

THINK GIS

ISSUE 51
SPRING
2023



3 DOMINO'S PIZZA GROUP

Delivering improved customer experiences

7 NATIONAL HIGHWAYS

Maximising value from geospatial data

11 JURASSIC FIBRE

Collaborating effectively with a digital twin

13 NORFOLK FIRE & RESCUE SERVICE

Optimising efficiency to help save lives

WELCOME IT'S A JOURNEY

Esri UK's newly-appointed managing director, Peter Wilkinson, is neither new to the geographic information system (GIS) industry nor new to the company. In this article, he shares his perspective on the changes he has witnessed so far in his career.



I was somewhat shocked recently when someone reminded me I've been working with GIS for over 25 years. While it doesn't seem that long to me, it led to an interesting conversation about some of the significant developments in GIS technology I have witnessed during this time.

GIS has begun to penetrate our world in ways that I could barely have anticipated at the start of my career. It now touches so many parts of our day-to-day lives that we interact with it sometimes without even realising it. Do we stop to think that our pizza deliveries have been planned to the minute using GIS? Do we realise that our children are learning history in primary school through the medium of GIS? And, when we visit a pharmacy, do we consider how GIS is helping to keep it open?

Probably not.

Yet, GIS is doing all these things. In this issue of ThinkGIS, you can read how Domino's Pizza is using GIS to help it deliver pizzas more quickly (page 3) and find out about an exciting new initiative enabling school children to learn about Victorian Britain using GIS (page 15). You will also, no doubt, be impressed by the geospatial analysis that NHS South Central and West has undertaken to provide equitable access to funding for pharmacies (page 6).

When I first entered this industry, GIS was seen by many as a niche technology accessed through workstations,

command prompts or, for the lucky few, a desktop application. Now, more and more organisations are taking GIS to mobile devices, virtual reality headsets and into the cloud. The latest technology makes GIS accessible to many more people, supports collaboration between multiple organisations and enables systems to be significantly more scalable and performant. Companies like LSTC (page 14) have migrated to Esri's ArcGIS Pro and are now making increasing use of ArcGIS Online tools and web content to improve their efficiency. Other organisations, such as National Highways (page 7), have migrated to Esri UK's Managed Cloud Service and are now using the cloud to deliver a myriad of GIS apps and services for thousands of employees.

In over two decades at Esri UK, I have worked in a number of teams including presales, customer success and, most recently, professional services. During this time, I have met a large number of Esri UK's customers and I am always amazed by the diversity and creativity of their GIS solutions. There are large commercial organisations, like Carter Jonas, that are using GIS as the basis of key nationwide business processes (page 12) and small charities, such as Chance to Shine (page 4), that are using GIS in a small way to make a big difference to the lives of young people. Historic England is an organisation that looks to the past, yet it too is very much focused on the future and using GIS to share its archaeological data and historic images (page 5).

So, where will GIS take us next? Across almost all industry sectors, organisations are exploring new ways to use geospatial technologies and data. One of the current trends that everyone is talking about is the concept of digital twins, yet, in my mind, GIS is – and always has been – a digital twin system. GIS can provide a geospatial, digital representation of the real world, whether this is a city, a utility network or a building. Nottingham City Council has created a digital twin of the entire city of Nottingham to support planning application processes (page 10), while Jurassic Fibre uses GIS to gather accurate information for its digital twin and accelerate the rollout of broadband (page 11). Norfolk Fire and Rescue Services has created a GIS-based digital twin of thousands of fire hydrants (page 13). These organisations – and many more like them – are using digital twins to improve collaboration, accelerate processes and engage with customers.

So, in 25 years, GIS has evolved from a workstation solution into a 3D digital twin. And the evolution won't stop here. None of us can foresee exactly what's on the road ahead, but I'm looking forward to continuing this journey.

Peter Wilkinson
Managing Director,
Esri UK

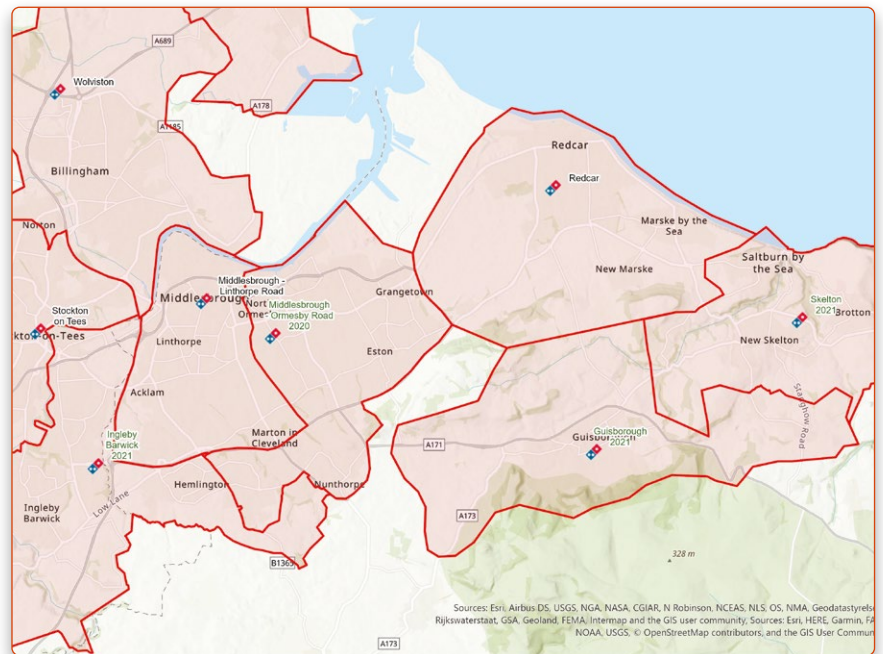
DOMINO'S PIZZA GROUP DELIVERS IMPROVED CUSTOMER EXPERIENCES

The UK's leading pizza brand is optimising the locations of new stores to help it deliver food faster, increase customer satisfaction and operate more sustainably.

Domino's Pizza Group already has 1,190 stores across the UK and over 70 franchise partners, so it has to plan and prioritise the development of new stores very strategically. Having recently migrated to Esri UK's Managed Cloud Service, the organisation now uses ArcGIS Pro and interactive web maps built with ArcGIS Online to analyse a multitude of factors including delivery distances, housing growth and the competitive landscape. It then uses this geospatial insight to ensure that new stores are sited in the right places to deliver the biggest improvements in customer experience.

One of the organisation's franchise partners in North East England used the intelligence gained from ArcGIS to better understand its local market and calculate the number of customer addresses within a six-minute and nine-minute drive of proposed new stores. It then expanded its business from three stores to seven, shaving 1.5 minutes from average delivery times, reducing late orders down to just 7% and creating a 10% uplift in customer satisfaction.

With a better understanding of delivery distances between stores and customers, Domino's Pizza can also optimise its nationwide network of stores to reduce carbon emissions. Recently, the organisation used ArcGIS Pro Network Analyst to analyse cycle times on road and cycle networks and plan the development of a new store in Hammersmith, London, from which all deliveries will be made via pedal power. This store is expected to reduce carbon emissions by over a third and will provide a blueprint for the future of fast food delivery.



Domino's Pizza used ArcGIS for data-driven network planning in Teesside, improving service and market penetration

"ArcGIS is really important to us for network planning and optimisation, enabling us to help our franchise partners to deliver pizzas as quickly as possible and improve their customer service."

Neil Andrews
Head of Location Planning,
Domino's Pizza Group

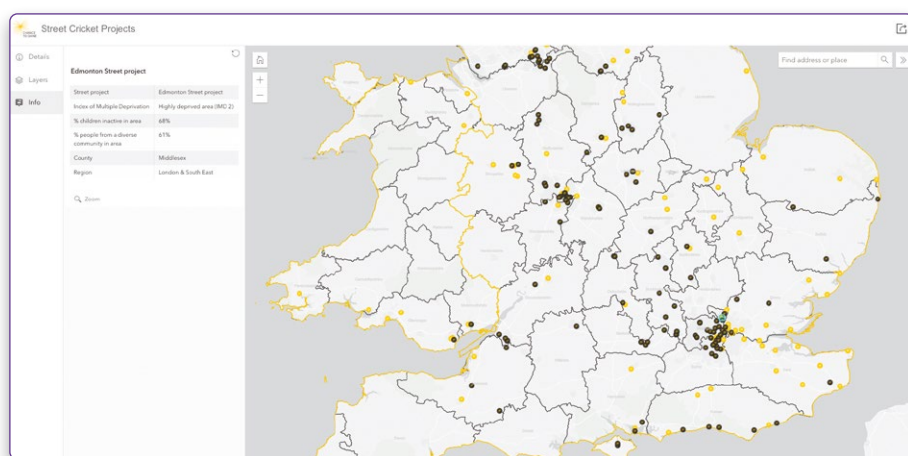


10%
uplift in customer
satisfaction

DATA VISUALISATION

CHANCE TO SHINE PROVIDES EQUITABLE ACCESS TO CRICKET COACHING

Children from ethnically diverse backgrounds and deprived communities are being given new opportunities to play, learn and develop through cricket.



ArcGIS allows Chance to Shine to place street cricket projects in the places that need them the most, using data including the Index of Multiple Deprivation (IMD) ethnic diversity and activity levels

The national cricket charity Chance to Shine works with 41 county cricket boards and other partners across England, Scotland and Wales to help inspire young people through the sport. Using ArcGIS Online for the first time, the charity has built an interactive web map that enables it to visualise where cricket facilities are already available and where gaps exist. It then uses the web map to analyse data on deprivation, eligibility for free school meals, ethnicity and inactivity to help its partners deliver new cricket programmes precisely where the need is greatest.

In the last twelve months, Chance to Shine has used ArcGIS Online to help it initiate 100 new street cricket projects nationwide, bringing free, weekly cricket sessions to community groups and schools in the most deprived areas of the UK. Two-thirds of the young people who are currently taking part in these street cricket programmes live in the 30% most deprived parts of the country. Furthermore, 81% of the young people who attend are from ethnically diverse backgrounds.

Critically, the insight gained from ArcGIS Online is helping the charity to make detailed funding applications, have well-informed conversations with potential donors and work towards raising at least £375,000 per year to sustain existing street projects and grow the programme. Although it is a national charity, Chance to Shine can show grant-providers where their money will be spent, at a local level, why these communities in particular need more sports-based activities and exactly where the charity is making a difference.

“We can now visualise the locations of cricket facilities and areas of deprivation, which helps us to adopt a more focused strategy to make cricket an equitable sport for all young people.”

Zoya Zia
Senior Impact and Evaluation Officer,
Chance to Shine



Find out more >

DATA VISUALISATION

HISTORIC ENGLAND BRINGS THE PAST TO LIFE

The public body responsible for England's historic environment is sharing its archaeological data visually on interactive maps to help more people discover, understand and value the nation's past.

Historic England is the custodian of millions of archived resources ranging from the first aerial photographs, taken from hot-air balloons, and hand-drawn maps of archaeological sites, to the latest lidar and satellite images. Now many of these precious resources are being digitised, standardised and shared via ArcGIS, helping to bring the past to life for people with an interest in local history.

One new app, called the Aerial Archaeology Mapping Explorer (AAME), makes mapping and interpretation work carried out by Historic England (and other organisations grant-aided by it) easily available in one place, to a standardised level, for the first time. Built using ArcGIS Web AppBuilder, it includes a query tool and allows users to zoom into specific archaeological features, such as camps along Hadrian's wall. Anyone can click on these features

to read details about them, access hyperlinks to historical information, held by local Historic Environment Records and Historic England, and better understand the significance of these ancient sites.

Another data visualisation solution, called the Aerial Photo Explorer (APEX), enables people to view around 400,000 specialist oblique photographs and 50,000 vertical photographs of England in full resolution. Also developed with ArcGIS Web AppBuilder, APEX provides a fascinating insight into the development and expansion of England's urban areas and changes to the rural landscape over more than a century. Historic England is steadily adding more and more resources to this ArcGIS solution and aims to eventually make up to 6 million historic images easily accessible to everyone.

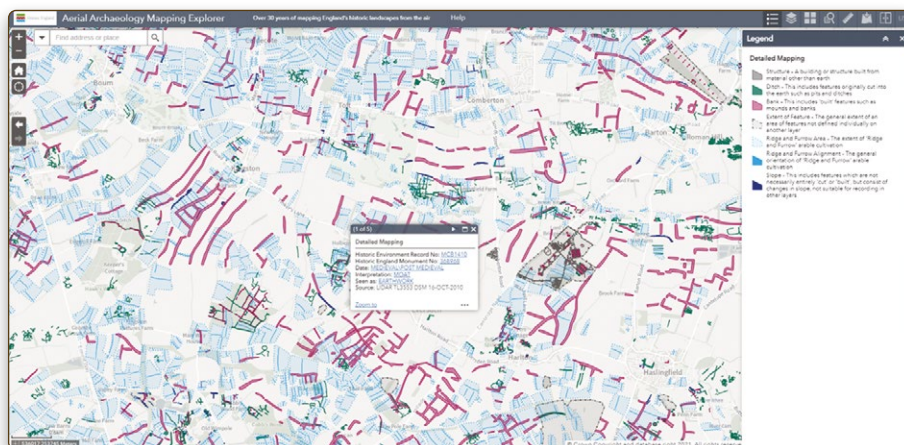


© Historic England Archive

"It is only by bringing together imagery, mapping and reports and presenting it all geospatially on an interactive digital map, that we can help people gain a deeper understanding of the archaeology of England."

Simon Crutchley
Remote Sensing Development Manager,
Historic England

Historic England's Aerial Archaeology Mapping Explorer showing medieval earthworks and other historic features in an area of Cambridgeshire



450,000
historic images
available to view

ANALYTICAL INSIGHTS

NHS PROTECTS PATIENT ACCESS TO COMMUNITY PHARMACIES

Geospatial analysis is being used to direct government funding to the right places, to give people better access to community pharmacies and reduce health inequalities in England.

Recognising that it is vitally important for everyone to have access to a pharmacy near where they live, work or shop, the Department of Health and Social Care provides financial support for pharmacies in more remote locations, where other pharmacies are scarce. Now, it can make decisions about which pharmacies to fund more objectively, efficiently and consistently, using an end-to-end solution developed by NHS South, Central and West (SCW) on behalf of a wide range of NHS stakeholders.

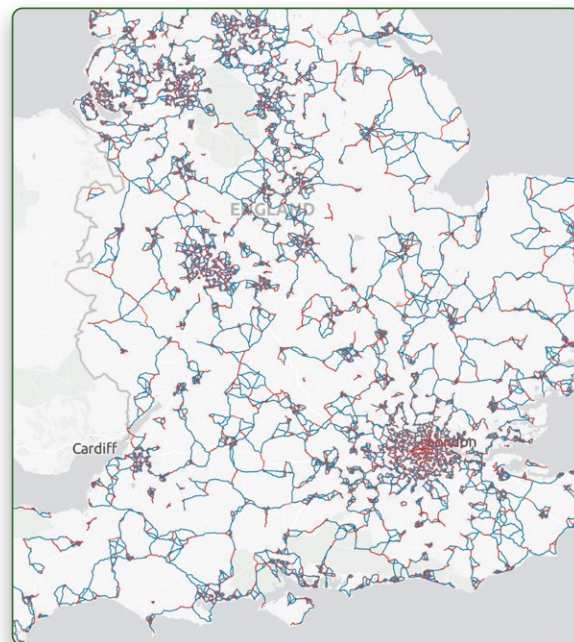
As a fundamental part of the solution, SCW geocoded and analysed over 11,600 community pharmacies in England and used the network analysis capabilities of ArcGIS Pro to calculate walking distances from each pharmacy to the five closest pharmacies. It then

shared this insight visually on interactive maps, using ArcGIS Hub, enabling the Department of Health and Social Care, as well as individual pharmacies, to see the walking routes calculated and better understand the process for determining eligibility for funding.

SCW also developed an online form using ArcGIS Survey123 that pharmacists can use to ask for a review and an Esri Dashboard enabling regional teams within NHS England to monitor the progress of reviews. This fully integrated, analytical solution gives the Department of Health and Social Care confidence that its budget is being targeted at the right pharmacies and helps it to ensure that 89% of people live within a 20-minute walk of a pharmacy.

"We have built an end-to-end solution that enables government funding to be distributed appropriately and makes the entire decision-making process transparent to all stakeholders."

Ian Maxfield
Associate Director of Geospatial Services, NHS South, Central and West Commissioning Support Unit



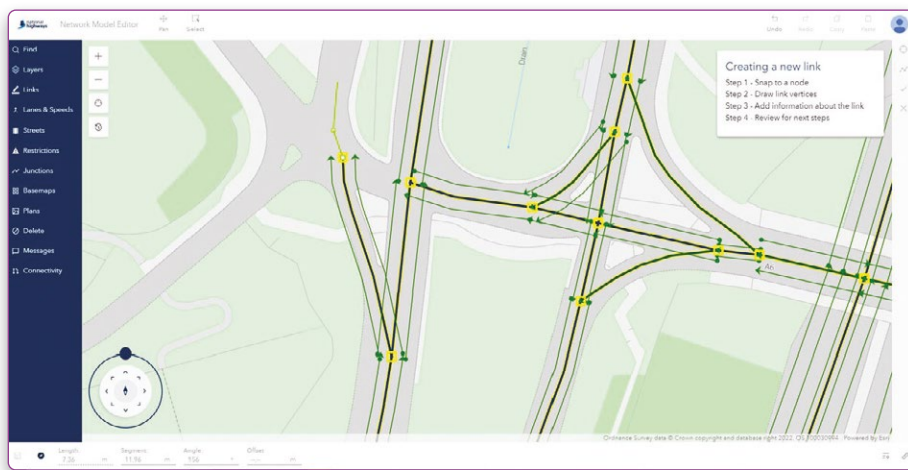
An analysis of community pharmacies across England, conducted with ArcGIS Pro



ANALYTICAL INSIGHTS

NATIONAL HIGHWAYS DRIVES ENHANCED VALUE FROM GEOSPATIAL DATA

A new strategy to consolidate road network data and replace disparate GIS applications is increasing the value that National Highways gains from its geospatial data assets.



A view of National Highways' new national road network model, which provides a single version of the truth for all employees

After discovering that geospatial data is the most used and most critical of its data assets, National Highways took the strategic decision to replace its many disparate departmental GIS applications and centralise its geospatial data and services. It migrated to Esri UK's Managed Cloud Service and used the ArcGIS system to build an extensive range of apps, data models and other GIS services that deliver new analytical capabilities and insight to more than 4,000 employees.

As a key part of this transformation project, National Highways created a single digital representation of the Strategic Road Network. Consequently, all of the organisation's employees now have access to the same accurate, digital road network map, whether they work in planning, ecology, major projects or operations. This single

source of the truth is also being used to gain insight across a wider variety of projects now, improving business efficiency and expanding the return on investment that the organisation gains from geospatial data.

One of the most important new solutions is an operational system, created using ArcGIS Velocity, that gives 400 staff real-time insight into traffic and road conditions, enabling them to better manage highway disruption. As well as the road network data, this system displays multiple feeds of real-time information, from weather forecasts and the live locations of gritting lorries to crowd-sourced traffic data from WAZE. As a result, employees have more information at their fingertips to help them make the best decisions and can react quickly to incidents to provide a good experience for road users.



"ArcGIS is helping us to maximise the value that we gain from our geospatial data, by enabling us to use it in really different use cases, from analysing live traffic flow to engaging with stakeholders and strategic planning."

Jon Drea
Head of Data Science, National Highways

4,000
corporate GIS users

The huge variety of submissions made for the Esri UK Customer Success Awards 2023 has demonstrated beyond doubt that innovation with GIS is occurring across almost all industry sectors. From housing and engineering to local government and conservation, Esri UK's customers are using ArcGIS solutions to transform the efficiency of traditional processes, heighten their understanding of complex issues and improve collaboration with colleagues and partners.

Held annually, the Esri UK Customer Success Awards aim to uncover and celebrate best practice and innovative uses of GIS throughout the UK. This year, the three award categories are map creator, collaborative working and analytical insights.

From the dozens of submissions received, judges have shortlisted nine companies and the winners will be announced at the Esri UK Annual Conference 2023.



THIRTEEN HOUSING GROUP

By using ArcGIS to improve the way that it visualises data, Thirteen Housing Group has gained a better understanding of the unique characteristics of the communities in which it operates. It can, therefore, now tailor its support for specific communities, use better evidence to make successful applications for community grants and help create thriving places where people want to live.

OXYGEN CONSERVATION

The pioneering land ownership and biodiversity company Oxygen Conservation has built ArcGIS web apps for each of its nine sites, giving staff, partners and clients clear visibility of key environmental metrics such as carbon stocks, ecosystems and water quality. These apps highlight improvements over time and show investors exactly how they are making a positive environmental and social impact within the British landscape.

MAP CREATOR

ANGLIAN WATER

Determined to reduce pollution and flooding events, Anglian Water has created an ArcGIS solution that helps it prioritise its effort and investment in the right locations and schedule proactive repairs based on a comprehensive analysis of risk. Within the first six months of using this solution to target maintenance activity, the company reduced blockages by 51%, realised savings of over £1 million and significantly improved customer satisfaction.

ANALYTICAL INSIGHTS

AECOM

Following two major landslide events adjacent to the A83 in Scotland, infrastructure consulting firm AECOM used ArcGIS to analyse everything from ground conditions and terrain to projected debris flow and rock fall movements for client Transport Scotland. This advanced geospatial analysis delivered a deeper level of understanding about geohazard severity across the site and enabled the creation of a sophisticated 3D virtual terrain model, ultimately leading to improved operational safety.

ARCADIS

The engineering company, Arcadis, has successfully used ArcGIS to analyse historical mining records and build a comprehensive 3D model of the mine workings beneath one of Britain's busiest train lines in the vicinity of Kidsgrove Station. The model was used to inform the development of a new accessible footbridge, improving collaborative working, reducing health and safety risks and contributing to efficiency savings in the region of £1 million (20% of project value).

VALUATION OFFICE AGENCY

The public sector's property valuation experts, the Valuation Office Agency, is harnessing the very latest ArcGIS technology to help it analyse evidence and accurately value over 26 million domestic and 2 million commercial properties. Over 3,000 staff will use this transformative and exciting solution to support multi-criteria decision-making, work more efficiently and deliver an improved level of service for customers.

COLLABORATIVE WORKING

DONCASTER COUNCIL

Doncaster Council has created an integrated workflow for scheduling the emptying of litter bins, collecting data in the field about the locations and condition of litter bins and visualising data about the service on dashboards. Using this end-to-end ArcGIS solution, the council is reducing drive times, responding more rapidly to issues such as damaged bins and delivering a more efficient public service for the citizens of Doncaster.

LINCOLNSHIRE RESILIENCE FORUM

To help it support local people in catastrophic situations like major floods, the Lincolnshire Resilience Forum has used ArcGIS to consolidate data from as many as 33 separate organisations and create a common operating picture for emergency responders. The partnership has also built an ArcGIS app to capture information during large-scale evacuations, helping to ensure everyone in a designated disaster area is moved swiftly to safety.

TRANSPORT FOR WEST MIDLANDS

A new incident management system has been built by Transport for West Midlands to help over thirty partner organisations record and share information about live incidents on the transport network. Used highly successfully during the Commonwealth Games 2022 in Birmingham, this ArcGIS solution significantly improves multi-agency collaboration and captures valuable data that can be used to analyse impacts, identify lessons learned and improve future decision-making.

ANALYTICAL INSIGHTS

NOTTINGHAM CITY COUNCIL CREATES CITY-WIDE DIGITAL TWIN

The council's pioneering, city model uses 3D modelling at scale and in detail to accelerate planning processes.



The 3D model of Nottingham with integrated planning information, created with ArcGIS Online



Drawing on 20 years' experience with 3D urban modelling, Nottingham City Council has created an immersive, interactive and highly detailed 3D model of the entire city to support development planning. This advanced digital twin enables planners to understand proposed new developments more easily, have more interactive discussions with developers and accelerate the planning process.

Built in ArcGIS Online, the 3D cityscape visualises a vast amount of contextual information, including 2D data on conservation areas and flood plains, live traffic data streamed directly from the Esri Living Atlas and street-level videos from CCTV cameras. When developers submit planning proposals, as part of the pre-application planning process, their Building Information Modelling (BIM) files are also incorporated into this digital twin. Planners can, therefore, see all the information they need relating to the planning process in a single GIS application, for the first time, enabling them to make informed decisions about the potential impacts of new developments on the city's distinctive character and skyline.

Nottingham City Council has now received government funding, from the Department of Levelling Up, Housing and Communities PropTech Innovation Fund, to help create a blueprint to enable other UK Local Planning Authorities establish 3D capabilities. With support from Esri UK, it will be creating demonstrators, learning resources and tools that other councils can leverage to develop their own urban digital twins and transform their planning processes.

"We are proud to be leveraging our investment in Esri technology and maximising the value of our existing 2D data in a 3D environment to modernise the planning process and increase user engagement"

Mick Dunn
GIS Service Manager, Nottingham City Council



COLLABORATIVE WORKING

JURASSIC FIBRE STREAMLINES END-TO-END BUSINESS PROCESSES

Teams throughout the entire organisation share a single digital twin, helping them to work efficiently and accelerate the delivery of ultrafast broadband.

GIS has been at the heart of Jurassic Fibre ever since it was founded in 2018 to bring ultrafast, full fibre broadband to communities throughout the South West. The organisation uses ArcGIS to build, validate and share a trusted digital twin of the actual and proposed broadband network throughout the region. This digital twin provides over 460 employees, from surveyors and planners to construction engineers and sales people, with a single version of the truth that they can depend on for real-time decision-making.

Jurassic Fibre has also built a wide range of ArcGIS field apps, web maps and dashboards that enable data from the digital twin to be visualised and used in different ways by different teams. Surveyors can collect and edit data in the field; planners have immediate sight of any flagged issues; and senior managers can monitor live information on the status of build projects. As the same accurate data

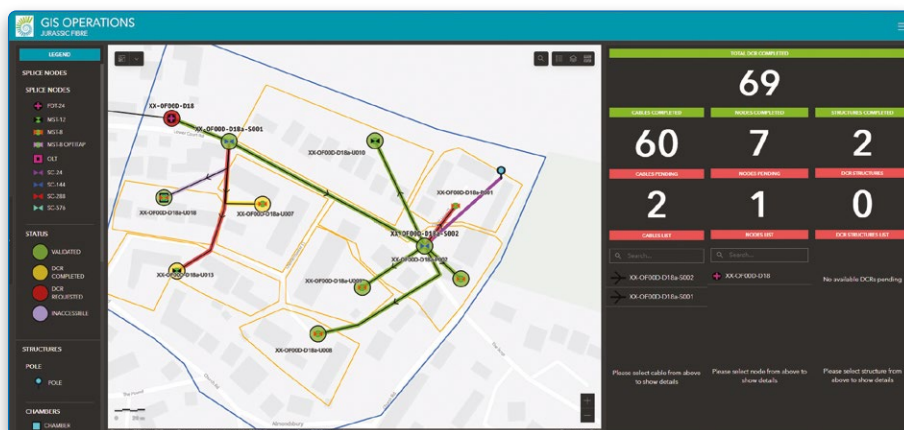
flows seamlessly through all these integrated ArcGIS solutions, core business processes are streamlined and teams can collaborate more effectively.

Recently, the organisation created a new solution with ArcGIS Field Maps to allow surveyors and other employees to verify the 'as-built' infrastructure from their mobile devices at least 20 times faster than before. Use of this solution is significantly improving data quality in the digital twin. Consequently, the organisation expects to encounter fewer unexpected issues at the installation phase, which will enable it to deliver ultrafast broadband more rapidly and provide a high quality service for customers.



"For us, ArcGIS is a critical system of engagement that enables us to ensure that a single version of the truth is transferred and communicated to all teams, at once."

Arindam Basu
Head of GIS and Inventory, Jurassic Fibre



ArcGIS Dashboard visualising data collected by surveyors and highlighting areas needing correction

460
employees collaborate
using a digital twin

COLLABORATIVE WORKING

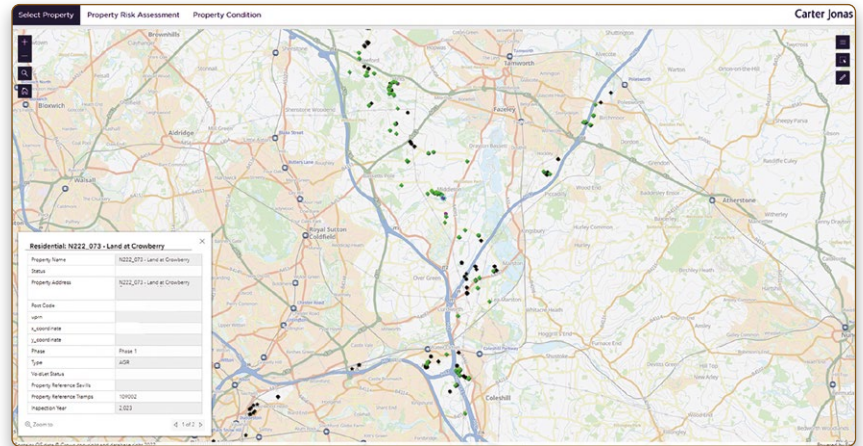
CARTER JONAS TRANSFORMS PROPERTY INSPECTION PROCESS

A multi-disciplinary property consultancy has digitised its property inspection process, enabling asset managers to work in a far more efficient and collaborative way.

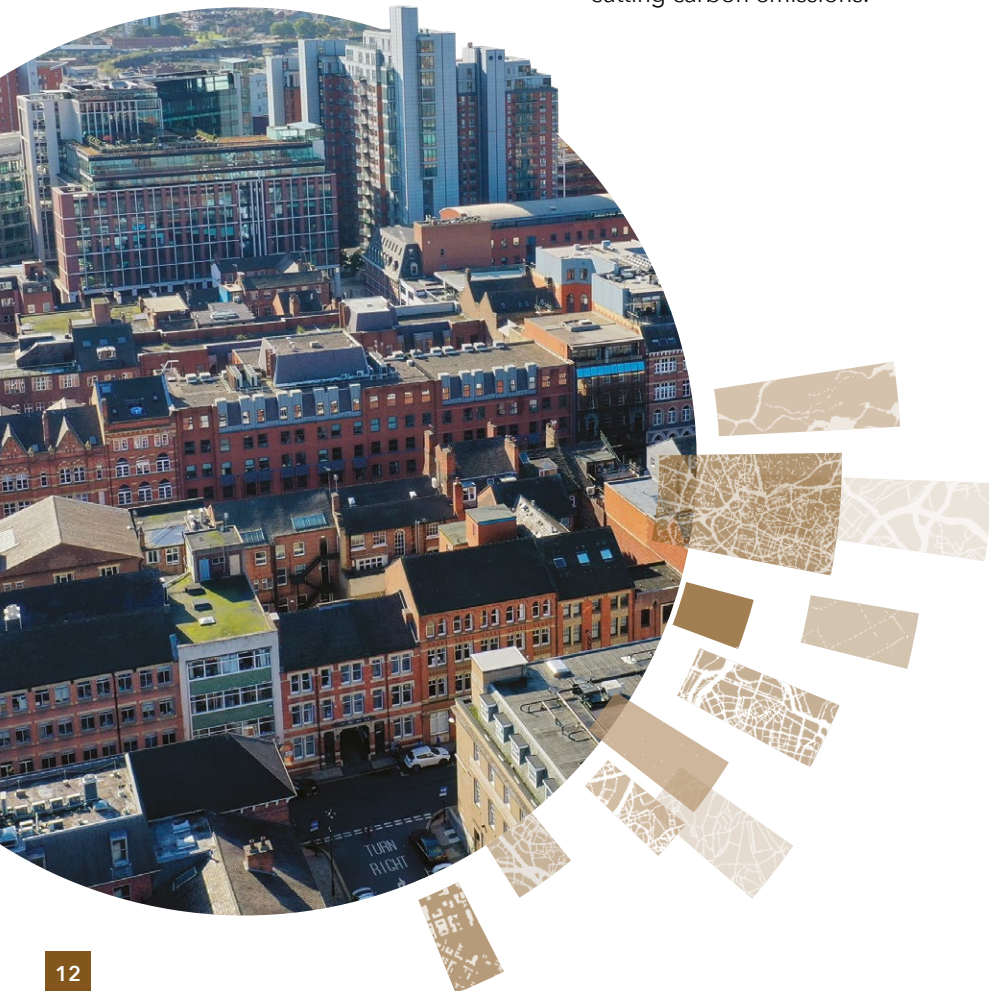
Every year, Carter Jonas undertakes around 5,000 property inspections on behalf of its clients, many of which have huge portfolios comprising hundreds of commercial, residential and rural properties. Completely transforming this pivotal process, the organisation has now created an end-to-end digital solution for conducting and managing property inspections, which is estimated to be saving 25,000 hours of manual activity per year.

Whereas previously, asset managers used to gather inspection data on paper forms and type up their notes, they now use ArcGIS apps on smartphones to complete inspections. All the data is collated in a single ArcGIS database and reports can be generated in around 45 minutes, rather than 4-6 hours. Furthermore, as the inspection process is consistent for all inspection types across Carter Jonas' 34 offices nationwide, asset managers can now be allocated to the closest inspections, reducing journey times and cutting carbon emissions.

As part of the end-to-end process, asset managers can view inspection findings on a mapping interface developed with ArcGIS API for JavaScript, as well as a series of client-specific ArcGIS Dashboards and web apps. These tools give asset managers a high level oversight of the progress of inspections and highlight any recurring issues across large property portfolios. Carter Jonas can then collaborate with its clients to help them coordinate similar jobs at multiple locations, take advantage of bulk purchasing discounts and reduce the cost of property maintenance.



Carter Jonas' Survey Manager solution, built using ArcGIS to improve the management of property inspections



"Our new ArcGIS process for property inspections helps us to work more efficiently, better manage our inspection data and collaborate more effectively with our clients to help them manage large property portfolios."

Simon Nigh
Head of Geospatial Services,
Carter Jonas

25,000
hours saved annually

50%
time savings

FIELD MOBILITY

NORFOLK FIRE & RESCUE OPTIMISES EFFICIENCY TO HELP SAVE LIVES

A new, more efficient approach to managing fire hydrant performance is making vitally important information instantly available to fire crews when lives are at risk from fire.

Norfolk Fire & Rescue Service has a statutory duty to inspect and maintain over 23,000 fire hydrants in its area and manage planning applications for hundreds more each year. It now uses an ArcGIS solution, configured with support from Esri UK's Professional Services team, to help it manage this enormous undertaking, improve collaboration between different teams and share up-to-date information about the current performance of each individual hydrant.

The end-to-end solution enables Norfolk Fire & Rescue Service to inspect and maintain fire hydrants significantly more efficiently than before and manage a growing number of hydrants with the same number of people. 25% less time is now required to allocate hydrant inspection tasks to technicians and manage their work schedules,

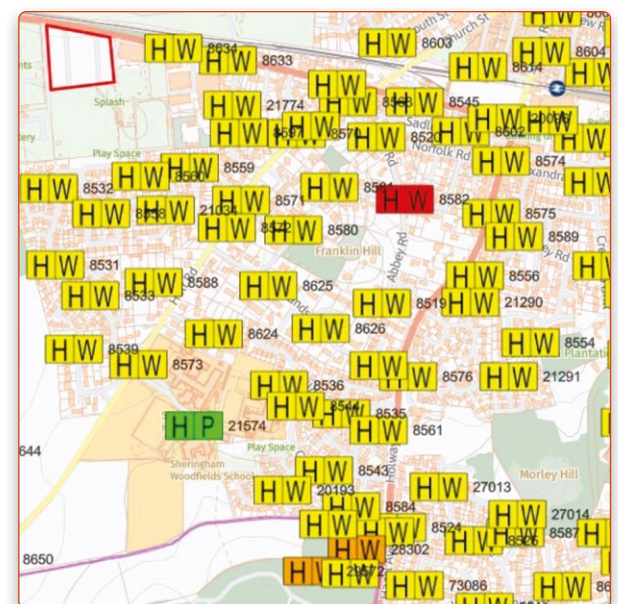
while the water resources team spends 50% less time sourcing information relating to planning applications for new hydrants. Managers have clear oversight of the inspection process and status of hydrants on ArcGIS Dashboards and can respond faster to issues reported by the public, such as leaks.

Most significantly, up-to-date hydrant data is now sent automatically from ArcGIS Online to the mobile data terminals in fire engines every night. When fire crews are called out to respond to a fire, they can use this data to see instantly which hydrants are nearest to the incident and useable. Firefighters can, therefore, save time when they arrive at the scene of a fire and start extinguishing it more quickly to help them reduce damage to property and save lives.



"We can collect and share accurate hydrant information far more efficiently now, which improves collaboration between internal teams and helps us to respond quickly and effectively to emergencies."

Tim Allison
Water Resources and Planning Manager,
Norfolk Fire & Rescue Service

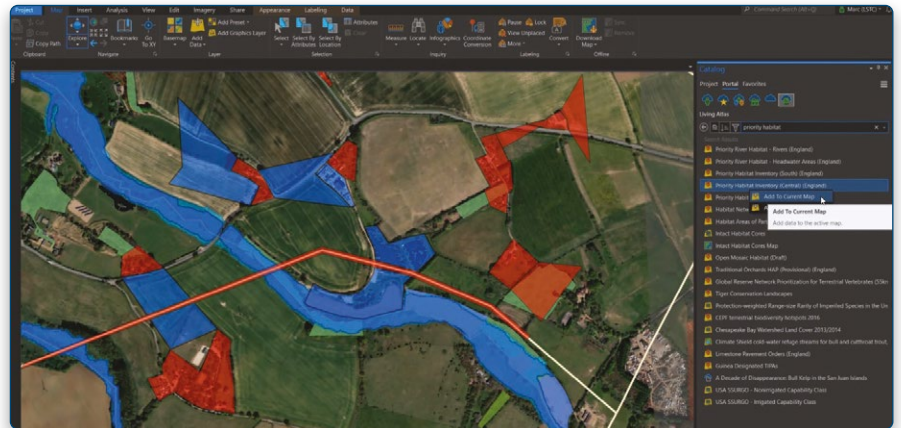


ArcGIS Online displays fire hydrants and their operational availability

LEARNING SERVICES

LSTC GAINS INSPIRATION FROM ARCGIS PRO MIGRATION

The transition from ArcMap to ArcGIS Pro has given LSTC the inspiration, the online content and the tools to completely transform core business processes.



Searching and importing ArcGIS Online and Living Atlas content is seamless in ArcGIS Pro

For the electricity industry services provider LSTC, the move from ArcMap to ArcGIS Pro has proven to be a powerful springboard for business transformation. The migration to Esri's latest desktop software has inspired and empowered the company to take advantage of more online content and ArcGIS Online tools to redesign the use of GIS across the enterprise - from field to desktop - and make significant improvements in business efficiency.

LSTC has, in particular, streamlined processes and improved collaboration within its planning and environmental departments. By using ArcGIS Pro's suite of added features, and seamless links to online content from ArcGIS Online and the Esri Living Atlas of the World, the company can now better visualise existing and proposed new

electricity transmission and distribution routes. Employees can access a richer, more varied and more accurate reservoir of geospatial data to deepen their understanding of different locations and then use this added insight to inform their feasibility studies.

Managers also use ArcGIS Pro to deploy inspectors more logically, so that assets in the field can be inspected in a shorter time. Field-based workers use a new mobile ArcGIS solution to complete surveys, and all of the data collected is analysed, interrogated and visualised in ArcGIS Pro. Work schedules for surveyors are automatically generated from the data in ArcGIS Pro, without any manual intervention, and progress data can be shared online using ArcGIS Dashboards, saving time and improving communication with clients.

"Migrating to ArcGIS Pro opened the door to online content and gave us seamless access to advanced GIS tools, facilitating improvements in the efficiency of almost all our key GIS processes."

Rob Salter
Managing Director, LSTC

Planning to migrate to ArcGIS Pro?

Companies that are considering moving from ArcMap to ArcGIS Pro can find a huge variety of useful resources on the Esri UK website. Click the link below to read about a typical migration journey, discover how to licence ArcGIS Pro, access learning resources to help you prepare for this change, read case studies and find helpful hints and tips for a successful project.

3,500

Victorian letters,
ready to explore

EDUCATION

THE NATIONAL ARCHIVES BRINGS VICTORIAN VOICES INTO CLASSROOMS

Creating a truly remarkable teaching resource, The National Archives has used ArcGIS Hub to contextualise and share one of the largest collections of Victorian correspondence.

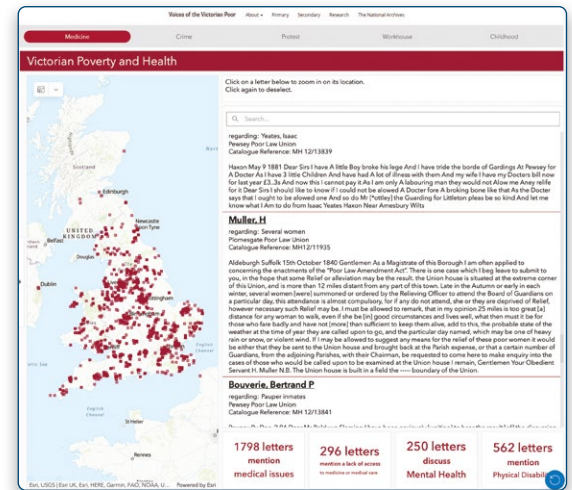
As part of a fascinating project called the 'Victorian Voices of the Poor', The National Archives has created an ArcGIS Hub site that brings to life over 3,500 Victorian letters and makes them more accessible to teachers and students. Written between 1834 and 1900 by paupers, the wider population of poor people, their families and other advocates, the letters provide a unique insight into the many challenges faced at the end of the 19th century, due to loss of work, injuries, diseases such as Cholera and Smallpox and profound poverty.

Primary school teachers can use the ArcGIS Hub site to teach their pupils how different life was for the Victorians. They can find resources about the 1834 Poor Law, which led to the creation of workhouses and then share

letters in which people describe their actual experiences in these facilities. Secondary school teachers can discover resources and functionality to support the teaching of GCSE curricular, including, for example, a dashboard that helps students study 'medicine through time,' a key topic in GCSE history.

Anyone with an interest in history can explore the ArcGIS Hub site - not just teachers and students. Researchers and the general public can use dozens of filters, created using ArcGIS Experience Builder, to search for letters by location, medical conditions or topics such as sanitation or low wages. This is very much a living project, and The National Archives plans to continually enhance the site over time, helping more people to hear the voices of the Victorian poor.

The National Archives' medicine dashboard, highlighting Victorian poverty and health



"ArcGIS lent itself beautifully to this project, enabling us to show the locations where letters were written and connect students with the stories of people who lived in their communities nearly 200 years ago."

Rosie Morris
Education Web Officer, The National Archives



The National Archives' ArcGIS Hub site provides access to a wealth of teaching resources

AGENDA

08:00

Registration

09:30

Opening Plenary
Fleming & Whittle, 3rd Floor

10:45

Break

	Data Visualisation & Mapping Fleming & Whittle 3rd floor	Analytical Insights Churchill Ground floor	Collaborative Working Mountbatten 6th floor	Education Gielgud 2nd floor	Learning Services Workshops St James 4th floor	Learning Services Workshops Westminster 4th floor
11:30	<p>Creating opportunities for all young people to engage in cricket</p> <p>Chance to Shine</p>	<p>Understanding the specific needs of different communities</p> <p>Costain</p>	<p>Simplifying property purchases on the Isle of Man</p> <p>Isle of Man Government</p>	<p>Unsealing the vaults to bring history alive</p> <p>The National Archives</p>	<p>Connecting tables to access and analyse more data</p> <p>Esri UK</p>	<p>Performing repetitive tasks using ArcPy and Python</p> <p>Esri UK</p>
	<p>Putting the ArcGIS cartography tools through their paces</p> <p>Esri UK</p>	<p>Investigating the significance of spatial distributions with ArcGIS Pro</p> <p>Esri UK</p>	<p>Turning up your ArcGIS Enterprise to 11</p> <p>Esri UK</p>	<p>Democratising data to improve learning experiences</p> <p>Esri UK</p>		

12:10

Lunch

13:10

	<p>Mapping a 'smart estate' for Manchester NHS</p> <p>BIS Consult</p>	<p>Transforming planning assessments with 3D analysis</p> <p>Nottingham City Council</p>	<p>Fibre network digital twin data accuracy; a GIS success story</p> <p>Jurassic Fibre</p>	<p>Fighting the climate crisis while improving digital skills</p> <p>Department for Education</p>	<p>Getting up to speed with ArcGIS Online</p> <p>Esri UK</p>	<p>Connecting tables to access and analyse more data</p> <p>EsriUK</p>
	<p>Configuring the right kind of app for your map</p> <p>Esri UK</p>	<p>Capturing and sharing your world with imagery</p> <p>Esri UK</p>	<p>Staying aware with real-time capabilities</p> <p>Esri UK</p>	<p>Embedding digital skills into the curriculum</p> <p>Esri UK</p>		

13:50

Break

14:15

	<p>Sharing trusted, local climate change information</p> <p>Met Office</p>	<p>Accelerating military planning with trusted intelligence</p> <p>42 Engineer Regiment Royal Engineers</p>	<p>Undertaking more collaborative wildlife monitoring</p> <p>Amphibian and Reptile Conservation</p>	<p>Engaging everyone from students to silver surfers</p> <p>Ramblers Scotland</p>	<p>Getting up to speed with ArcGIS Online</p> <p>Esri UK</p>	<p>Performing repetitive tasks using ArcPy and Python</p> <p>Esri UK</p>
	<p>Developing that unique app to meet your needs</p> <p>Esri UK</p>	<p>Introducing the power of scripting in ArcGIS</p> <p>Esri UK</p>	<p>Making mobile data capture easy and accurate</p> <p>Esri UK</p>	<p>Implementing successful citizen science projects</p> <p>Esri UK</p>		

14:55

Break

15:30

Closing Plenary
Fleming & Whittle, 3rd Floor

16:30

Drinks Reception

17:30