

Bluesky services for

# Local Authorities

"You'll be amazed what you can do with Bluesky data"



**B**luesky's Local Government package offers excellent value combining four key geospatial datasets in a GIS-ready bundle. The package includes orthorectifed aerial photography, orthorectified CIR (colour infrared), DTM (Digital Terrain Model and DSM (Digital Surface Model). These datasets are already an essential part of Local Government GIS data portfolios and have become an essential resource across a diverse range of departments. Desktop analysis using spatial data is increasingly becoming an integral part of the cost-cutting agenda helping to drive efficiencies and deliver results.

Aerial photography from Bluesky is supporting the delivery of essential council services in Gloucestershire. The high resolution imagery is helping staff at Cotswolds District Council deal with requests from the public both in person, online and via the Council's Customer Contact Centre. The data is also supporting staff in the planning, environment and property services directorates, providing an up-to-date, accurate and consistent record of one of England's most popular and visited areas.

"The Bluesky aerial photography has been very well received. Many of our users are familiar with aerial photography through online mapping sites such as Google. However, the Bluesky imagery is much more up-to-date and provides a consistent record of both the urban and rural environment."

Sean Ashton GIS Officer Cotswold District Council





# Digital Terrain Model (DTM) / Digital Surface Model (DSM)

Property Gazeteer Record Of Development Property Services Greenspace Management

Solar Farm Renewable Energy Feasibility Context Mapping Heritage Management Public Consultation

Detailed height data – Digital Terrain Models (DTM) and Digital Surface Models (DSM) are helping Rushmoor Borough Council model the Hampshire towns of Aldershot and Farnborough. The 50 cm resolution models are being used to inform planning policies, support public consultation and underpin Emergency Response plans.

Using the height models Rushmoor Borough Council has completed a Canopy cover study to inform future planning policies and decisions, and created both a contour map and object height database. The Council has also identified an array of properties not featured in their base mapping and created a 3D visualisation and fly-through of Farnborough town centre for a Public Consultation exercise.

"Our business case for acquisition of height data was centred on multiple uses of the data. We have already achieved several of our goals with many more projects lined up."

#### Richard Greaney

GIS Manager, Rushmoor Borough Council



ase Study.



LiDAR provides the most accurate and detailed terrain and surface data possible from a remote sensing platform. It offers an unsurpassed 3D representation of the ground, trees and buildings. This authority-wide data is routinely used in a range of diverse applications across many departments. The cost-saving can be huge!

Landfill Management Waste Management Waste Management Marchaeological Investigation Infrastructure Planning

Wind And Solar Farm Renewable Energy Feasibility

High tech aerial laser surveying technology was employed to reveal the hidden archaeology of an Iron-Age hill settlement in Lancashire. Visually, the archaeological features are very difficult to see, but the Bluesky laser survey, commissioned by the Morecambe Bay Partnership, was expected to reveal previously undiscovered details of the settlement at Warton Crag. Identified as an important 'Heritage at Risk' site, the site has already been subject to low level archaeological investigations, which have identified remains from a small, well-defended hill fort.

"The laser equipment provides a fast and cost-effective method of capturing highly accurate measurements of the entire site and its surroundings with minimum impact on a nationally important wildlife conservation site, a Site of Special Scientific Interest, in an Area of Outstanding Natural Beauty."

Louise Martin H2H Cultural Heritage Officer Morecambe Bay Partnership

MORECAMBE BAY PARTNERSHIP



# National Tree Map<sup>™</sup> (NTM)

Bluesky's National Tree Map<sup>™</sup> (NTM<sup>™</sup>) is the most detailed dataset of its kind ever produced. With coverage across the whole of England and Wales, NTM<sup>™</sup> provides a unique, comprehensive database of location, height and canopy/crown extents for every single tree 3m and above in height.

TPO Measuring Street cleansing operations Leaf collection

The National Tree Map<sup>™</sup> (NTM<sup>™</sup>) is helping the London Borough of Bromley prioritise its autumn street cleansing programme by locating trees with a close proximity to roads and pavements and identifying large leaf species that have a greater contribution to leaf fall.

Urban leaf fall can cause a hazard, making pavements and roads slippery, and potentially cause flooding, by blocking drains and gullies. As one of London's largest Boroughs, and home to around two thirds of London's woodlands, Bromley faces the annual challenge of clearing hundreds of tonnes of fallen leaves. "Using the NTM we are able to make more effective use of our resources – targeting priority streets. We are also able to respond more swiftly to customer queries as we have a scientifically based works list for our contractor."

#### Luke Chittock

Systems Manager (GIS) London Borough of Bromley





### Thermal Imagery (TIR)

**B**luesky provides an end-to-end thermal mapping solution, offering a cost-effective airborne thermal survey service measuring building heat-loss levels across an entire city in just one evening. The data can be used for public engagement via a dedicated web portal.



Thermal imaging is helping Harrow Council tackle the growing problem of unscrupulous landlords renting out sheds and outbuildings as dwellings. The thermal data is being combined with additional information, such as waste collection records, parking permits and noise complaints, as part of a government funded project 'Hot Harrow'.

The thermal data supplied to Harrow included property level, map accurate thermal infrared images which can be used to highlight different levels of heat loss between individual properties and unexpected 'hot spots'. When combined with additional data these images can be used to identify and target individual properties for energy efficiency works or even support with fuel bills.

"The combination of thermal imagery with other resources gives a truly holistic picture of the Borough. While 'beds in sheds' is a serious and growing issue there are a number of applications for this intelligence including energy efficiency improvement projects and tackling fuel poverty."

#### Matt Pennells

Location Intelligence Specialist & Business Consultant



# Flood Mapping

Flooding cannot be prevented entirely but we can learn to understand the cause and manage the risk so that we are better prepared. JBA data from Bluesky provides data for comprehensive flood risk management including flood risk assessment, flood risk mapping, modelling, planning and construction of mitigation measures that manage flood risk to acceptable levels.



**S**urrey Heath Borough Council invested in a LiDAR dataset to help direct flood alleviation works on Chobham Common, the largest National Nature Reserve in the south-east of England and one of the finest remaining examples of lowland heath in the world, following severe and repeated flooding.

The Council used the LiDAR data within their Geographical Information System (GIS), Global Mapper, which allowed for the data to be viewed and analysed by both experienced GIS professionals as well as novice map users. "Using the LiDAR data, we have been able to run a watershed analysis on this hugely important and sensitive site. We have identified at least one medieval bund, used to retain water, and we hope to be able to reinstate this and other historic drainage pools to attenuate flood water coming off the common."

James Rutter GIS Manager Surrey Heath Borough Council



Case Study



## Skyline 3D Viewer

**S**kyline Software is one of the most powerful geospatially enabled virtual worlds available. It enables organisations to view and query all of their GIS and geospatial data on real terrain and in a fully interactive 3D environment, then serve this up over the internet to the users within the organisation or even the wider public, through an easy-to-use and familiar web browser interface. Local Authorities can use Skyline to share data on planning, facilities, enforcement, asset management, environment and security to name but a few applications. 3D models can be photorealistic and queryable. All common GIS data and formats can be included and visualised.



Glasgow City Council have been working with Bluesky using Skyline for over 9 years to host and serve the 3D Urban Model of the city. The highly detailed and accurate model is served up to the public via a link from the Council's website and is being used:

- to enhance the understanding of the built environment through the use of a 3D photo realistic representation of the city;
- to improve the communication and consultation process within the planning system;
- to provide a highly accurate visual tool in 3D to assist in the assessment of new development proposals to the public, elected members and planning officers alike;
- to promote and showcase the regeneration of Glasgow;
- to improve the quality of all new developments on the ground.

"Bluesky offers the full Skyline service, including model building, data fusion, hosting, management and training. All of your data in one amazing easy to use, cost effective 3D world. We are viewing the future."

James Eddy Technical Director, Bluesky International Ltd.

Case Stud



# Event And Disaster Planning And Simulation Proposal Design And Evaluation Proposal Design And Evaluation Proposal Design And Evaluation Renewable Energy Planning





# Mapshop www.blueskymapshop.com

The Bluesky Mapshop provides customers with instant access to an ever increasing range of environmental data including several free datasets. The Mapshop has been developed to make it as easy as possible to locate your area of interest through postcode, town name or coordinate searches. Customers also have the option to upload KMZ or ESRI Shapefiles to identify the areas they require. It is easy to select different products which are displayed in a large viewing window. Users can then navigate around their area of choice using the zooming, scrolling and panning tools.

National Tree Map<sup>TM</sup> Colour Infrared Aerial Photograpy Ordnance Survey Mapping Ordnance Survey Mapping

Aerial mapping company Bluesky has completed a significant upgrade to its online Mapshop including new functionality and new data. For the first time, visitors to **www.blueskymapshop.com** can now define their own area of interest with new polygon drawing and editing tools. This allows visitors to purchase only the data they need rather than the more traditional option of having to pay for standard sized tiles or boxes of data. The most recently flown aerial photography layers have also been added and can be instantly downloaded.

"Up-to-date, high-quality data at the click of a mouse, at last!"

"You are far more competitive than my usual supplier"

"The site is easy to use and very intuitive"

**Customer comments** 



**A**s a UK-based aerial survey specialist, Bluesky uses the very latest technology to ensure its products including imagery, LiDAR and thermal data, are second to none.

Bluesky has unrivalled expertise in the creation of seamless aerial photography and maintains national off-the-shelf coverage of aerial photography and height data through an on-going update programme. Bluesky operates the world's first sensor for the simultaneous capture of LiDAR, thermal and aerial photography data and as such is in the enviable position of being able to provide customers with unique and cost-effective solutions.

Bluesky prides itself on its pioneering and agile approach to developing new products and services including National Tree Map<sup>™</sup>, SoLAR, Air Quality Mapping and Nightsky Mapping<sup>™</sup> and is considered a leader in its field.

# Welcome to our world...





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