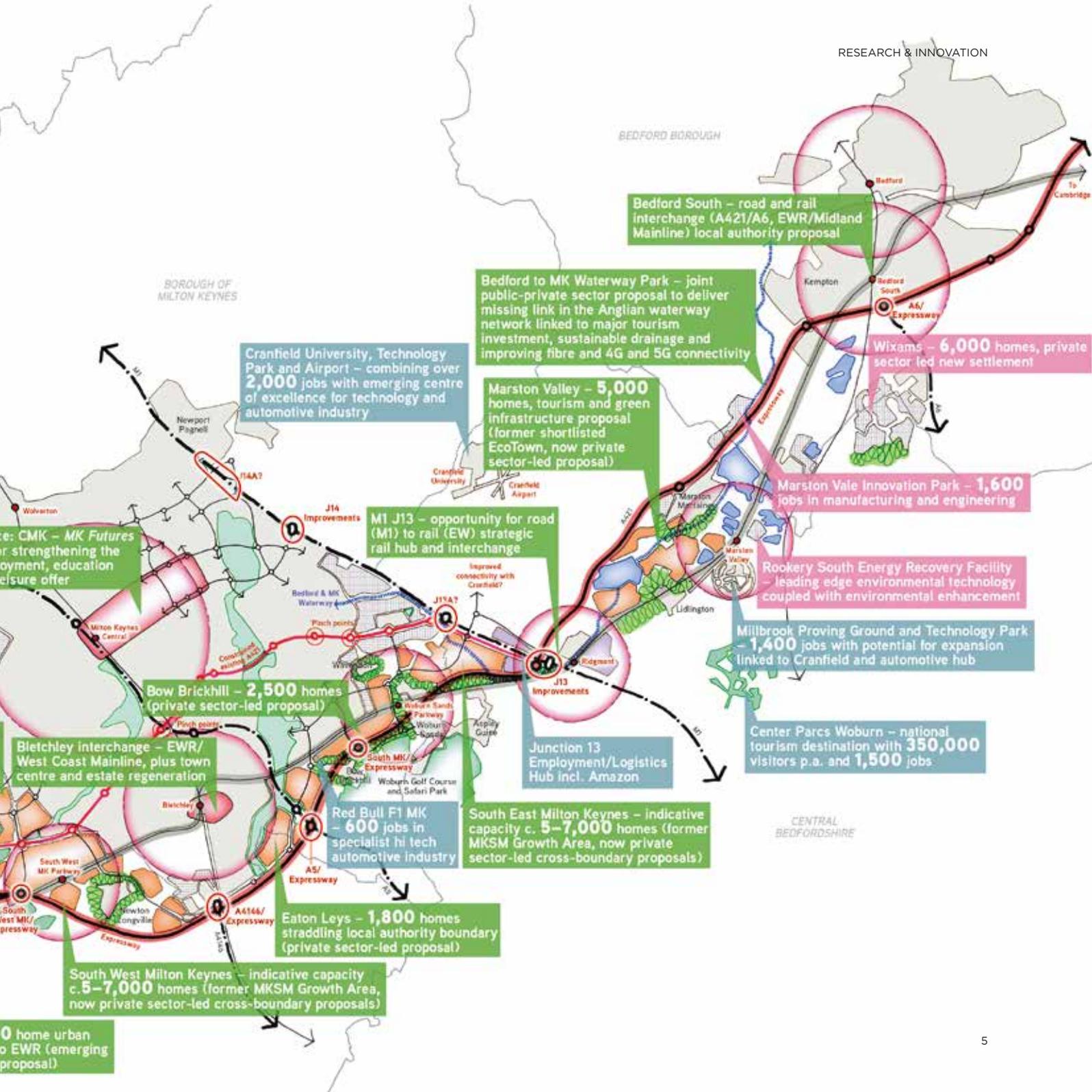
Our observation, that much of the submitted NIC evidence base lacked a spatial dimension, led to a series of DLA in-house research projects which sought to stimulate debate around the opportunities for delivering the level of integrated and cross-boundary growth recommended by the NIC.

Central to this work was our mapping, analysis and creative thinking around the role that strategic infrastructure has to play in the unlocking of the potential long term.

We presented our analysis at the National Infrastructure Forum in July 2017, allowing our work to be shared with a wider audience than previously and capturing the interest of a number of delivery bodies for whom our spatial considerations added a new dimension to their activities.

Our research work has also led to DLA securing commissions by a number of local authorities in the western section of the Corridor, keen to work together to develop spatially-led growth strategies as we move towards a single integrated strategic plan for the Corridor.





Bedford South – road and rail interchange (A421/A6, EWR/Midland Mainline) local authority proposal

Bedford to MK Waterway Park – joint public-private sector proposal to deliver missing link in the Anglian waterway network linked to major tourism investment, sustainable drainage and improving fibre and 4G and 5G connectivity

Wixams – 6,000 homes, private sector led new settlement

Cranfield University, Technology Park and Airport – combining over 2,000 jobs with emerging centre of excellence for technology and automotive industry

Marston Valley – 5,000 homes, tourism and green infrastructure proposal (former shortlisted EcoTown, now private sector-led proposal)

Marston Vale Innovation Park – 1,600 jobs in manufacturing and engineering

M1 J13 – opportunity for road (M1) to rail (EW) strategic rail hub and interchange

Rookery South Energy Recovery Facility – leading edge environmental technology coupled with environmental enhancement

CMK – MK Futures for strengthening the employment, education leisure offer

Millbrook Proving Ground and Technology Park – 1,400 jobs with potential for expansion linked to Cranfield and automotive hub

Bow Brickhill – 2,500 homes (private sector-led proposal)

Junction 13 Employment/Logistics Hub incl. Amazon

Bletchley interchange – EWR/ West Coast Mainline, plus town centre and estate regeneration

Red Bull F1 MK – 600 jobs in specialist hi tech automotive industry

South East Milton Keynes – indicative capacity c. 5–7,000 homes (former MKSM Growth Area, now private sector-led cross-boundary proposals)

Center Parcs Woburn – national tourism destination with 350,000 visitors p.a. and 1,500 jobs.

Eaton Leys – 1,800 homes straddling local authority boundary (private sector-led proposal)

South West Milton Keynes – indicative capacity c. 5–7,000 homes (former MKSM Growth Area, now private sector-led cross-boundary proposals)

0 home urban to EWR (emerging proposal)

CENTRAL BEDFORDSHIRE

ACTIVE DESIGN: PLANNING FOR HEALTH & WELLBEING

CLIENT: SPORT ENGLAND

Active Design is an innovative set of planning and urban design guidelines that aims to get more people moving through the design and layout of places. Prepared by DLA and Sport England and supported by Public Health England this guidance builds on the original Active Design published in 2007.

Active Design sets out Ten Principles to inspire and inform the design and layout of cities, towns, villages, neighbourhoods, buildings, streets and open spaces to promote sport and physical activity and active lifestyles. The guide draws on a series of case studies that set out practical real-life examples of the Ten Active Design Principles in practice and provides practical advice to inspire those engaged in shaping places to deliver more active and healthier environments.

Launched in October 2015 at Public Health England's 'Everybody Active, Everyday: One Year On' event, Active Design has been well received and was shortlisted as a finalist in the 2016 Royal Town Planning Institute's (RTPI) Awards for Planning Excellence.

Active Design

Planning for health and wellbeing



8. Active buildings

The internal and external layout, design and use of buildings should promote opportunities for physical activity.
 Providing opportunities for activity inside and around buildings.

The design of buildings and their surroundings will all play a role in supporting and encouraging active lifestyles. For example, the internal design and layout of a building can provide access and well used entrances and exits. Where possible, a network should be created to promote physical activity as part of daily routines, particularly at the workplace.

Building layouts can also incorporate outdoor spaces that are accessible to a variety of permanent and/or temporary sport and physical activity related opportunities, such as public tennis, or temporary facilities at various outdoor events.

Well-ventilated external layout can promote the use of stairs by providing clear signage, such as to create and activate to use. Active travel can be supported by providing appropriate and secure cycle parking, lockers, showers and changing rooms. Public cycle parking can also be provided to encourage facilities to encourage active travel.

Well-ventilated internal layout can promote the use of stairs by providing clear signage, such as to create and activate to use. Active travel can be supported by providing appropriate and secure cycle parking, lockers, showers and changing rooms. Public cycle parking can also be provided to encourage facilities to encourage active travel.

Active buildings can also help address sedentary behaviour - in-vehicle and office - by providing opportunities for physical activity. For example, well-planned routes that encourage discussion and how to meet clients can reduce sedentary behaviour.

Key facts

At the UK, an average adult spends 10h sitting at a desk every day.

Stairs are used by only 10% of people in the UK.

1. The building is designed to be used by a wide range of people, including those with disabilities and those who are unable to use stairs.



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Active buildings



GLA DENSITY STUDY

CLIENT: GREATER LONDON AUTHORITY

The new London Plan faces the dual challenge of meeting ever growing housing need and maintaining housing standards. Working jointly with Three Dragons, experts in research and policy-making, DLA has completed a density study of the Capital, with the aim of understanding how well higher density schemes and tall buildings perform relative to London Plan policy objectives, affordability and financial viability. The analysis, which included reviewing the relationship between density, building height, form and design outcomes, was informed by DLA's expertise in masterplanning and understanding of the importance of context in placemaking. Marrying residential design standards (to ensure homes are fit for purpose) with robust placemaking and community building are the key to making high density environments work for residents.

This built on previous studies by DLA informing the London Plan including a viability assessment for the London-wide SHLAA, and a viability assessment to establish the impact of the adoption of the Government's new national housing standards within London Plan policy on the viability of development in London. The viability assessment demonstrated that the introduction of the nationally described space standards did not represent a significant determinant in the viability and the deliverability of housing development in London. DLA represented the GLA at the Examination in Public where the assessment was found to be robust.





SENSE OF PLACE

CLIENT: NATIONAL GRID

On behalf of National Grid, DLA developed innovative new design guidelines to promote an improved design approach to development near high voltage overhead power lines. The groundbreaking initiative was one of the first examples of a privatised utility company taking an active participation in the urban design debate.

The 'Sense of Place' guidelines give practical guidance on how developers and planning authorities can reduce the visual impact of existing pylons and high voltage overhead lines on new residential and commercial development. The final report demonstrates "joined up thinking" that supports and integrates with the requirements of the Government's planning policy, embraces the principles of good urban design and regeneration, and finds new ways to avoid the unnecessary sterilisation of land near high voltage overhead lines.

The guidelines were produced in consultation with a wide range of interest groups, organisations and individuals from the development industry, and are supported by a range of organisations including the TCPA, the RTPI, the Landscape Institute, the National Playing Fields Association, the Civic Trust and major developers including Countryside Properties plc and the Berkeley Group plc.

In 2018 we were re-appointed by National Grid to produce the new and updated edition of the guidelines.



IMPACT OF SECTION 106 OBLIGATIONS ON GROWTH

CLIENT: DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG)

DLA was appointed as part of a wider consultancy team, made up of Reading University, Three Dragons, Hives Planning and the law firm DLA Piper, to research the impact of the planning system on the development industry.

The DCLG commissioned the research to examine the extent and value of planning obligations entered into in England in the year 2011 to 2012. The study built on three previous studies undertaken from 2003 to 2008 - the scope of this update was broadened to evaluate primary and secondary data to address a range of related issues about the challenges and trends in setting planning obligations and the shift to the new regime created by the introduction of the Community Infrastructure Levy.

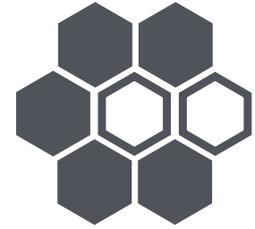
DLA was part of a group of leading practitioners used to help explore qualitative issues regarding the role and impact of the planning system on the delivery of development in a series of workshops. DLA was also responsible for undertaking a number of in-depth interviews with developers and local planning authority officers to understand the causes of stalled sites.

This work was important in informing the wider Three Dragons and Reading University analysis, in which a number of findings could be drawn, some of these included:

- An overall reduction in the level of development activity since the previous studies;
- The number of planning agreements falling by 1/3 compared to 2007-08;
- A fall of 23% in the value of planning obligations since 2007-08;
- Roughly 32,000 affordable homes were achieved in 2011-12; a 33% reduction compared to 2007-08;
- Stalled sites were mostly affected in lower land value areas whilst higher land value areas such as London proved more resilient and able to bounce back from the fall in the market in 2007/08.

The research was published in the form of the Section 106 Planning Obligations in England 2011-2012 final report.

CHLOE 'CONCEPTUAL HEXAGONAL LAND-USE OVERLAY ENGINE'



Developed in-house by DLA, CHLOE is an interactive mapping and reporting tool that promotes discussion and engagement by allowing its users to engage and contribute to the design process.

Ideally suited to Community Stakeholder workshops and/or Public Consultation events, CHLOE provides a platform for participants and local people to consider development that is appropriate, proportionate and that they feel best represents the existing community's needs.

As proposals are built up tile-by-tile, live updates are reported back to guide the user through the design process allowing them to make informed decisions about education provision, open space standards, community facilities and employment types/jobs to ensure that the development in question is sustainable and that the area's needs are met.

Users can customise assumptions for each site, including: residential densities, household size and child yield and open space standards allowing different scenarios to be tested, recorded and compared. A togglable layer can show or hide the site's constraints and opportunities, such as: drainage, topography, existing nearby facilities, green infrastructure and transport to provide more detailed information to the user about the area in question.

CHLOE outputs are compatible with DLA's GIS services allowing for seamless integration with our Urban Design, Planning & Graphic Design teams.



GIS ONLINE



At DLA we have, as part of our GIS software suite, ArcGIS Online (AGOL). AGOL is an ESRI provided web-based mapping system which allows for greater sharing and collaboration between colleagues and external parties. The platform allows us to create and share interactive mapping, data and files in a secure, intuitive and accessible manner. Furthermore, AGOL utilises mobile technology, with applications available for data exploration and collection when in the field. This can be done online and offline to ensure the data and mapping are always available.

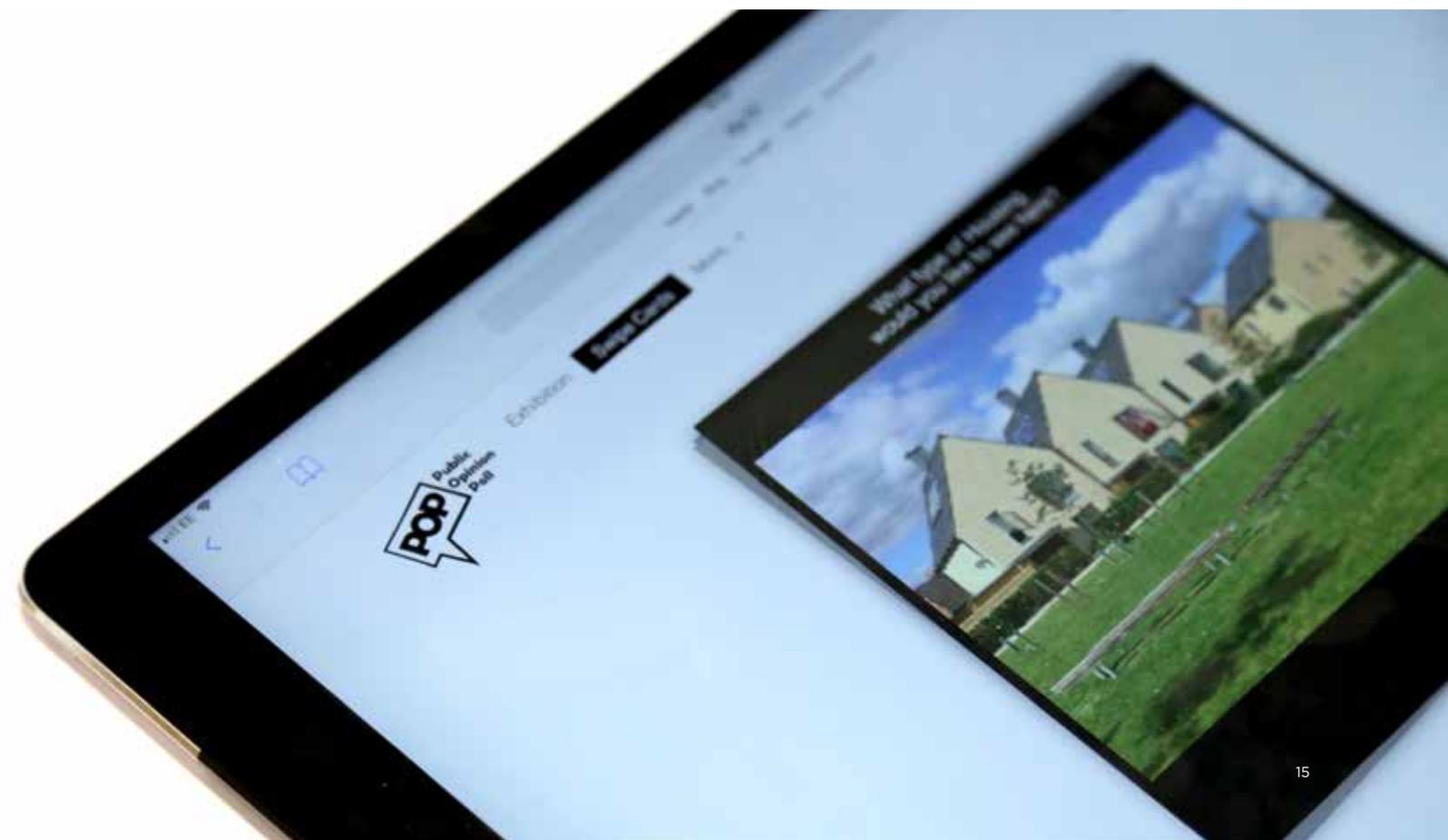
As part of Milton Keynes reaching its 50th birthday in 2017, DLA created a special website to help mark the occasion, dedicated to the beautiful trees in the Borough. We named the website MK50 Trees.



POP



POP is the interactive Public Opinion Poll app used to engage stakeholders in proposals and provide invaluable feedback. This public consultation tool is compatible with smartphones and tablets. The swipe cards provide ideas as to how development proposals could take shape, such as the design of housing, types of open space and local facilities. POP enables stakeholders to have their say on the ideas they like and dislike with a simple swipe of the finger, left if they dislike, right for those ideas they like.



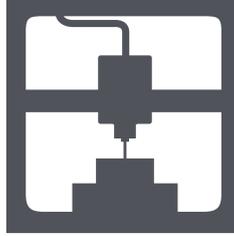
PIMS



PIMS is a relational database for planning projects to enable the monitoring of planning conditions and obligations through the life cycle of the project. It has an intuitive web-map interface to allow the user to explore the spatial and tabular data, view related objects, export information and view files related to the project from a centralised source on any device. PIMS was developed to make monitoring more efficient and to ensure a high level of data confidence through reducing duplication and fragmentation.



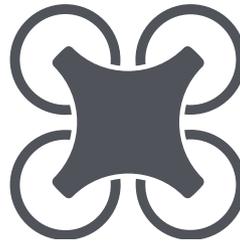
3D PRINTING



We offer bespoke visioning within our projects using the latest in 3D printing technology that combines our placemaking and masterplanning capabilities into physical scale models. The outputs can be used for master plans, consultation events and ongoing development options. 3D printing achieves a level of accuracy and detail that can really support our more traditional techniques.



DRONE TECHNOLOGY



Recently we have begun to use drone technology to increase our understanding of site potential, exploring opportunities literally from a new perspective. It also allows us to combine with GIS and graphic design software to produce potentially stunning 3D models understanding a site more fully and producing material for engagement or promotion.



THE BREADTH OF OUR SERVICES

We work with public and private sector clients of all sizes to create deliverable planning strategies and successful master plans which in turn secure robust permissions and guide high quality development on the ground.

The breadth of our services includes all core planning and masterplanning activities, and is enhanced by a wide range of associated skills which enable us to produce project specific outputs.

Town Planning

Strategic planning
Planning strategies
Site promotion & advocacy
Outline, detailed and reserved matters applications
Environmental statements
S106 monitoring
Consultation strategies and stakeholder engagement
Planning application management including team coordination
Viability assessments & development advice

Masterplanning & Urban Design

Strategic spatial strategies
Masterplanning
Development Frameworks and Parameter Plans
Site layouts
Design & Access Statements
Design codes & site briefs
Phasing strategies

Communication & Mapping

Graphic Design
AutoCAD
GIS
3D illustration and visualisations
3D printing
Drone imagery



