

Birmingham City Council delivers insights and efficiency with public data marketplace

96,000

monthly API calls

3 Months

deployment time

287

datasets

CONTEXT:

MEETING COMMUNITY NEEDS AT SCALE

The largest local authority in the United Kingdom, Birmingham City Council serves a population of over one million citizens, providing a full range of services, including schools, waste collection, housing, parks, road management and planning.

CHALLENGE:

TURNING DATA INTO VALUABLE INSIGHTS

Due to its size and range of activities Birmingham collects, generates, and uses an enormous amount of data. Freedom of Information Act regulations mandate that much of this data should be shared publicly, and the council therefore created its Open Data Factory portal in 2014. However, while this approach made data available, it simply provided raw information, which was neither user-friendly nor up-to-date.



As a council serving a large community of citizens and businesses, Birmingham understands the power of data. We therefore wanted to make our portal a marketplace for insights, moving beyond raw data to user-friendly data assets, ensuring that information was easily understandable and usable to all through visualizations, dashboards and data stories.



Danny O'Neill
Birmingham City Observatory Lead

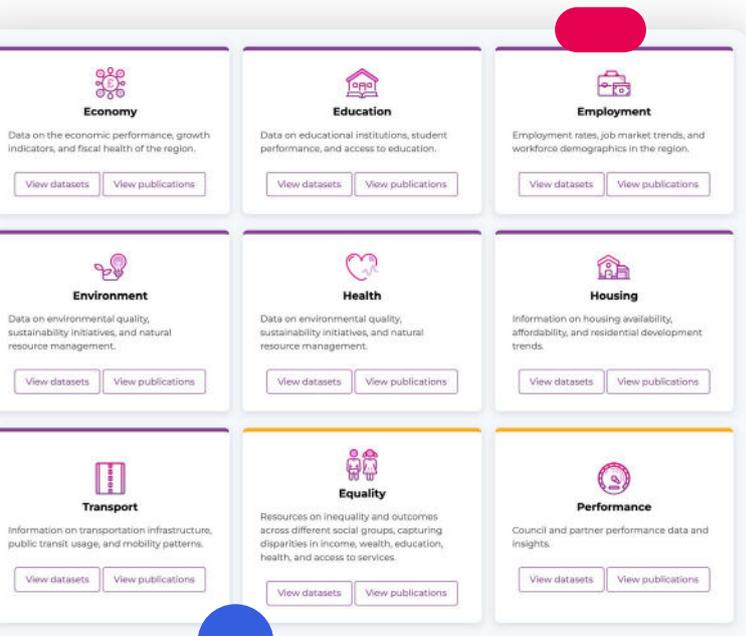
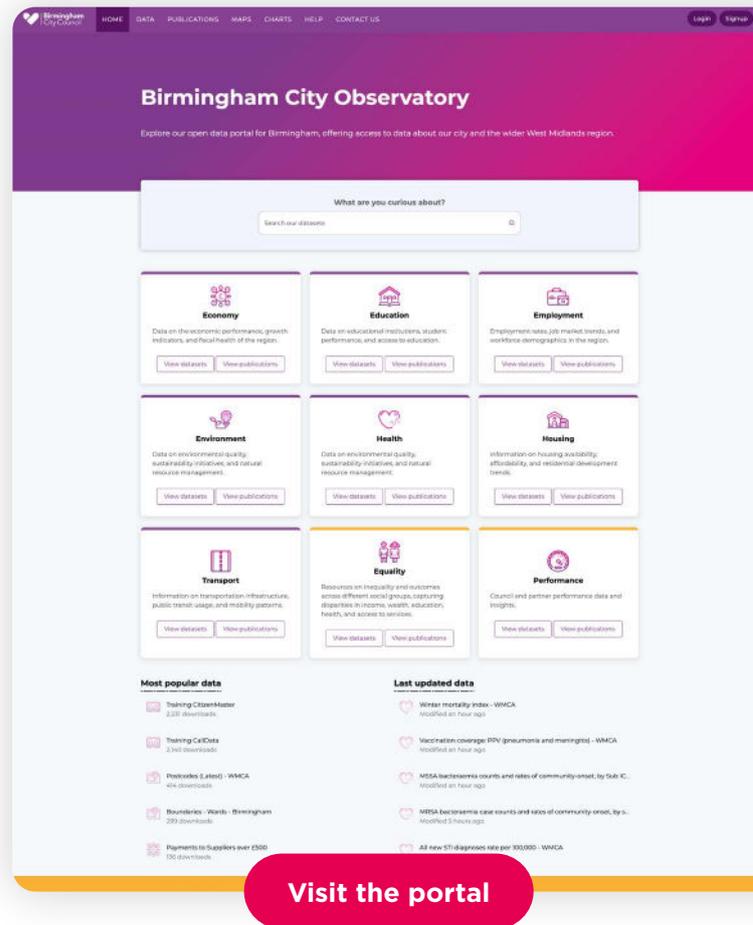
DATA EXPERIENCE:

CREATING AN ENGAGING, EFFICIENT DATA MARKETPLACE

To increase the usability of its data portal, Birmingham replaced its Open Data Factory with a new public data marketplace, the Birmingham City Observatory. However, the initial technology platform it used was delivered as a managed service, adding to costs and making it difficult to administer internally.

The council therefore looked for a more flexible, accessible solution. It chose to work with Opendatasoft to create a completely new trial public data marketplace to demonstrate the benefits to senior management. Thanks to this approach, within three months, Birmingham was able to build and go live with a fully functioning trial site, which led to it securing long-term resources and support for the initiative.

Bringing together data from the council and over 20 other providers, such as the UK Office of National Statistics, the new Birmingham City Observatory launched in August 2024.



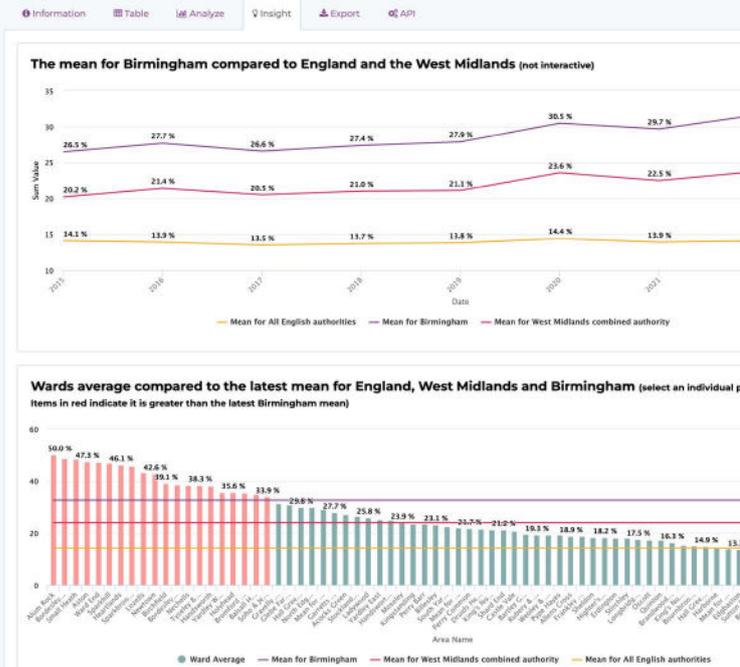
A self-service data marketplace, it features comprehensive information organized into nine themes, including transport, health, and equality, with every dataset provided with its own insights page to explain and give context to the data it contains. This enables users to easily understand information by quickly creating comparisons to other local authorities and averages for the whole country.

Delivering for a wide range of users

Making insights available to the widest possible range of audiences, whatever their data skills, is central to the City Observatory program. It is already heavily used by local universities in both teaching and research, citizens, voluntary groups and other public sector bodies, such as neighboring councils and health services. Internally, it provides the council's 11,000 staff with access to a single source of truth - and as every dataset includes details of the data owner, it is straightforward to request more detail if required.

To further enhance usability, the portal's Publications page collects a continually updated range of documents, dashboards and factsheets in a single place, filterable by type and theme. This makes data easily usable and understandable by all types of audience.

Percentage of children in absolute low income families: Aged 0-15 - Birmingham Wards

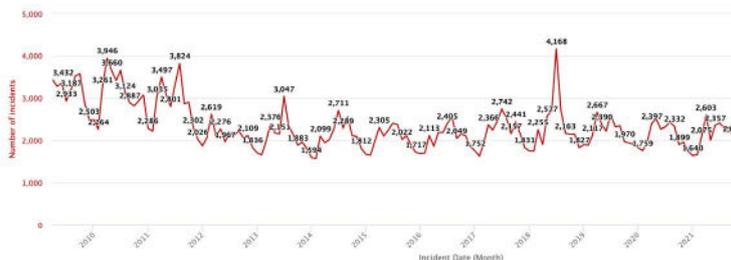


Demonstrating and monitoring outcomes

A key aim for the data marketplace is to ensure accountability and to drive improvements across specific metrics and indicators. A range of interactive Microsoft PowerBI dashboards bring data on the portal to life, covering subjects as diverse as housing, census results and deprivation. This makes it easy to explore and question data, and is heavily used by citizens, health professionals, councillors, and voluntary groups. This underpins greater collaboration across the city and wider region, helping target actions and drive better-informed decisions.

West Midlands Fire Service Incidents - WMCA

Incidents by month

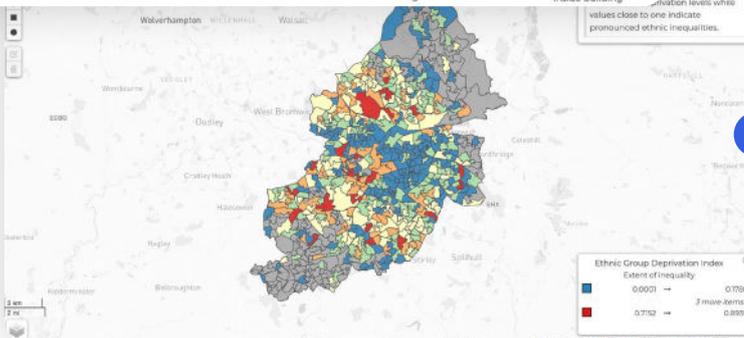


Top 5 incident classifications

Position	Classification	No. of incidents
1	False Alarms (Equipment)	93,994
2	False alarm raised with good intent	43,216
3	Road Traffic Collision	33,343
4	Deliberate Rubbish Fires	32,748
5	Accidental rubbish fire	27,337

Top 5 place fire started

Position	Location
1	Kitchen
2	External structures (walls, window frames, fascia etc.)
3	Bedroom
4	Living room
5	Inside building



MAKING PORTAL MANAGEMENT EASY

Despite the size and scope of the data marketplace, it is managed by a small team thanks to the solution's usability. Administration does not require knowledge of specific coding skills and can be carried out internally without the need to rely on external providers. Comprehensive documentation is easily accessible, and as all Opendatasoft product manuals are online, tools such as generative AI can be used to provide answers and even HTML code for new page designs. This is supported by the Opendatasoft Community, which brings users together and enables them to share best practice and answer each other's questions.

OPENDATASOFT:

THE DATA MARKETPLACE FOR DATA SHARING AT SCALE

To make its data and insights accessible to all users, Birmingham relies on three key strengths of Opendatasoft's solution and approach:

AI-POWERED SEARCH

Opendatasoft's AI-powered search makes it easier for users to find relevant data, aiding discoverability by going beyond keyword search and understanding the context of the query. This is particularly important as Birmingham is a diverse city, making the multilingual functionality of AI search vital. Adopting AI search also means that Birmingham does not have to manually populate search with all potential keywords, dramatically saving time while improving the user experience.

BUILT-IN PROCESSORS AND AUTOMATION

Thanks to Opendatasoft's range of processors, it is easy to enrich data with geographical information, maps or polygons to make it more understandable. Administration is minimized as data can be quickly imported straight from a specific URL or via an API, with scheduled updates happening automatically. Automation also ensures strong governance - teams within the council can upload data themselves, with rules in place to check that compliance processes are being followed.

CONSTANT UPDATES AND NEW FEATURES

Unlike its previous solution, where all updates were charged for additionally, Birmingham is now benefiting from access to all new Opendatasoft features as part of its ongoing SaaS subscription. This means it is able to constantly enhance the experience for both users and administrators, without putting pressure on budgets. For example, Birmingham has adopted Opendatasoft's latest Microsoft PowerBI connector to automatically integrate information across its data stack.

RESULTS: DELIVERING UNDERSTANDABLE INSIGHTS TO ALL

Birmingham City Council is now seeing major benefits from its data marketplace, including:

A single source of truth

The City Observatory has established itself as a centralized data repository that is trusted across the council and beyond, providing a single source of truth in key areas and underpinning better decision-making. Data assets such as census and postcode data are increasingly being used by citizens, voluntary organizations, other councils, and healthcare bodies, leading to an average of 96,000 API calls per month since the portal launched. The council is now working with the West Midlands Combined Authority to host its data, further extending the portal's reach and utility.

Greater efficiency

Despite having a small team, the council is now able to manage its portal internally, without needing to pay separately for updates or enhancements. This is driving increased efficiency and cost-savings, with straightforward administration through the portal's user-friendly backend. Due to the solution's built-in APIs most datasets are updated automatically, following specific rules and processes, dramatically reducing administration time while still ensuring compliance and governance.

Delivering more understandable, actionable insights

Every one of the 287 datasets on the portal has its own insights page, with data visualized through dashboards, interactive maps and graphs, helping provide a deeper understanding for users, whatever their interests and level of data skills.

As many of the datasets have been imported via API from other public sector organizations, the portal provides a resource that goes beyond Birmingham's own data, deepening the experience and delivering on the key objective of turning data into usable, actionable insights.

 *Thanks to Opendatasoft we have been able to quickly create a vibrant, insightful source of data on Birmingham and the wider region. By empowering the entire community with information in understandable, usable ways we are increasing the impact of data, underpinning greater transparency, better decision-making, and improved collaboration for all.*



Danny O'Neill
Birmingham City
Observatory Lead



 *The success of Birmingham's City Observatory demonstrates how quickly organizations can transform their data into value for their employees, citizens and the wider community at scale through a centralized, self-service data marketplace. Birmingham is now delivering an engaging experience for users, while boosting efficiency and helping deliver on its overall objectives.*



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