UNLOCKING THE POWER OF LAND INFORMATION

GB LAND BOUNDARIES IN THE ARCGIS LIVING ATLAS OF THE WORLD

LANDCLAN   esri UK

Executive Summary

This whitepaper introduces the new Great Britain Land Boundary tile layer, a collaborative effort between Esri UK and its partner, LANDCLAN. Now available in the ArcGIS Living Atlas of the World, this dataset offers a complete view of land parcel boundaries across Great Britain, built on the authoritative INSPIRE index. The target audience includes both experienced users of Esri's geospatial software and managers with a broader analytical background.

The core value of this offering is its ability to provide immediate access to a comprehensive, regularly updated dataset of cadastral parcels. By integrating this layer into ArcGIS, users can perform advanced spatial analysis, uncover hidden patterns, and create rich visualisations that go beyond traditional data methods. The whitepaper details how this data can be applied across a wide array of sectors, including:

- Government & Public Policy: for planning, tax assessment, and infrastructure management.
- Environmental Studies: for conservation, land use analysis, and sustainability efforts.
- Utilities & Infrastructure: for service placement and network maintenance.
- Urban Planning & Development: for land use strategies and public service management.
- Real Estate & Insurance: for risk assessment, portfolio management, and property valuation.

The document highlights the ease of access through ArcGIS Online and ArcGIS Pro, noting that the basic tile layer is available to everyone via the ArcGIS Living Atlas as 'LandClan Parcel Boundaries'. For those requiring more detailed information, an integrated workflow allows users to purchase additional, highly-specific attribute data, which includes information on ownership, planning applications, and environmental constraints.

In summary, this new tile layer is more than just a dataset; it is a powerful tool that saves time on research and procurement, enhances spatial analysis capabilities, and provides a foundation for more insightful, data-driven decisions across a diverse range of industries.

Unlocking the power of land information with GB land boundaries

Esri UK and LANDCLAN have made available in the ArcGIS Living Atlas, a new Great Britain Land Boundary tile layer. This new dataset, built using the INSPIRE index, provides a comprehensive view of land parcel boundaries across Great Britain and offers significant value to users of Esri ArcGIS.
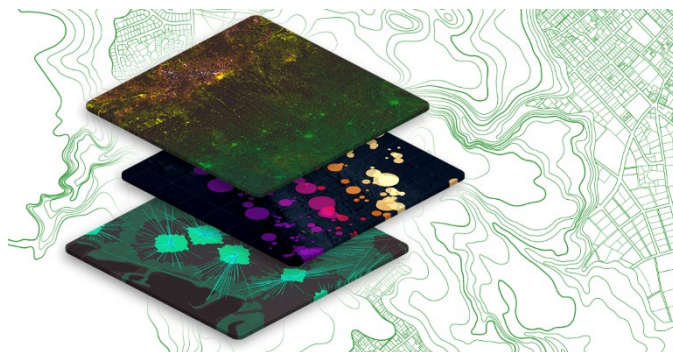
What are INSPIRE Land Boundaries and why do they matter?

Cadastral parcels define areas of land owned or leased by a single proprietor or group. Under the EU INSPIRE directive, national land registration agencies like HM Land Registry and Registers of Scotland release GIS polygons showing these parcels. Even with the UK's departure from the EU, this data continues to be provided due to the government's recognition of open data's importance in democracy.

Derived from authoritative sources such as HM Land Registry and Ordnance Survey, these parcels represent general land boundaries. They are invaluable for various spatial analyses, including site finding, municipal planning, and environmental stewardship.

Uniting Parcels and ArcGIS: Enhanced Spatial Analysis and Visualisation

The integration of this land parcel data with ArcGIS significantly enhances its utility, enabling accurate and advanced spatial analysis, seamless integration with diverse datasets, and contextual visualisation. This empowers users to uncover patterns and relationships that might not be apparent through traditional analysis or tabular data alone.

Key applications across diverse markets

The Great Britain Land Boundary tile layer offers insightful analysis across a wide range of industries:

- **Government and Public Policy:** Local governments can use parcel boundaries to manage land estates, plan infrastructure projects, define planning policies, assess planning applications, and levy council taxes.
- **Environmental Studies:** Researchers can leverage land boundaries to analyse land use patterns, track changes in land cover, and study environmental impacts, aiding conservation efforts and sustainable practices.

- **Utilities and Infrastructure:** Utility companies can employ this data for planning the placement of services like water, electricity, and telecommunications, and to identify contacts for land access during network maintenance.
- **Urban Planning and Development:** Planners and developers rely on land boundaries for efficient land use strategies, informing policy decisions, infrastructure development, and public service management.
- **Architecture, Engineering, and Construction (AEC):** Construction companies and engineers can utilise land plots to enhance precision in planning, design, and construction projects.
- **Environment, Social, and Governance (ESG):** Land parcels can be used to assess environmental impact, track social indicators, and manage governance standards, fostering accountable sustainability.
- **Public Safety:** Law enforcement and officials can improve community safety and preparedness by mapping crime trends, planning emergency responses, and effectively allocating resources.
- **Real Estate:** Estate agents, property developers, and legal entities can use property information to identify investments, evaluate land value, facilitate transactions, and resolve disputes.
- **Insurance:** Insurers and reinsurers can leverage land parcel boundaries for risk assessment, portfolio management, data collection, underwriting, claims processing, and damage management.

Getting Started with the Great Britain Land Boundary Tile Layer

Accessing this valuable dataset is straightforward. Users can search for "'LandClan Parcel Boundaries" directly within ArcGIS Online or ArcGIS Pro. The parcels are accessible to everyone through the ArcGIS Living Atlas. A free trial of ArcGIS Online is available if required.
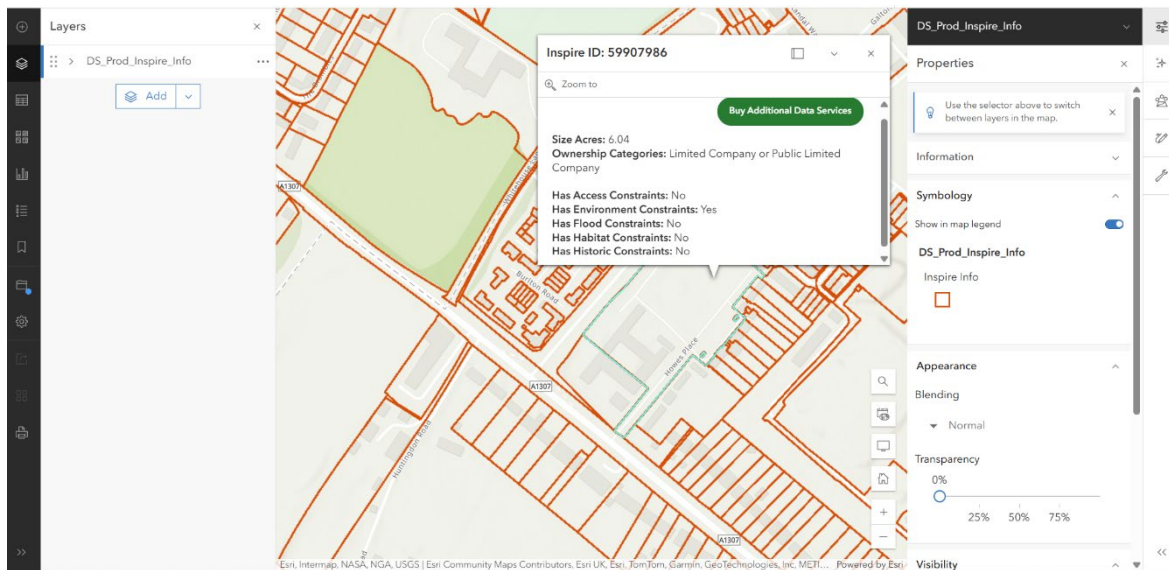
Using the data in ArcGIS Online

Once opened in Map Viewer, users can explore the tile layer for areas of interest, add it to web maps and apps, and share it within their organisation or with the public. Clicking on a parcel in the tile layer reveals a pop-up with basic attributes, including:

- Inspire ID
- Acreage
- Access Constraints
- Environment Constraints
- Flood Constraints
- Habitat Constraints
- Historic Constraints
- Ownership Categories

Tile layers are designed to efficiently display large datasets and other geographic information, especially over the web. Users also have the flexibility to:

- Adjust the appearance of the tile layer using blending and transparency tools to refine the visible range in the Map Viewer.
- Overlay other data layers, such as feature layers or dynamic map services, to provide additional context or information.
- Collaborate by referencing the tile layer in maps and apps shared across your organisation
- Transition from static to interactive maps by integrating the layer with other ArcGIS layers or by customising pop-ups to display attribute information when users interact with the map.

Accessing more attributes for the land parcels

For users requiring more detailed attributes, links within the pop-ups will direct you to the Data Services page on LANDCLAN's Portal. Through their partnership, LANDCLAN offers additional data for purchase, including:

LANDCLAN   Data Services

Categories

£3,000/year **Constraints** A set of services that provides information on various development constraints, including Access Constraints (limitations related to sit…	**£3,000/year** **Ownership** A set of services that provides insights into land and property ownership patterns. It includes Commercial and Corporate…	**£10,000/year** **Planning Applications** A set of services that provides information on past and current planning applications. It includes details such as application types,…
£10,000/year **Planning Policies** A set of services that provides information on local planning regulations that guide land use and development. It includes adopted…	**£3,000/year** **Energy Performance Certificates** A set of services that provides information on energy efficiency of buildings, including ratings, and energy usage.	**£3,000/year** **Registered Leases** A set of services that provides information on registered leasehold land and property in England and Wales. It shows the date of the..
£2,000/year **Public Rights of Way** A set of services that provides information on designated paths that the ublic can use to travel across land, such as footpaths,…	**£2,000/year** **Road Maintenance** A set of services that provides information on which roads are maintained by public authorities and helps identifying the…	

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This collaboration between Esri UK and LANDCLAN highlights the pivotal role Esri partners play in broadening the use of ArcGIS and advancing GIS.

LANDCLAN is an industry-leading property data and location intelligence company that serves various sectors requiring location data analysis, including real estate, insurance, energy, infrastructure, agriculture, logistics, and government.

Access the LANDCLAN Land Boundaries Layer here:
LandClan Parcel Boundaries