

Case Study:

NationalMap (Australia)

Type: Website

Organisation(s): Australian Government, Digital Transformation Agency, Geoscience Australia

Tags: open data, infrastructure, website



The Australian [NationalMap](#) is an online map-based tool that provides spatial data from a range of Australian government departments and agencies. It was built in 2014 with the intention of supporting commercial and community innovation through the opening of public data.

Within the portal, the [Investor Map](#) is of particular interest to the Greater Manchester Local Data Review. The Investor Map was built in consultation with investors and stakeholders across a range of industry sectors. It aims to provide access to spatial and other data to help encourage investment across the country.

Background

NationalMap was launched by the Australian Government in 2014. It was unveiled ahead of the annual [GovHack](#) event, a hackathon that encourages developers to come up with new ways to use government data. The outputs of the 2014 event [fed into the future design and structure of the site](#).

NationalMap is a fully open architecture that pulls data directly from [Geoscience Australia](#), the [Bureau of Meteorology](#), the [Australian Bureau of Statistics](#) and the government's [data.gov.au](#) open data repository. It primarily aims to:

- provide easy access to authoritative and other spatial data to government, business and the public;
- facilitate the opening of data by federal, state and local government bodies; and
- provide an open framework of geospatial data services that supports commercial and community innovation.

The NationalMap portal fits within a wider strategic push for open data by the Australian Government, as exemplified through the development of the government's [open data toolkit](#).

Software

NationalMap was built using Open Source software available through [Github](#). The core platform, [TerriaJS](#), was initially developed by [Data61](#) for the purposes of NationalMap. However, this platform has subsequently been made available to assist with the

development of other spatial data viewing applications, such as the [Australian Renewable Energy Mapping Infrastructure \(AREMI\) Project](#).

Important considerations

Content and quality

The site has one main interactive national map that contains hundreds of datasets, in categories ranging from Agriculture to Health to Marine and Oceans. The primary purpose of the site is to visualise the datasets, allowing users to play and interact with the data, rather than to be used as a datastore. However, each dataset is supported by detailed metadata and background narrative, as well as a link to the original data source.

Beyond this main interactive map, the portal has links to related maps, such as the [National Environmental Information Infrastructure map](#), and the [AREMI project](#). Of the related maps available, the [Investor Map](#) is of particular relevance to the Greater Manchester Local Data Review, as the map was designed to encourage investment and growth.

Investor Map

The Investor Map functions in the same way as the main NationalMap. It has over 900 national datasets that users can view and overlay to help inform their investment thinking and decision-making. Datasets cover an extensive range of investment factors, grouped into the following categories and subcategories:

- **Resources and energy:** land and tenure, mining, renewable energy, infrastructure, oil and gas, social and economic, and soil.
- **Tourism:** tourism, infrastructure, social and economic, and environment.
- **Agriculture and food:** agriculture, climate, water, transport, and soil.

These datasets were chosen as relevant features for potential investors, [based on consultation](#) with investors and stakeholders across a range of industry sectors.

User experience and usage data

The interactive maps on the portal are very user friendly, and offer a wide range of options for playing with and visualising data. Users can zoom out to understand the broader national picture of a dataset, or can zoom in to explore a small local area in detail.

There is no function for public users on the site to view the popularity of different datasets, although this may be monitored internally. However, users can leave feedback on both their use of, or impact from, the data; and any suggested changes to the site. Feedback received over the five years since the website's initial creation has helped develop the site into the high quality and user-friendly platform that it is today.

Blockers and challenges

The website appears to have attempted to mitigate risks and challenges that other open data projects have identified. For example, clear terms and conditions have been set out to reduce the potential misuse or misinterpretation of the data by users. These terms and conditions limit liability by clearly stating that the site is not intended to provide any commercial, financial, or legal advice.

What can Greater Manchester take from this now?

- Consultation with a range of potential investors and stakeholders is essential when determining the types of public data needed to drive growth and innovation.
- The datasets represented on the investor map provide a baseline example of the type of indicators that might be relevant for investors in Greater Manchester too.
- Providing an interactive map that allows users to select and layer the datasets they are interested in is a user-friendly way of making public data more accessible to a wide audience.
- Clear terms and conditions of usage of websites can help to mitigate the risks to data providers surrounding misinterpretation by users. However, this needs to ensure that it does not impinge on open data licence terms.
- A feedback function on the homepage of a mapping site or datastore could be a simple and effective way of gaining valuable insights into how the user base is interacting with the data and what other features they might find useful.

Find out more:

<https://nationalmap.gov.au/>

<https://nationalmap.gov.au/investormap/>