



**Open Innovations
Annual review 2024**

#RadicallyOpen

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1. Introduction

Welcome to our Annual Review of 2024. Our review, like all of our work is #RadicallyOpen. It is concise and published openly on the web.

2024 is our eleventh year of operation. We are so proud of our achievements, our team, our constant evolution, our ambition and our resolve. We have lots coming up in 2025 to share but first we will reflect on our delivery in 2024.

Our #RadicallyOpen approach means that when you work with us we all work:

- In the open
- Innovatively
- Collaboratively
- At pace
- Concisely
- On the web

Paul Connell & The Open Innovations team, January 2025.

Remember all of our work is on the web and easily found using your favourite search engine.

2. Who are we and what do we do?

We are a not-for-profit independent small business operating remotely from Leeds. Over the last year since closing our workspace we have been “On Tour “ - enjoying working from clients and sponsors' locations. Thank you to Arup, Tetra Tech, CEG and Bradford 2025 for hosting us. In 2025, we will continue to work remotely and have a base with The Data City, watch this space for updates.

We innovate in the open with data, working with our sponsors, partners, companies, organisations, governments and individuals. We help others to access, use and share data – to use the web as it was intended – and create massive surpluses of shared value.

Our team is small but knowledgeable, experienced and talented, with a mix of backgrounds including data science, data analysis, innovation, economics, marketing & comms, IT, web development, project management and much much more.



Paul Connell

Founder Open Innovations



Kathryn Connell

Director



Stuart Lowe

Data, Research & Development Open Innovations



Luke Strange

Data Scientist Open Innovations



Christian Spence

Economics Data Lead Open Innovations



Giles Dring

Associate Data Architect Open Innovations



Thomas Forth

Head of Data Open Innovations



Tazmin Chiles

Data & Innovation Consultant Open Innovations

We are doers not talkers; we innovate iteratively on the web by working at pace, being on the web, testing rapidly, building prototypes and creating real tools/ websites and data assets and infrastructure.

Our mission-led approach means that we work on stuff that matters to us, our sponsors, partners and network and ultimately everyone else. Everything we do is on [our website](#).

We focus on these key areas:

- Sponsors
- Projects
- Data partnerships
- Innovation
- Events

3. Who do we work with?

Anyone that has an interest in data, working with data, sharing data, innovating with data, analysing data, publishing data openly on the web. So far this has been local authorities, governments, cultural programmes, think tanks, public and private sector organisations from every sector. We work in two main ways: collaboratively with our sponsor network or commissioned by clients/partners.

3.1. Sponsors

Each year our sponsors support us with a small amount which means that we can maintain and develop our assets - the website, toolbox, mailbox help, mission-led projects



3.2. Partners

We are commissioned by clients/partners to work in partnership on a specific data project or programme - we continue to work openly on these projects so that ultimately any developments and progressions we make together can be used and shared so that others can benefit from the work too.



4. How do we work?

Open Innovations has existed since 2013 with the intention of being #RadicallyOpen making a difference in North England.

Our key USP is our website and the way we work openly. The aim of this is to make a difference, for individuals, organisations, governments and academia to use, learn, share and benefit from our work. To do this we publish most of our work under a couple of open source recognised licences:

- Creative Commons CC By 4.0 - this means that our work can be shared and adapted if accreditation is given and any changes are detailed.
- MIT licence - open source approved licence for software.

Over the last 2 years we have focused on helping organisations use their data differently, openly and quickly. We have also focused on our mission-led, data for good work.

Our work is dominated by the public and regulated sectors. We have noticed that the public sector's ability to deliver excellent data projects has been hampered by the UK's centralised institutions. In our opinion, they have made progress slow and in some cases nothing "gets done" at all. Our approach proves that there is a credible alternative. One that focuses on outputs, ambitions, and realistic progress.

5. Why does our work matter?

Our most important success is that Open Innovations is still here after 11 years. We're still relevant, still ambitious and still aiming to be a new type of organisation in North England.

We're an independent, not-for-profit organisation. We need to be aware of our commercial situation to stay in business. Our revenue streams are made up of sponsor support and our data partnerships and projects.

Because of our sponsors we are able to fund our team to work on projects which are politically and topically relevant and can make a difference - we call these our mission-led work. We will highlight this later in the review.

Our work matters because we care about doing the right thing with data. We care about doing the best possible job of sharing, publishing, visualising, and innovating with data. We care about helping others do the same and helping affect positive change.

6. What is our impact and value?

Our impact and value is easy to measure as we capture the data via our dashboard - but the output we achieve consistently is impressive:

- Team - Small, talented, high-performance, experienced, and knowledgeable team.
- Website - Our website is an invaluable resource which takes high-level maintenance. This is reflected in **181,534** page views - an increase of 36% compared to last year (after new bot-filtering rules were applied).
- Mission-led work - Sponsor-funded projects which make a difference to others.
- Projects - Our #RadicallyOpen approach means all of our project outputs are shared so others can learn, benefit and develop at pace for efficiency.
- Tools - We have spent time and effort developing tools which can help others use data more efficiently.
- Sharing - Most of our work is published under a CC BY 4.0 and/or MIT licences. This means that anyone can use it if they give us credit.
- Network & Reach - we have an extensive comms program which in 2024 delivered at least **309,932** impressions.
- Innovation events - How Does The North Win, True North Explorer Launch, and Open Data Saves Lives - well attended and engaged audiences.
- Insight & Opinion - We are asked for help and advice on a daily basis from all over the world - students in Helsinki, the UK Parliament, journalists, London think tanks, National & regional news channels, a peat restorer in the Dales, Local authorities across the UK and more.
- PR - We regularly are asked to provide comment and features for the FT, Guardian, The Times, Channel 4, BBC, UK Parliament, local and regional news, charities, Age UK, Digital specialist features, and at conferences across the UK.

6.1. Dashboard

At Open Innovations, we measure our work openly. Our dashboard is used to measure our progress and success. It is updated automatically, regularly and is open to all. We report on our sponsors, projects, revenue, events and social media. At a glance you can immediately see the value we deliver.



Note that the website visits recorded in the dashboard are before bot removal which we introduced recently.

6.2. Projects

This is at the heart of what we do best. Our team of data scientists, analysts, and developers work on your behalf to design, deliver & maintain some pioneering projects which impact us all. 2024 was a busy and exciting year which saw us work on **8 new projects** focusing on culture, the economy and transport:

- **Northern Powergrid DFES 2023**

An interactive visualisation of Northern Powergrid's potential future scenarios (DFES) updated to 2023

- **Institutue for Government Charts**

Visualisation component library for Institute for Government

- **Workplace Parking Levy**

We created a tool to help local authorities explore workplace parking levys. The demo uses the fictional county of Borsetshire (from The Archers).

- **True North Data Explorer**

A data hub for the True North network exploring economic data and owner-managed businesses in the North of England.

- **Leeds City Council Culture Dashboard**

A dashboard for Leeds Cultural Investment Programme (LCIP)

- **Bradford 2025**

Creating a dashboard for data around Bradford 2025 year of culture

- **techUK Local Digital Index**

A tool to aid policy makers and a way to see the impact and value of the tech sector for the national and regional economies.

- **Liverpool City Region Bus Tracking**

Working with Liverpool City Region Combined Authority (LCRCA) to build the data infrastructure that enables them to evaluate the effectiveness of the buses that actually run vs the buses that were timetabled across Liverpool.

Mission-led projects

Thanks to our sponsors' funding we can fund a small team to create, develop and maintain data projects that we think will have an impact. We are incredibly proud of our work and impact in this field. To date we have worked on over **51** of these projects.

■ Housing Data

For many young (and not so young) people in the UK, the dream of owning a home has never felt more elusive. Soaring property prices, stagnant wages, and a shrinking supply of affordable housing have turned what was once a common life milestone into an increasingly unattainable goal. Our housing data was created to explore to identify some useful insights.

HIGHLIGHT

■ General Election 2024

We worked through the night to deliver a live hex map for the 2024 UK General Election, our results were published quicker than the BBC and we tripled our website impressions and social media statistics on the day. For lots of reasons we think that our approach and hex maps were some of the best.

HIGHLIGHT

■ Warm spaces directories

Since the winter of 2022-3 many different groups - from voluntary to local councils - started creating directories of warm space offers. All these separate directories duplicate work, they mean that any individual directory only contains some of the offers, and those who are looking for warmth have to visit more websites (that are rarely optimised for people on limited data plans). We developed this tool to index all the warm spaces directories and let people search using less data.

HIGHLIGHT

■ Hexviz

Show a CSV file or Google Sheet on a hex map (cartogram)

■ UK Hex Maps

Hex maps (technically, cartograms) are useful when each area in a visualisation should have the same visual contribution. For instance, a standard geographic election map of the UK over-emphasises the winners of rural areas because they are much bigger, geographically, even though they are the same size electorally. In this case a hex map would give a better impression of the result although at the expense of accurate geography. We've brought together openly licensed hex map layouts (of UK geographies) that are available for reuse.

■ Add UK geography codes

Take a CSV file that only has, say ward names, and add a column of GSS codes. It can also convert some dates for you.

■ Edit hex layouts

A tool to help design and edit hex layouts stored as HexJSON

They have been used widely - we cannot capture every instance but we know of these organisations that have share or used our work: BBC, The Times, Ministry of Justice, UK Parliament, ONS, RAC, Age UK, Channel 4, Look North, Parliamentary Digital Service, House of Commons, NHS, NHSx, NHS Digital, Leeds Anchors Network, Newsnight, UKMPG, New Statesman, The Economist, Financial Times, Transport for the North, Universities of Leeds/Bradford/Cambridge/Oxford/Bristol/Edinburgh/Warwick/Loughborough/Newcastle, Radio 4, CPC Catapult, RSM Economics, The Data City, BFI, National Grid, Open Research Leeds, Scholastic Solutions, Open Data Manchester, Leeds 2023, The Open Data Institute, Open UK, Leeds Digital, and of course our sponsors past and present.

6.3. Communications

Our website and our team are our most important communications tools. We publish many articles and blogs which are often reshared and published by others and showcase what we are working on and how it can impact others. We are also asked to attend and contribute to many events, conferences, roundtables and workshops where we can share our work and insight.

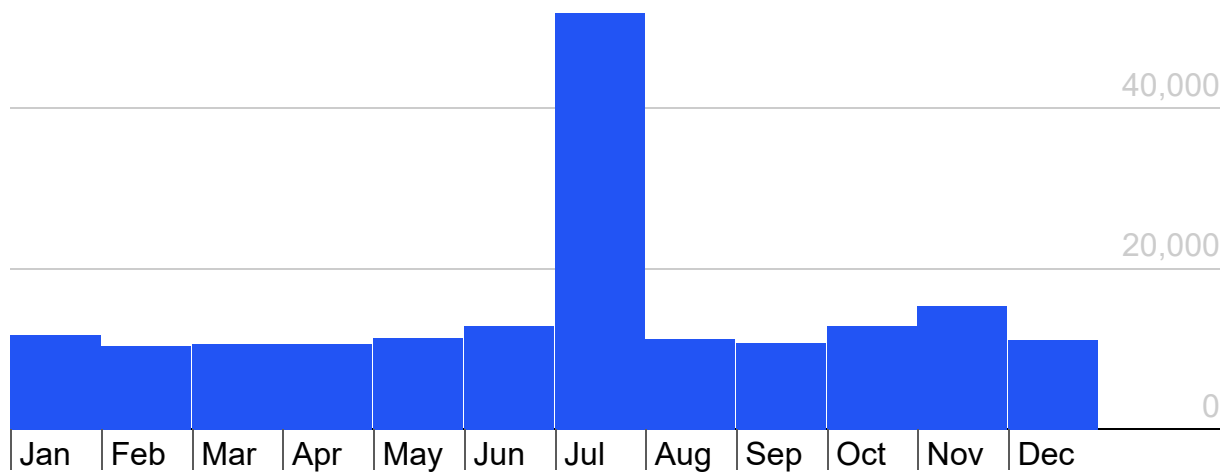
We have a mailing list of over 1100 subscribers who we send out regular newsletters and updates to and an active and engaged social media profile covering X, Facebook, LinkedIn, Blue Sky and YouTube. It enables us to engage with an audience that covers the whole of the UK and beyond, sharing our news, project outcomes, innovation work, and more. Please do follow us and join in with our open conversations, and share your stories and priorities with us so we can share them. This social media presence is important in raising awareness, sharing info, and also has a monetary value relative to our sponsors, partners and clients.

Summary

Website visits:	181,534
Tweets:	294
Tweet impressions:	101,511
New X followers:	1,294
Facebook posts:	177
Facebook impressions:	4,299
Facebook reach:	3,984
LinkedIn impressions:	22,007
Youtube viewing time (across all videos):	1,414 minutes
Youtube unique views:	581
Total online engagement: (measured in number of times a tweet, post, link, page, etc, has been seen)	309,932

Website visits

Across our main website as well as microsites for particular projects.



The big spike in visits in July was due to our live mapping of results for the General Election.

Blog posts

Our blog is a useful and important method to communicate our work, showcase tools, announce research and development work, and connect people & orgs to our work so that it can be shared, developed and amplified. During the year we wrote **39** blog posts:

- 8 January Passenger journeys: pictures at a (rail transport) exhibition by Will Deakin (580 views)
- 10 January Farewell to Munro House by Kathryn Connell (763 views)
- 10 January Northern Powergrid: Net Zero Hack for Impact by Gillian Williamson (270 views)
- 25 January Making better feedback forms by Stuart Lowe (59 views)
- 8 February Net Zero Hack for Impact: wrapping up & next steps by Tazmin Chiles (74 views)
- 5 March UK constituency data hex maps by Stuart Lowe (508 views)
- 6 March A sustainable move - leaving Munro House by Kathryn Connell (176 views)
- 28 March How does the North win? What comes next.. by Paul Connell (187 views)
- 18 April Building quick hex maps by Stuart Lowe (105 views)
- 3 May Creating data infrastructure for arts, culture and creative education by Tazmin Chiles (158 views)
- 8 May A workplace parking levy tool for Ambridge by Christian Spence and Stuart Lowe (72 views)
- 15 May Spring newsletter 2024 by Kathryn Connell (103 views)
- 4 June How the North is Winning: Launch of New Data Partnership by Luke Strange and Kathryn Connell (129 views)
- 12 June Youth employment in UK constituencies by Tazmin Chiles (69 views)
- 19 June Colour-your-own General Election 2024 by Stuart Lowe (445 views)
- 2 July Election 2024 results hex map by James Connell (1227 views)
- 2 July Launching The True North Data Explorer by James Connell and Luke Strange (85 views)
- 5 July Building the General Election Hexmaps by Giles Dring (392 views)
- 11 July Can the UK go back to being the richest country in the world? by Thomas Forth (204 views)
- 22 July The World of Housing by Luke Strange and James Connell (107 views)
- 24 July Summer 2024 newsletter by Kathryn Connell (75 views)
- 31 July UK cartogram round-up by Stuart Lowe (168 views)
- 12 August Advocating for cultural education for young people in our city by Tazmin Chiles (42 views)

- 20 August Add GSS codes to a CSV by Stuart Lowe (34 views)
- 22 August Fixing ONS Geoportal GeoJSON by Stuart Lowe (84 views)
- 27 August Wuthering Bytes talk - August 2024 by Paul Connell (55 views)
- 28 August Building a housing data explorer by Luke Strange (98 views)
- 30 August Insights from the Housing Data Explorer by James Connell (103 views)
- 23 September Project Launch: techUK Local Digital Index by Luke Strange (99 views)
- 1 October Help build a hex map of wards by Stuart Lowe (81 views)
- 9 October Autumn newsletter 2024 by Kathryn Connell (190 views)
- 15 October Visualising ministerial roles for the Institute for Government by Giles Dring (45 views)
- 15 October Results from another UK Growth Survey by Thomas Forth (853 views)
- 29 October Transport accessibility in 2024 – How did we get here? by Luke Strange (298 views)
- 7 November Updated petitions viewer by Stuart Lowe (48 views)
- 12 November Our work on culture: creating data infrastructure for the sector by Tazmin Chiles (74 views)
- 26 November Are council websites getting bigger? by Luke Strange (45 views)
- 23 December GTFS and GTFS-RT for beginners by Luke Strange (15 views)
- 23 December Wrapping up with Youth Futures Foundation by Tazmin Chiles (20 views)

7. Social, charity, and sustainability

Our work, our impact, and our knowledge are great so it's no surprise that we get asked a lot by a wide variety of organisations to use resources, and services for free. As a not-for-profit, non-funded organisation we simply cannot operate on this basis. However, we do choose a couple of relevant projects each year to support with some of the funds raised by sponsorship and events.

Open Innovations will be making a cash donation this year to 3 organisations: Zarach.org (helping ensure children don't go without a bed to sleep in), Unicef and the Red Cross.

We operate a commercial non-profit model - which means that we use profits to work on our mission-led projects. In simple terms this means that sponsorship and other revenues can support work and projects that make a difference.

The fact that we have established Open Innovations as a business with stable revenues means that your sponsorship can be directed towards these mission-led projects and we can provide technical support, space for meetings and collective pooling of resources to make the most of all of our investments.

All of our current work has started with us completing self funded activity (Meetings, Conversations, Events, Web Communications) and doing innovation (Data Projects/ Visualisations/Tools).

In 2024 this has meant that our collective investment has allowed projects including: [#PlanetData](#), [How Does The North Win?](#), [Economic Data Dashboard](#), [Housing Data](#), [Culture Data](#), [Bus journey times tool](#), [Population around a point](#), [Parkulator](#), [Constituencies hex maps](#) and the [WarmSpaces Finder tool](#) to make a difference for everyone.

8. What next?

Lots more, following our recent track record in helping cultural organisations publish, share & visualise their data, we are excited to be working with Bradford 2025 on their year of culture, and a collaboration between the North East Combined Authority and the University of Northumbria and helping Calderdale with a cultural audience tool too.

We are continuing our work with Northern Powergrid DFES, and will be announcing more data observatory and data partnership projects in culture, the economy and transport very soon.

We will continue to work on our important and valuable mission-led work. So please join in, share, get involved and get in touch. Working together is more impactful and more fun.

Use our website, share our work, ask us for help, join in :)

Paul and the Open Innovations team

Acknowledgements & notes

Image credits

- Cover image: Open Innovations / CC-BY-NC-SA 4.0

Data sources

- Sponsors: open-innovations.org/dashboard/data/sponsors.csv
- Innovation events: open-innovations.org/dashboard/data/innovation.csv
- Projects: open-innovations.org/dashboard/data/projects.csv
- Themes: open-innovations.org/dashboard/data/themes.csv
- Social media monthly statistics: open-innovations.org/dashboard/data/socials.csv
- Website monthly statistics: [analytics.csv](https://open-innovations.org/analytics.csv)

Links

Who are we and what do we do?

- The Data City: thedatacity.com/
- Our team: </about/team>
- Paul Connell Founder Open Innovations: <mailto:paul.connell@open-innovations.org>
- Kathryn Connell Director : <mailto:kathryn.connell@open-innovations.org>
- Stuart Lowe Data, Research & Development Open Innovations: <mailto:stuart.lowe@open-innovations.org>
- Luke Strange Data Scientist Open Innovations: <mailto:luke.strange@open-innovations.org>
- Christian Spence Economics Data Lead Open Innovations: <mailto:christian.spence@open-innovations.org>
- Giles Dring Associate Data Architect Open Innovations: <mailto:giles.dring@open-innovations.org>
- Thomas Forth Head of Data Open Innovations: <mailto:tom.forth@open-innovations.org>
- Tazmin Chiles Data & Innovation Consultant Open Innovations: <mailto:tazmin.chiles@open-innovations.org>
- our website: open-innovations.org/

How do we work?

- Creative Commons CC By 4.0: creativecommons.org/licenses/by/4.0/
- MIT licence: opensource.org/license/mit

What is our impact and value?

- Team: open-innovations.org/about/team/
- Projects: open-innovations.org/projects/
- Tools: open-innovations.org/data/toolbox
- Network & Reach: open-innovations.org/dashboard/?impact=2023#social
- Northern Powergrid DFES 2023: odileeds.github.io/northern-powergrid/2023-DFES/
- Institue for Government Charts: github.com/open-innovations/ifg-charts
- Workplace Parking Levy: open-innovations.org/projects/workplace-parking-levy/borsetshire/
- True North Data Explorer: open-innovations.github.io/true-north/
- Leeds City Council Culture Dashboard: open-innovations.github.io/lcc-culture-dashboard/
- Bradford 2025: data.bradford2025.co.uk
- techUK Local Digital Index: thedatacity.github.io/techUK-ldi-website/
- Liverpool City Region Bus Tracking: github.com/open-innovations/bus-tracking
- Housing Data: open-innovations.github.io/housing/
- General Election 2024: ge2024.hexmap.uk/
- Warm spaces directories: open-innovations.github.io/warm-spaces/
- Hexviz: open-innovations.org/projects/hexmaps/viewer
- UK Hex Maps: hexmap.uk/
- Add UK geography codes: open-innovations.github.io/geography-code-adder/
- Edit hex layouts: open-innovations.org/projects/hexmaps/editor/
- articles and blogs: [/blogs/](https://open-innovations.org/blogs/)
- mailing list: open-innovations.org/getinvolved/signup
- Passenger journeys: pictures at a (rail transport) exhibition: open-innovations.org/blog/2024-01-08-passenger-journeys-pictures-at-a-rail-transport-exhibition
- Farewell to Munro House: open-innovations.org/blog/2024-01-10-goodbye-to-munro-house
- Northern Powergrid: Net Zero Hack for Impact: open-innovations.org/blog/2024-01-10-northern-powergrid-net-zero-hack-for-impact
- Making better feedback forms: open-innovations.org/blog/2024-01-25-making-better-feedback-forms
- Net Zero Hack for Impact: wrapping up & next steps: open-innovations.org/blog/2024-02-08-net-zero-hack-for-impact-wrapping-up-next-steps
- UK constituency data hex maps: open-innovations.org/blog/2024-03-05-uk-constituency-data-hex-maps
- A sustainable move - leaving Munro House: open-innovations.org/

[blog/2024-03-06-a-sustainable-move-leaving-munro-house](#)

- [How does the North win? What comes next...: open-innovations.org/blog/2024-03-28-how-does-the-north-win-what-next](#)
- [Building quick hex maps: open-innovations.org/blog/2024-04-18-building-quick-hex-maps](#)
- [Creating data infrastructure for arts, culture and creative education: open-innovations.org/blog/2024-05-03-creating-data-infrastructure-for-arts-culture-and-creative-education](#)
- [A workplace parking levy tool for Ambridge: open-innovations.org/blog/2024-05-08-workplace-parking-levy-tool](#)
- [Spring newsletter 2024: open-innovations.org/blog/2024-05-15-spring-newsletter-2024](#)
- [How the North is Winning: Launch of New Data Partnership: open-innovations.org/blog/2024-06-04-how-the-north-is-winning-true-north](#)
- [Youth employment in UK constituencies: open-innovations.org/blog/2024-06-12-exploring-youth-employment-in-uk-constituencies-](#)
- [Colour-your-own General Election 2024: open-innovations.org/blog/2024-06-19-colour-your-own-general-election-2024](#)
- [Election 2024 results hex map: open-innovations.org/blog/2024-07-02-live-election-2024-results-hex-map](#)
- [Launching The True North Data Explorer: open-innovations.org/blog/2024-07-02-true-north-data-explorer](#)
- [Building the General Election Hexmaps: open-innovations.org/blog/2024-07-05-building-the-general-election-hexmaps](#)
- [Can the UK go back to being the richest country in the world?: open-innovations.org/blog/2024-07-11-can-the-uk-go-back-to-being-the-richest-country-in-the-world-](#)
- [The World of Housing: open-innovations.org/blog/2024-07-22-the-world-of-housing](#)
- [Summer 2024 newsletter: open-innovations.org/blog/2024-07-24-summer-2024-newsletter](#)
- [UK cartogram round-up: open-innovations.org/blog/2024-07-31-uk-cartogram-round-up](#)
- [Advocating for cultural education for young people in our city: open-innovations.org/blog/2024-08-12-advocating-for-cultural-education-for-young-people](#)
- [Add GSS codes to a CSV: open-innovations.org/blog/2024-08-20-add-gss-codes-to-a-csv](#)
- [Fixing ONS Geoportal GeoJSON: open-innovations.org/blog/2024-08-22-fixing-ons-geoportal-geojson](#)

- Wuthering Bytes talk - August 2024: open-innovations.org/blog/2024-08-27-wuthering-bytes-august-2024
- Building a housing data explorer: open-innovations.org/blog/2024-08-28-building-a-housing-data-explorer
- Insights from the Housing Data Explorer: open-innovations.org/blog/2024-08-30-insights-from-the-housing-data-explorer
- Project Launch: techUK Local Digital Index: open-innovations.org/blog/2024-09-23-project-launch-techuk-local-digital-index
- Help build a hex map of wards: open-innovations.org/blog/2024-10-01-help-build-a-hex-map-of-wards
- Autumn newsletter 2024: open-innovations.org/blog/2024-10-09-autumn-newsletter-2024
- Visualising ministerial roles for the Institute for Government: open-innovations.org/blog/2024-10-15-building-a-timeline-visualisation-for-the-institute-for-government
- Results from another UK Growth Survey: open-innovations.org/blog/2024-10-15-results-from-another-uk-growth-survey
- Transport accessibility in 2024 – How did we get here?: open-innovations.org/blog/2024-10-29-transport-accessibility-in-2024-part-1
- Updated petitions viewer: open-innovations.org/blog/2024-11-07-updated-petitions-viewer
- Our work on culture: creating data infrastructure for the sector: open-innovations.org/blog/2024-11-12-our-work-on-culture-creating-data-infrastructure-for-the-sector
- Are council websites getting bigger?: open-innovations.org/blog/2024-11-26-are-council-websites-getting-bigger-
- GTFS and GTFS-RT for beginners: open-innovations.org/blog/2024-12-23-gtfs-and-gtfs-rt-for-beginners
- Wrapping up with Youth Futures Foundation: open-innovations.org/blog/2024-12-23-wrapping-up-with-youth-futures-foundation-and-how-open-data-can-improve-outcomes-for-young-people

Social, charity, and sustainability

- #PlanetData: open-innovations.org/events/planetdata/5/
- How Does The North Win?: open-innovations.org/events/how-does-the-north-win/
- Economic Data Dashboard: economic-analytics.shinyapps.io/edd-app/
- Culture Data: open-innovations.org/projects/culture/
- Bus journey times tool: open-innovations.github.io/bus-tracking/
- Population around a point: open-innovations.github.io/population-calculator/
- Parkulator: open-innovations.github.io/parkulator/
- Constituencies hex maps: constituencies.open-innovations.org/
- WarmSpaces Finder tool: warm.open-innovations.org/

