



Geospatial
Commission



Ordnance
Survey

GEOSPATIAL COMMISSION PUBLIC SECTOR & PSGA EVENTS 2024

#GCxPSGA24



Geospatial
Commission



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Survey

WELCOME TO THE GEOSPATIAL COMMISSION PUBLIC SECTOR & PSGA EVENTS 2024

#GCxPSGA24



MORNING PROGRAMME

TIME	SESSION	PRESENTER	
10:00	Welcome	Steven Sibbald David Ball	Geospatial Commission Ordnance Survey
10:10	The latest evolution of OS's product offer and its future roadmap	Dean Paulley	Ordnance Survey
10:40	ONS Geography: Looking to the future	Jen Hampton	Office for National Statistics
11:10–11:40	Morning break		
11:45	OS National Geographic Database workshop	Rory Prentice Jess Baker	Ordnance Survey
12:45-13:35	Lunch break		

AFTERNOON PROGRAMME

TIME	SESSION	PRESENTER	
13:40	Welcome back	David Ball	Ordnance Survey
13:45	Customer story	Gair McAdie	Driving Vehicle Licensing Agency
14:00	Aerial Photography for Great Britain (APGB) – what's new?	Kathryn Lucas	Bluesky International Ltd.
14:15	Introducing the new APGB web services	Helen Wattie	Getmapping Ltd.
14:30	PSGA developments and update	Rory Prentice Jess Baker	Ordnance Survey
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15:20	Customer story	Frank Blades	Ceredigion County Council
15:35	PSGA Future capabilities update	Andy Wilson	Ordnance Survey
15:50	Closing comments	Steven Sibbald	Geospatial Commission
16:00	Close		



Geospatial
Commission



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esri UK



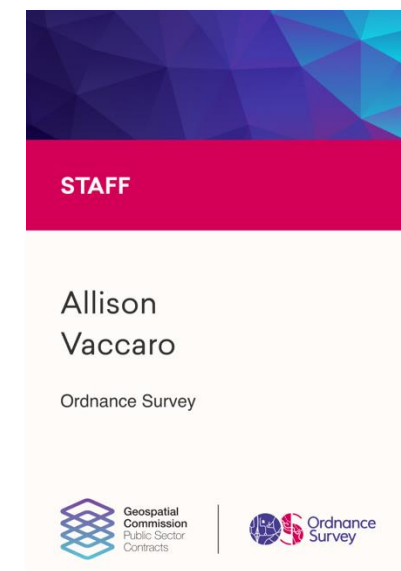
GEOXPHERE

Landmark
Information Group



HOW TO GET INVOLVED

- WiFi network: **CWS-Broadcast** PW: **LeatherWillow24**
- Ask questions on **Slido** using the code **#CAGCxPSGA2024**
- Come and find us during the breaks at the Ordnance Survey stand in the exhibition space
- Start a conversation on social media using **#GCxPSGA24**



THE LATEST EVOLUTION OF OS'S PRODUCT OFFER, AND ITS FUTURE ROADMAP

Dean Paulley
Head of Product

Agenda



OS NGD – TWO YEARS ON



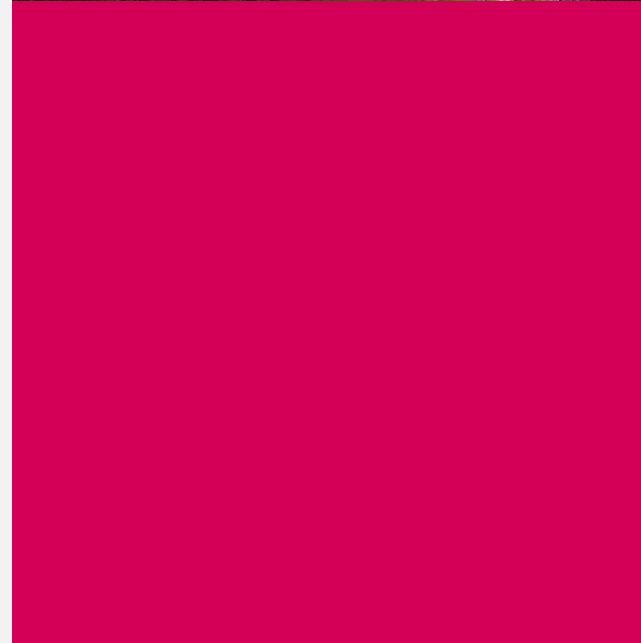
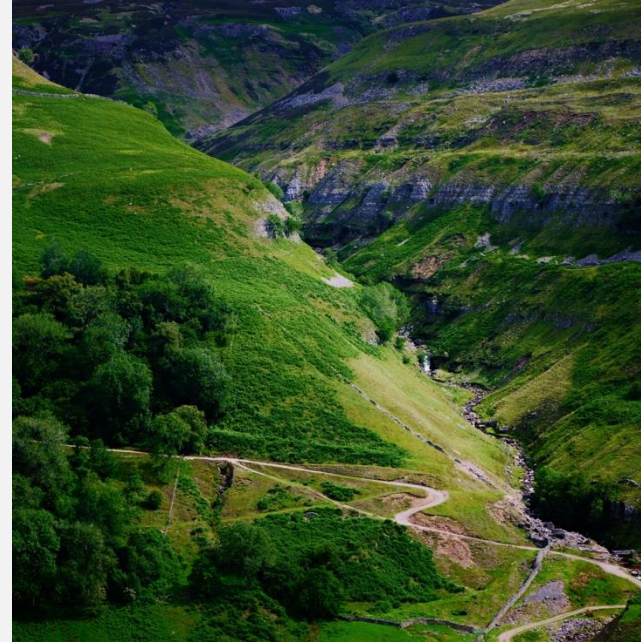
CUSTOMER EXAMPLES



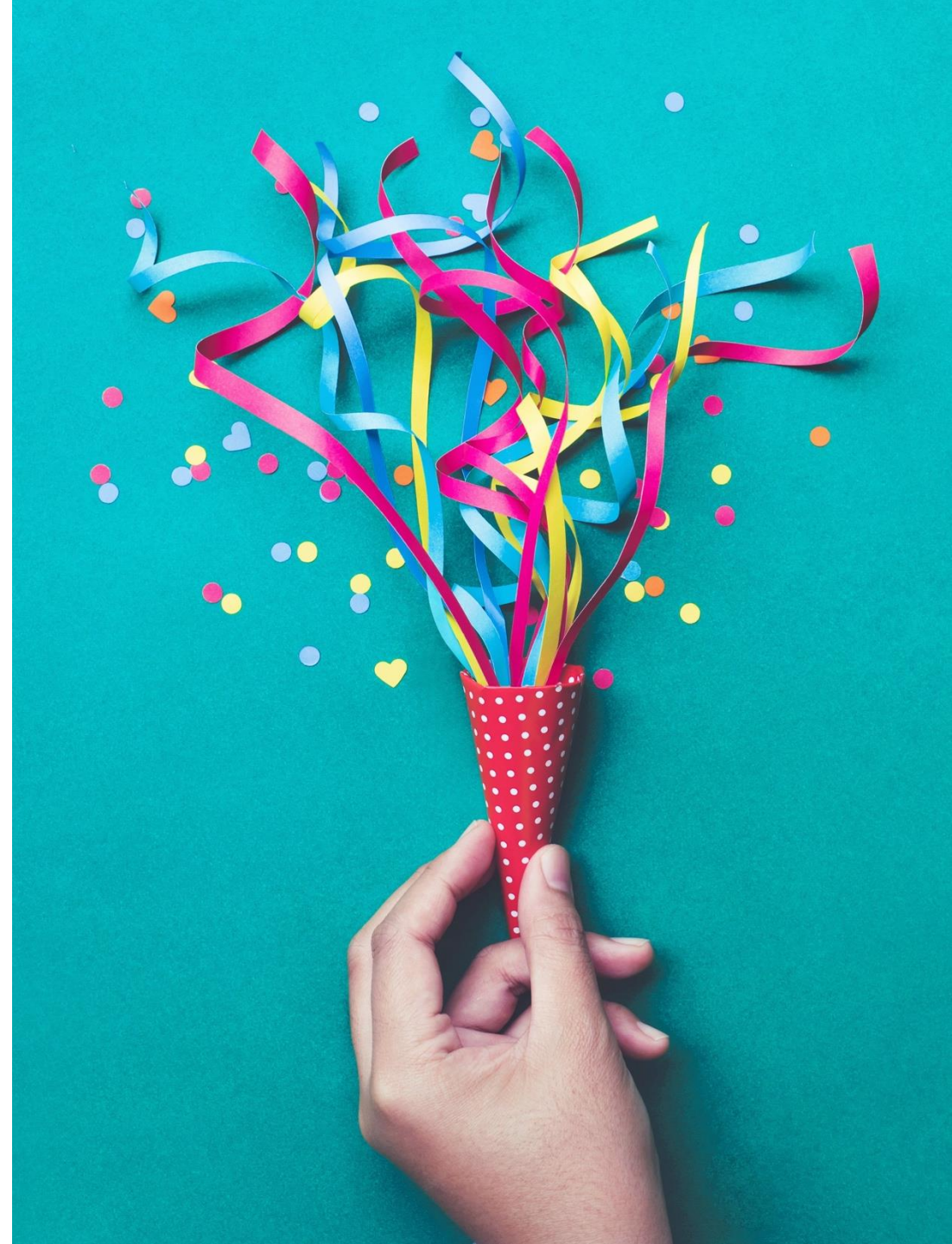
WHAT'S NEW?



WHAT'S NEXT?



2 years since
launching OS NGD



Previous releases

22/23



OS NGD Launch!

September 2022

- + Redesigned data across 9 themes
- + New distribution services (OS Select+Build and APIs)



OS NGD Address

- + Floor levels, business names, classifications
- + OS Places – daily currency



OS NGD Transport

- + Average and Indicative Speed
- + GB road width data

Sept 23



OS NGD Buildings

- + New geometry
- + Usage, connectivity and address counts
- + New Cross References



OS NGD Transport

- + Rail Network
- + Pavements
- + GB Coverage of Tracks and Paths

March 24



OS NGD Buildings

- + Age
- + Construction Material
- + Basement Presence



OS NGD Structures

- + Field Boundaries



OS NGD Land Cover

- + Habitat classifications and % coverage



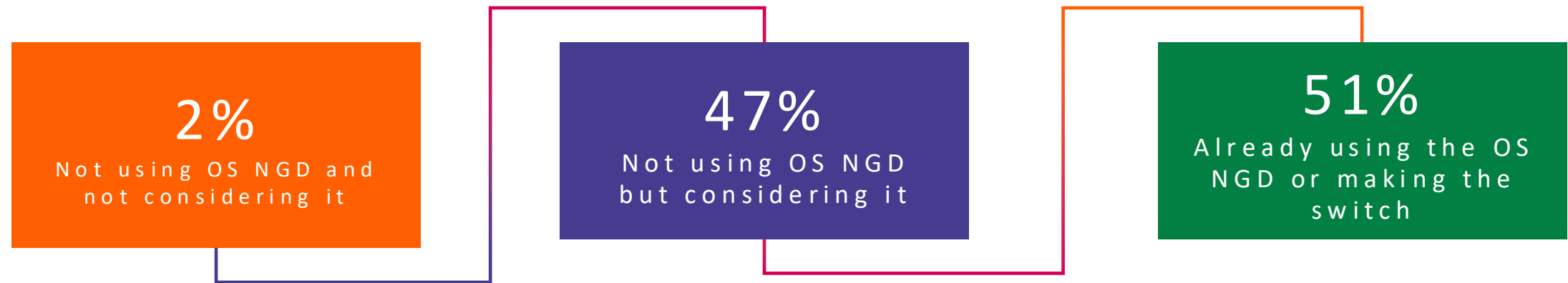
Multi-Modal Routing Network



Emergency Services Gazetteer

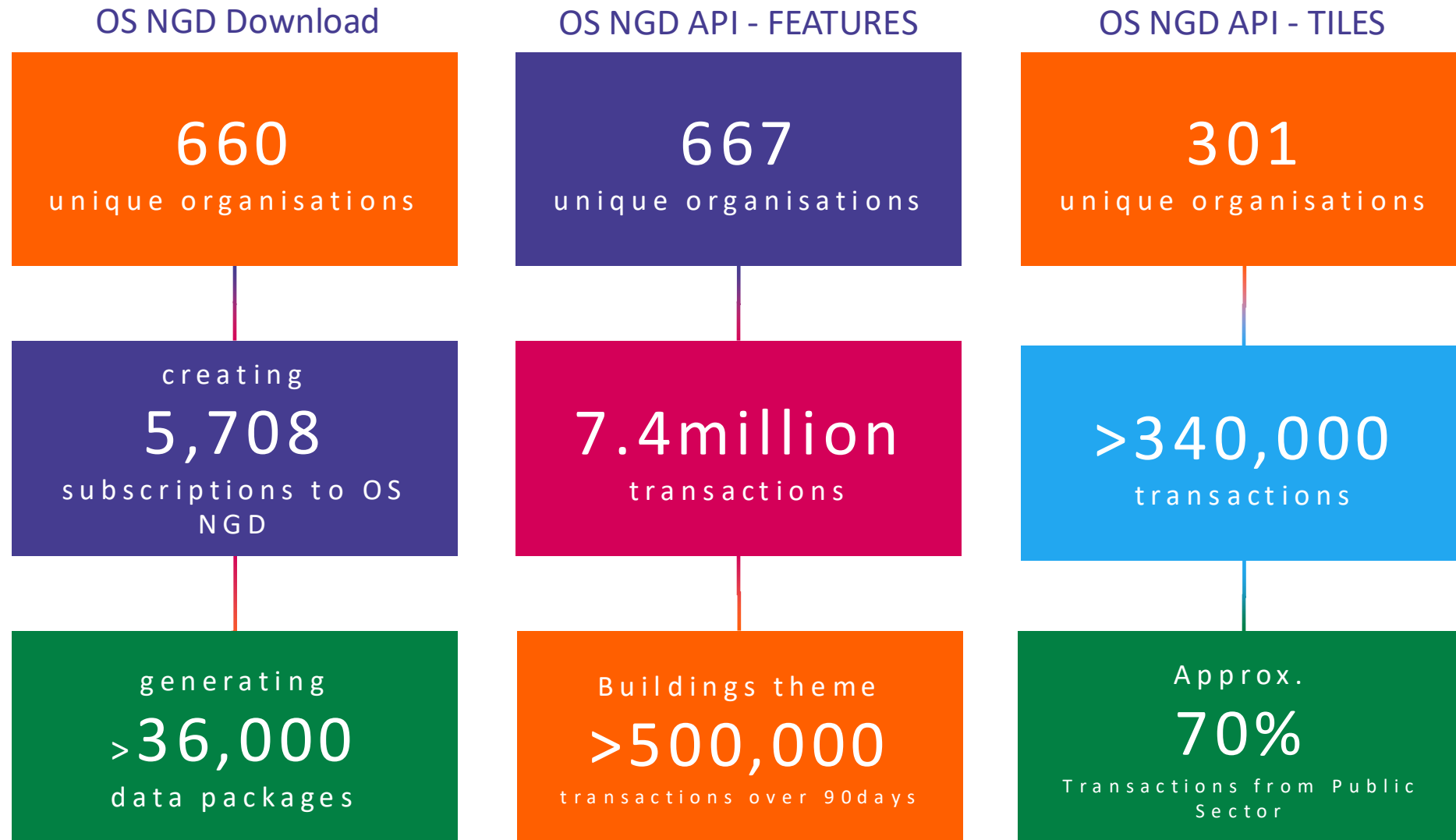
And so much more..!

How much are YOU using the OS NGD



*responses up to 22 Nov (348 responses)

Usage of OS NGD Data





Customer Examples

How are you using our latest offerings?



Creating sports facility catchment areas



The new MRN will allow users of Active Places Power to **calculate drive, walk and cycle catchments from sports facilities.**



Using the MRN meant **less preprocessing** as speed data and the presence of pavements are included in the dataset.



Active Places Power and the catchment area tool **guide investment decisions and support strategic planning** for sports provision.



The MRN is **invaluable** for geospatial analysis, offering **excellent accuracy** and comprehensive coverage. The **reduced processing time and additional attribution**, when compared to previous products, allowed the fast development of new tools and will assist greatly in keeping the network inputs up to date in the future

– Liz Clarke, Head of GIS, Sport England



Active Travel England's Scheme Tool



Active Travel England created a tool to **view active travel schemes** with important context, helping judge suitability for funding.



OS NGD data has been used to investigate the amount of **road space available, and average speeds and speed limits.**



This has allowed ATE inspectors to easily review proposed schemes.



Ordnance Survey's data on **carriageway and footway widths** is delivering valuable insights that enable Active Travel England to better understand our highways network. **This supports our mission to make walking, wheeling, and cycling more accessible for everyone.**

— Nicos Taylor, Inspector, Active Travel England



Active Travel England



Analysing Vacant & Derelict Land



Defra is analysing “Vacant & Derelict land” to identify areas that have potential for increased levels of woodland.



OS NGD Land, Sites and Address data alongside 3rd Party datasets have been used to undertake the work



This work **supports planning and decision making for Government's** aim to increase woodland cover in England to 16.5% by 2050.

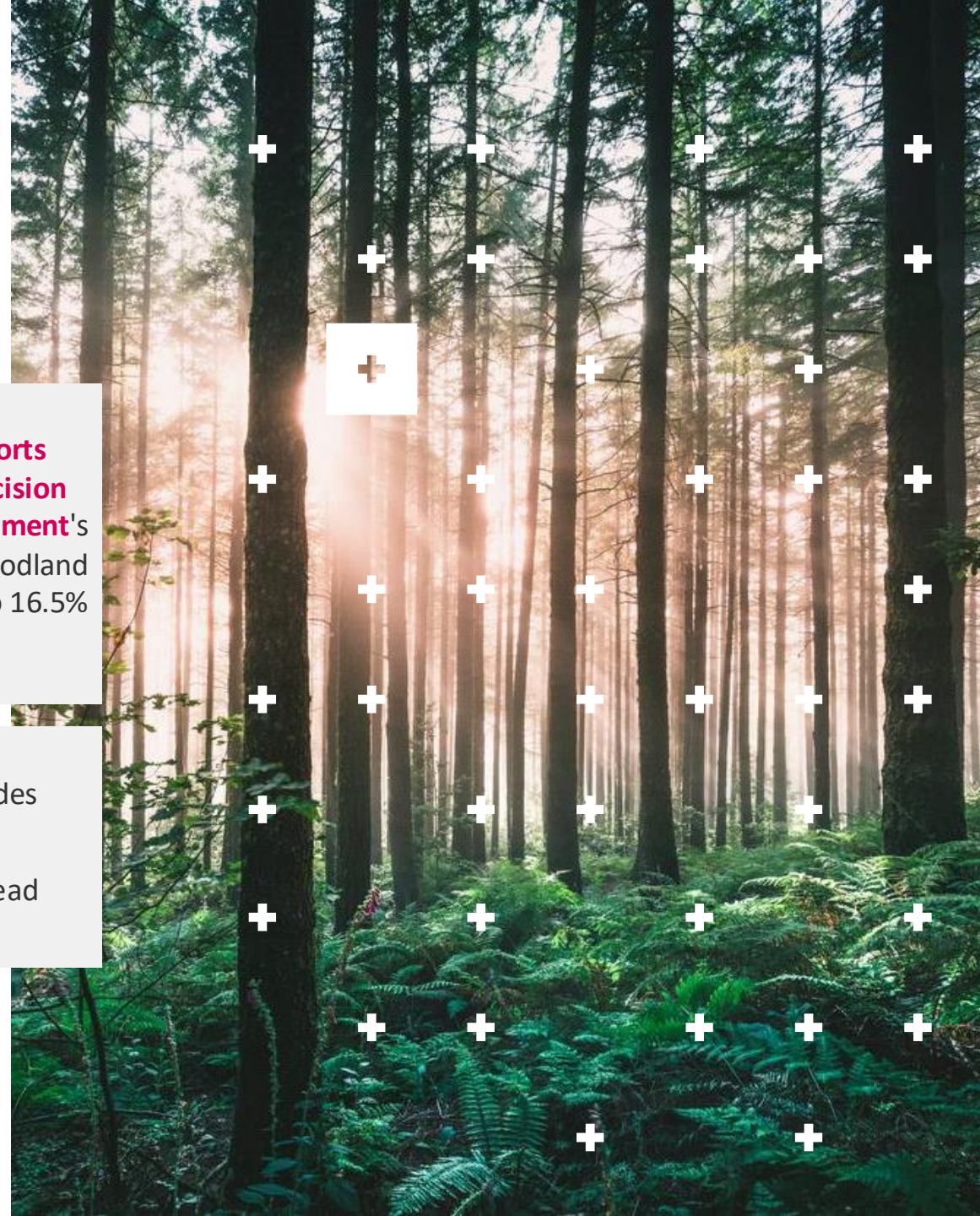


With increasing pressures on land use, the timely delivery of this project provides the **solid evidence base** that's necessary to **underpin developing policy**.

– Edward Matthews, Defra Vacant and Derelict Land lead



Department
for Environment
Food & Rural Affairs



Customer Sentiment

“

A **huge improvement** on previous method of ordering... OS NGD is a **huge step forward**

“

Easy process, decent instructions. **Excellent data** which is straightforward to manipulate and interpret in GIS

“

OS NGD is an **incredible tool** that can only get better! My imagination runs wild with all the recipes I can think of, and it takes no time at all to do! **Game changer!**

“

The NGD will provide us with a **flexible way** for our customers to access and use data

“

NGD is the go-to for accessing OS data and data extracts are widely used across the council

“

The NGD allows me to get **much more refined data, much quicker**. Everything is slicker, smoother, and easier to access. I can **run analysis quicker** because I don't have to include tons of extra data that I don't need.



WHAT'S NEW AND NEXT?

Recent and short-term
enhancements



September 24: What's New?

OS NGD LAND USE



Enhanced Land Use Attribution



Enhanced topographic features attribution



Bridge Interactions



Number of Floors



Increased Completeness



September 24: What's New?

OS NGD LAND USE



Enhanced Land Use Attribution

- + New classification schemes



Increased Completeness

- + Greater coverage for both Residential and non-residential sites



Enhanced topographic features attribution

- + Land Use attribution now present on component parts

OS NGD STRUCTURES



Bridge Interactions

- + Attribution identifying the network passing over and under a bridge

OS NGD BUILDINGS















Number of Floors

- + The maximum number of occupiable floors at or above ground level

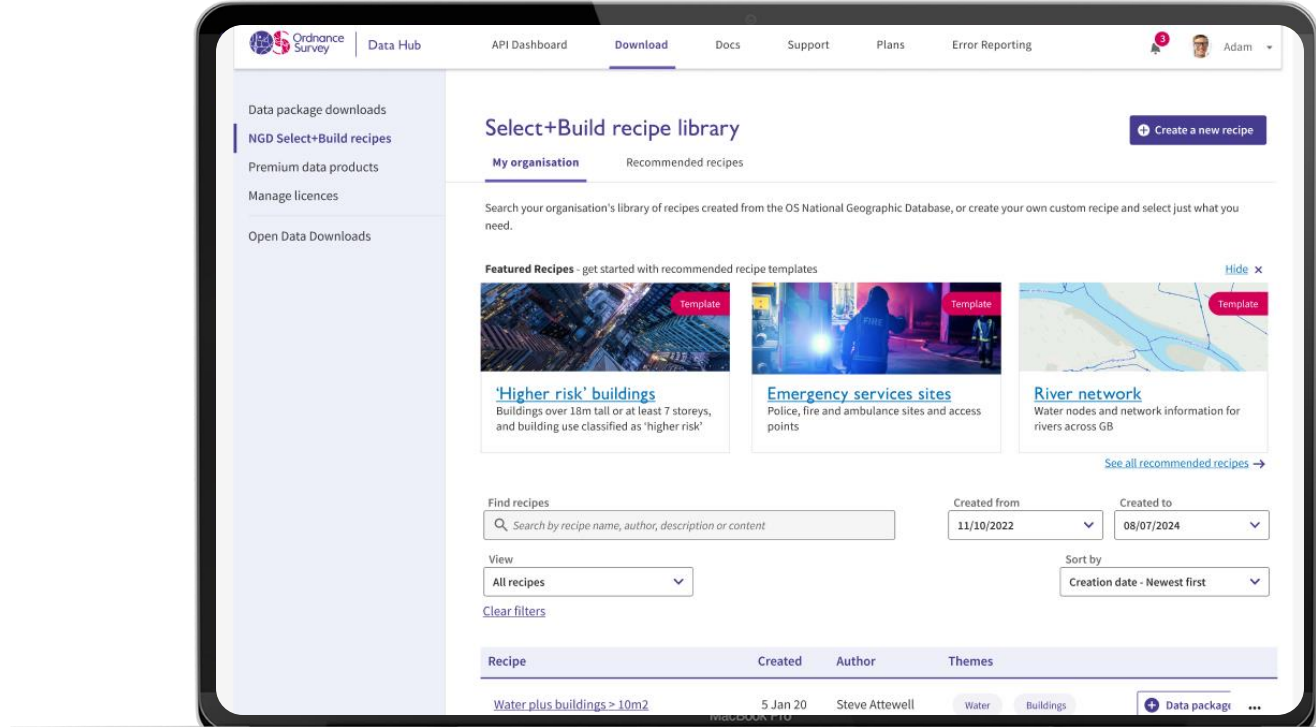
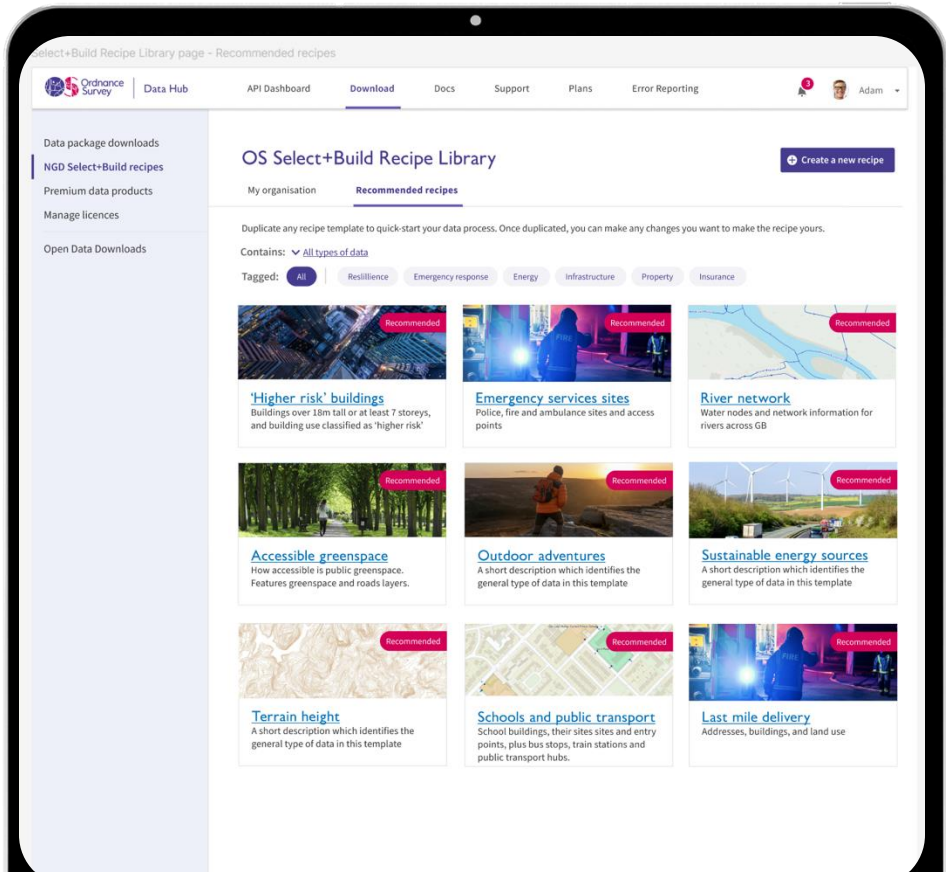


March 25: What's Next?

OS NGD BUILDINGS		OS NGD LAND USE	OS NGD GEOGRAPHICAL NAMES	EMERGENCY SERVICES GAZETEER
 Roof Shape	 Roof Aspect	 Increased Coverage	 Vernacular Names	 Tunnels
 Roof Material	 Presence of Solar Panels	 Increased Access Points	 Tunnels	
 Presence of Green Roofs	 Access to Public Buildings			
 Building Height				

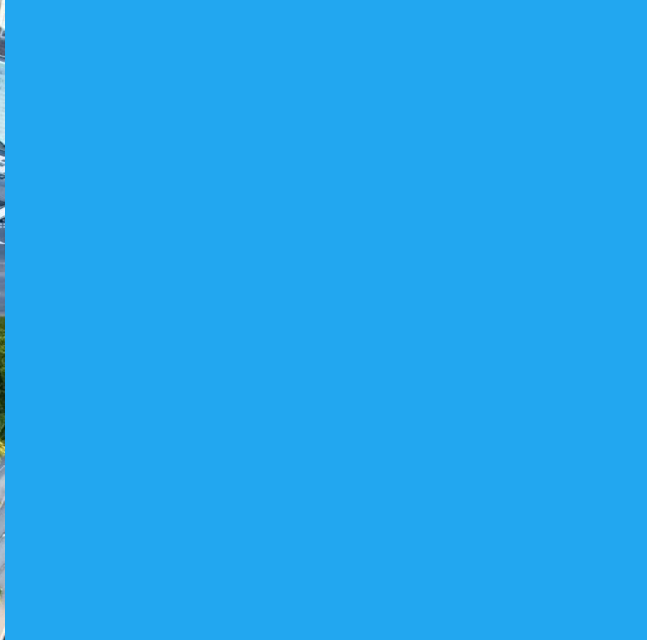
OS Recommended Recipes

- + Pre-selected OS NGD data which meets your requirements and allows you to subscribe to updates. Making it even quicker and easier to get going.



Be Part of the Design Team →





THANK YOU

Dean Paulley
Head of Product



ONS GEOGRAPHY: Looking to the future

Jen Hampton

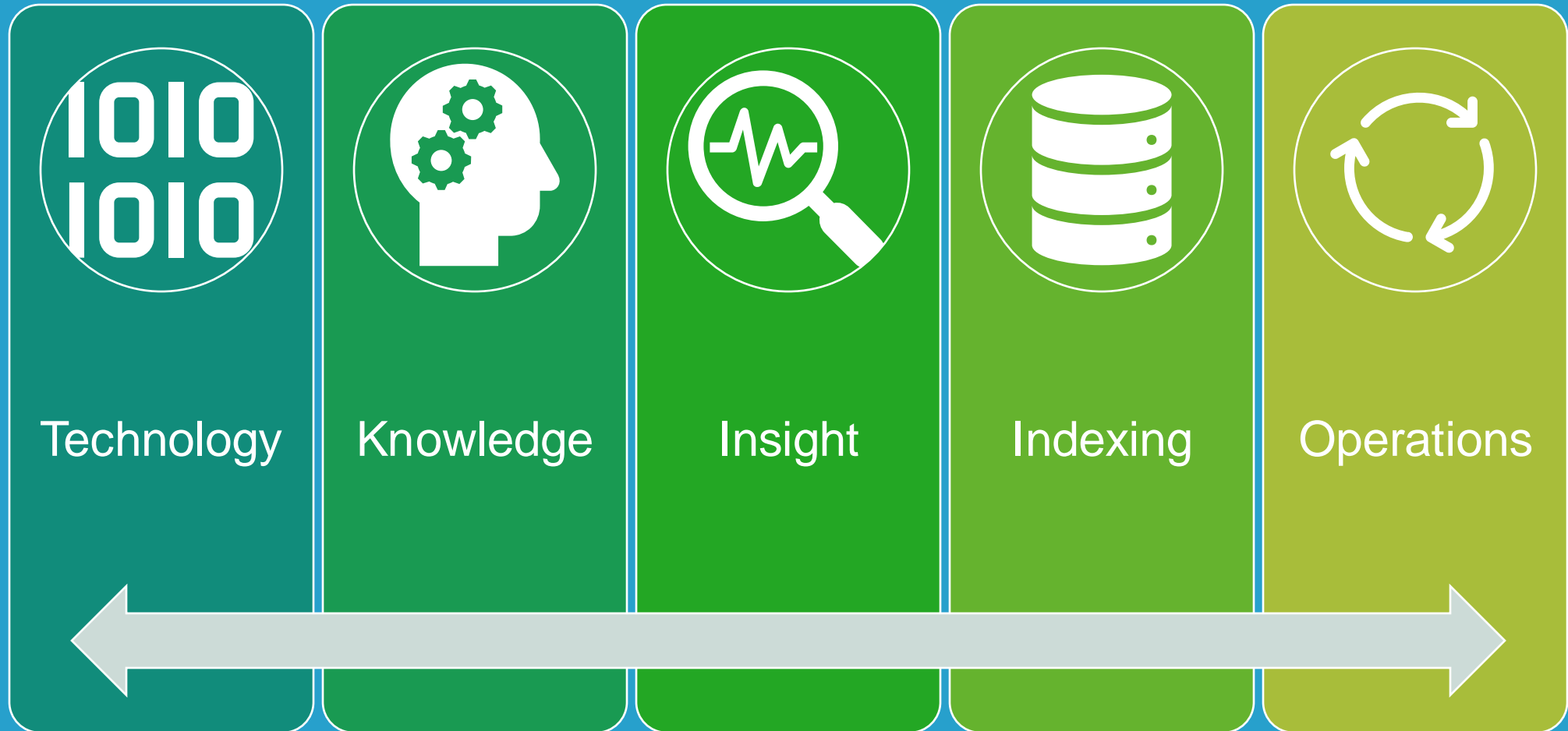
Head of Geospatial Analysis & Innovation

Statistics for the public good

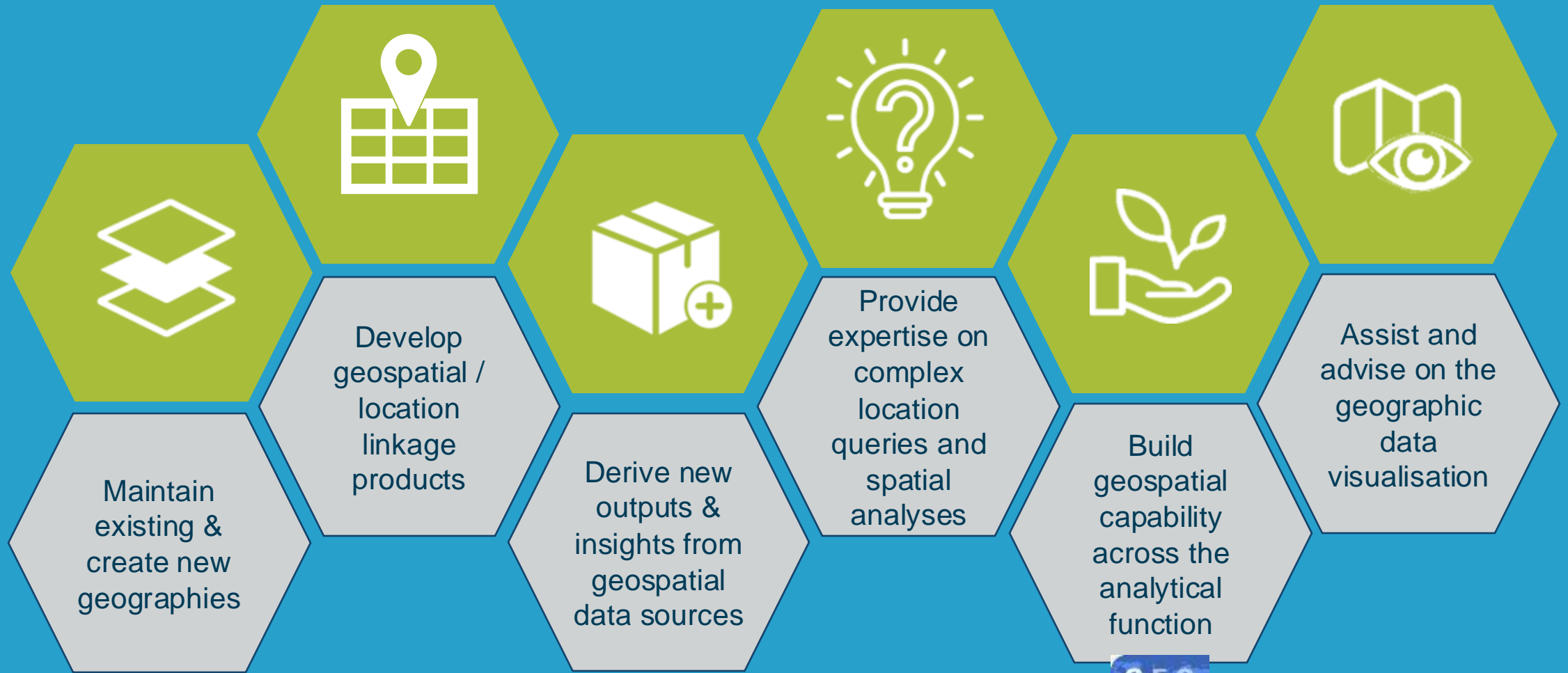
Informing the UK.
Improving lives.
Building the future.

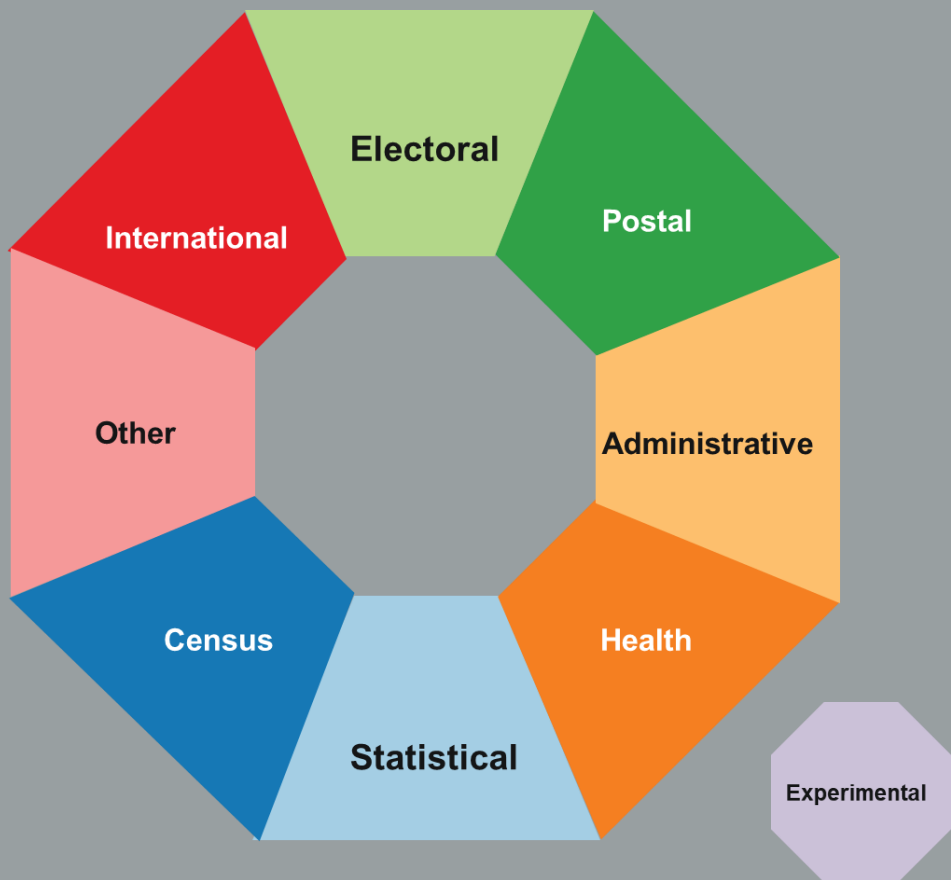


ONS Geospatial & Geography Teams



What do we do?





<https://geoportal.statistics.gov.uk/documents/ons:hierarchical-representation-of-uk-geographies-december-2023/explore>

123

Geographies
operative in the UK

Electoral:	10 Products (6)
Postal:	4 Products
Administrative:	18 Products (14)
Health:	13 Products (5)
Statistical:	11 Products (6)
Census:	7 Products (4)
Other:	55 Products (13)
International:	4 Products (4)
Experimental:	1 Product (1)

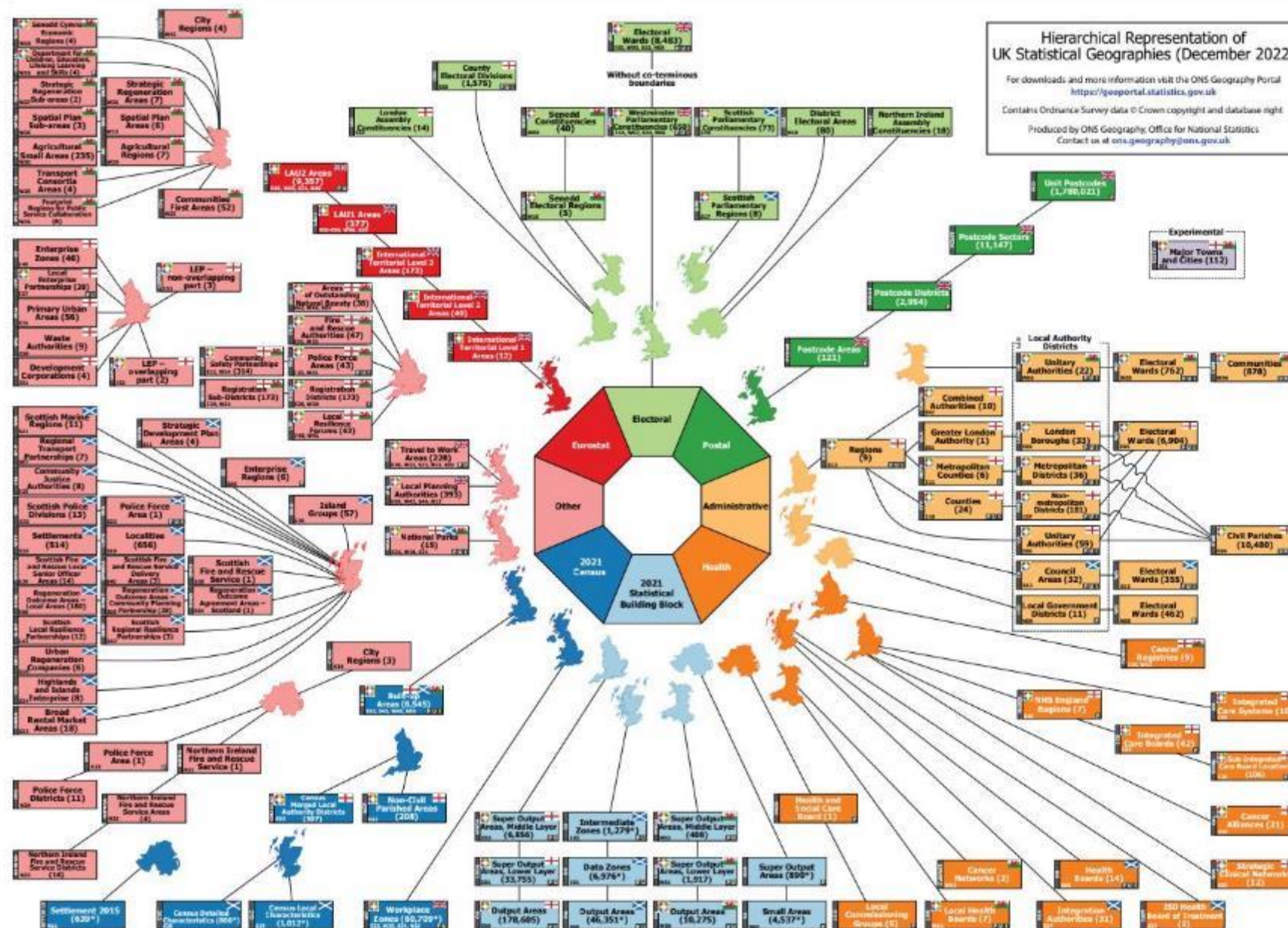


ONS
Geo Portal

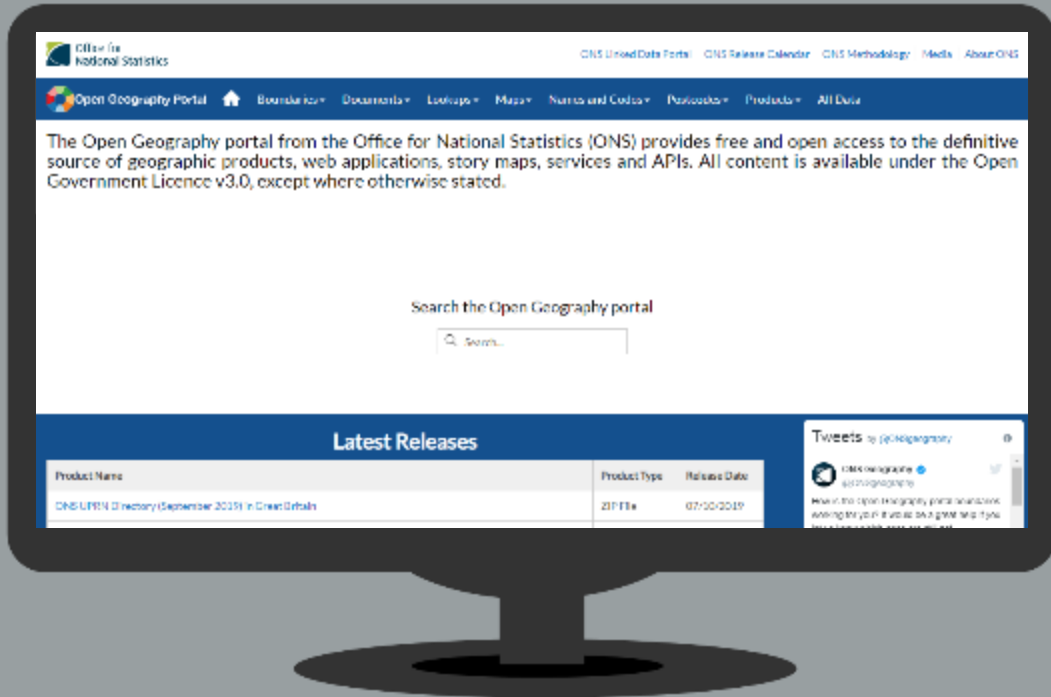
53
Boundaries

132
Lookups

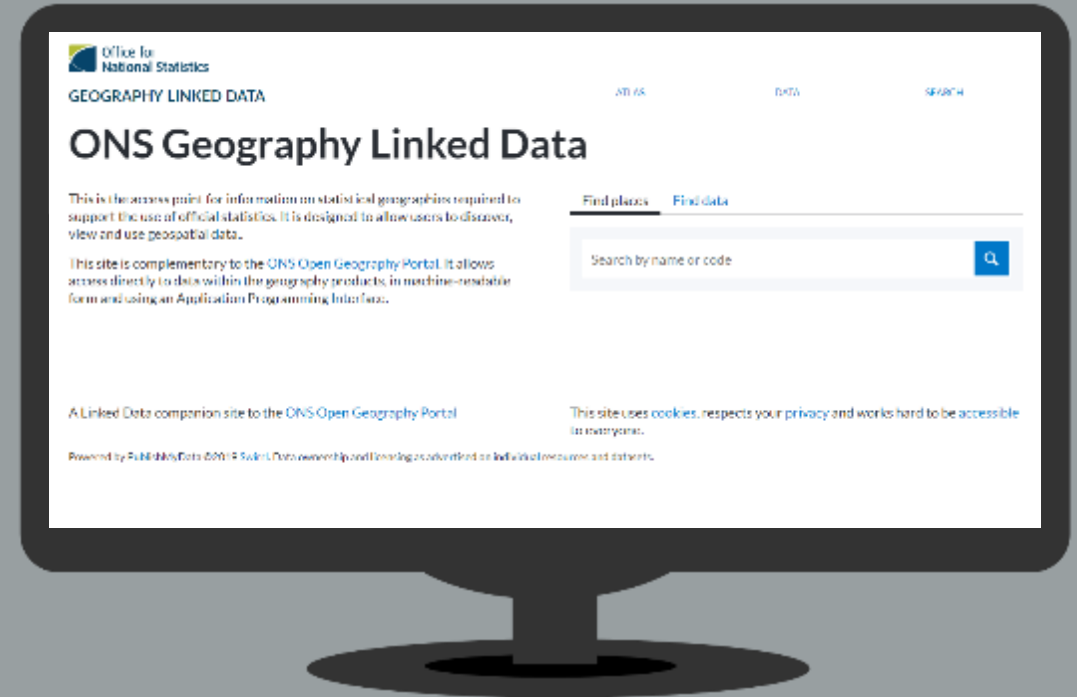
Hierarchical Representation of UK Statistical Geographies



How to access



[Open Geography Portal \(statistics.gov.uk\)](https://statistics.gov.uk)



[ONS Geography \(data.gov.uk\)](https://data.gov.uk)

Our World

Society

Economy

Environment

Vision

“ Support outcomes for the UK public good through the smarter linking and integration of our physical and human geographies. ”



Four areas of focus

1



National
Geographic
Database

2



Cross-Organisation
Systems
Integration

3



Strategic
Alignment
of Data Strategies

4



Joint Data
products for better
analytical outputs

Benefits

- Cross government efficiencies
- Standardised data practices
- Increased data quality & timeliness
- Greater geospatial products for granular / targeted interventions



One Geo Marketplace

- Greater quality & consistency across datasets & documentation
- Improved comparability & usability through aligned metadata standards
- Greater functionality & flexibility in building geospatial datasets
- Saved time & resources!



We need...

...YOU!



Office for National Statistics

Photo by [Towfiqu barbhuiya](#) on [Unsplash](#)

Slido:
#CAGCxPSGA2024



<https://app.sli.do/event/j65TqetCvepxiTWK6FVqsB>

ONS.Geography@ons.gov.uk

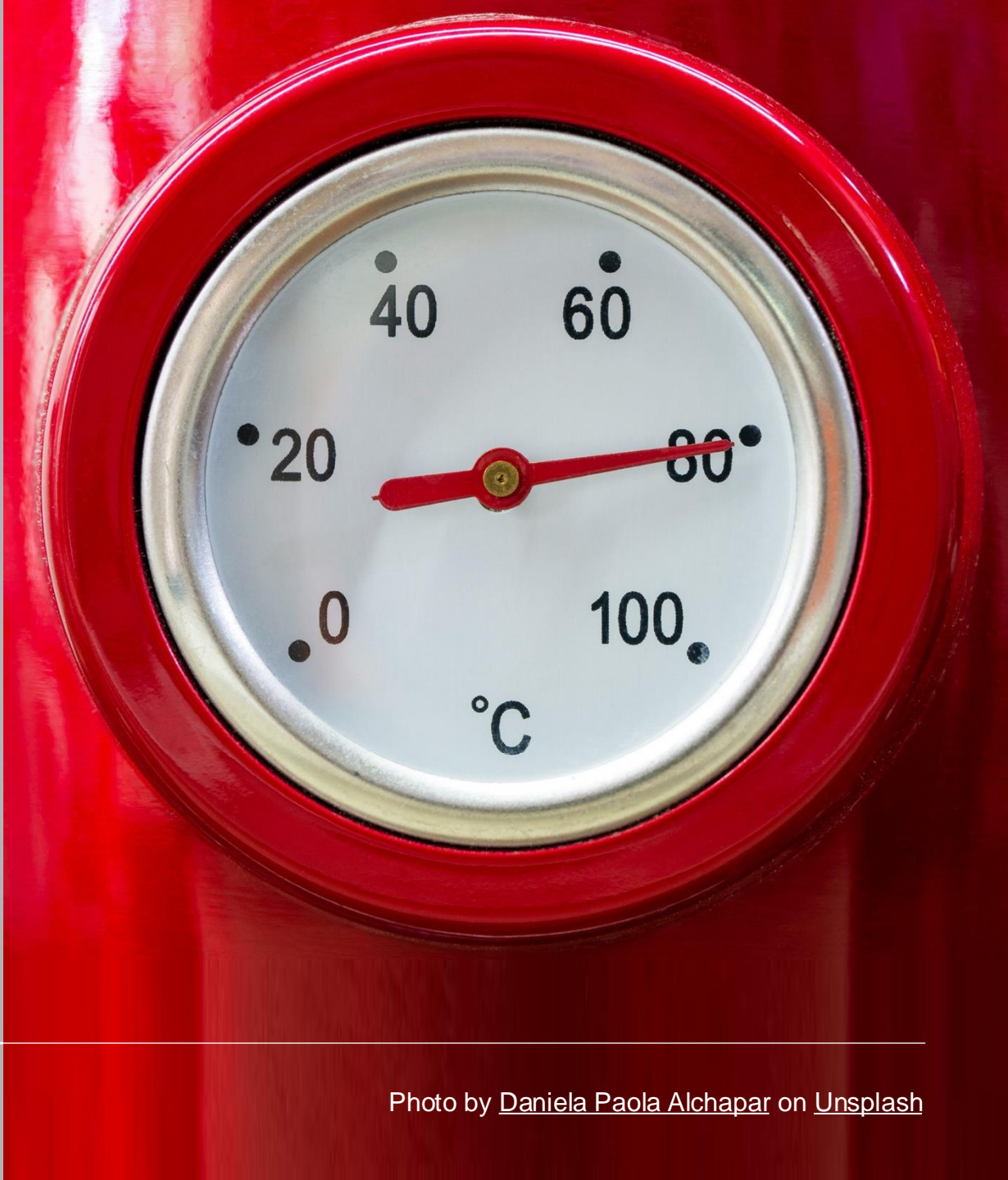


Photo by [Daniela Paola Alchapar](#) on [Unsplash](#)

Thanks!

ONS.Geography@ons.gov.uk



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**THE NEXT SESSION
WILL START AT 13:40**





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AFTERNOON PROGRAMME

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16:00	Close		



Driver & Vehicle
Licensing
Agency

Address Capture and Handling using NGD

DVLA Local Addressing Solution



INVESTORS IN PEOPLE™
We invest in people Gold

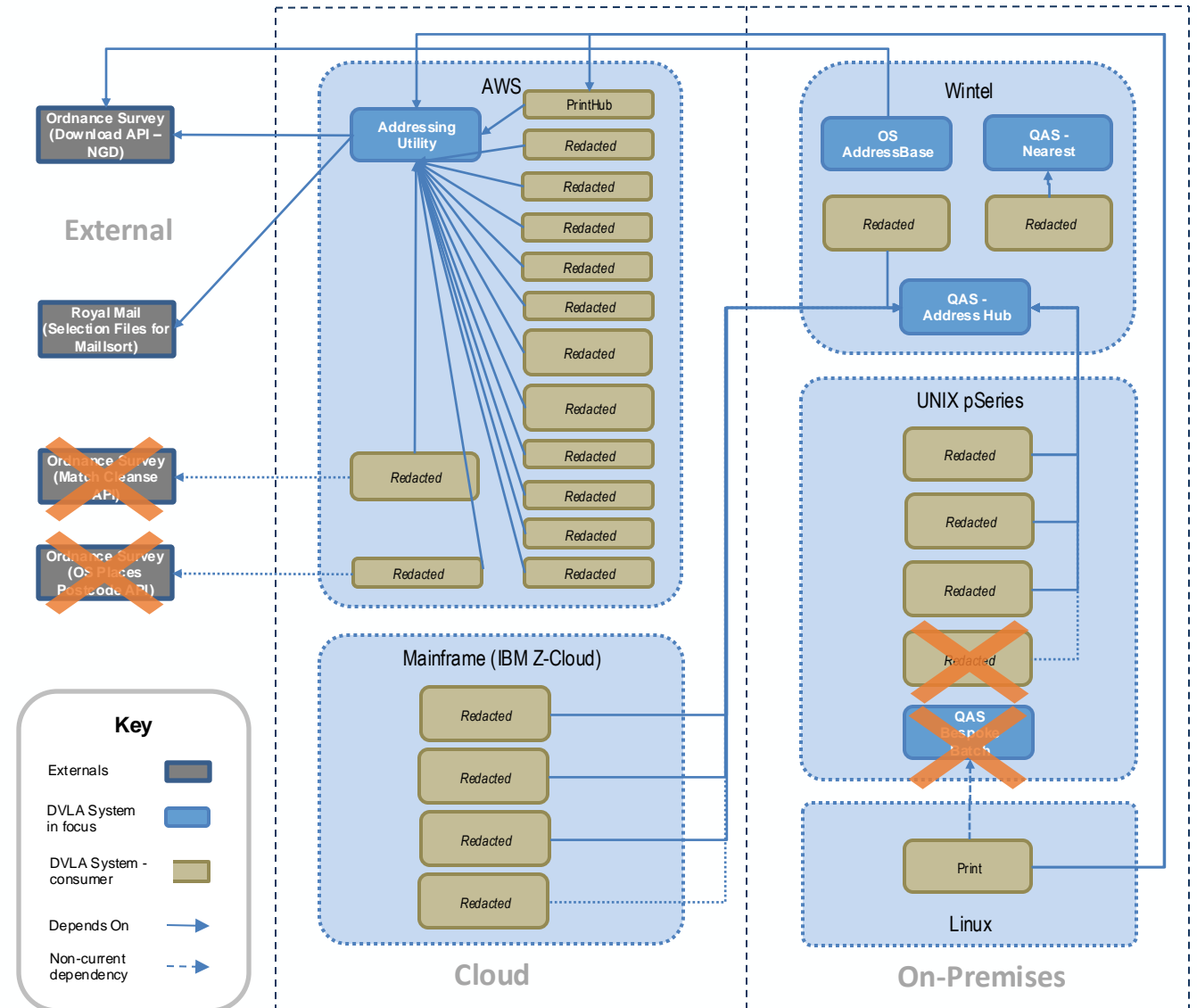
Addressing at DVLA

Driver and Vehicle registers, current and previous addresses

- >50M active driver records
- >40M active vehicle records

Most high level systems dependent on Address lookup

- >250K address lookups/day, 24x7
- >1000/second peak
- Legacy system dependency on Experian QAS



Address Capture Requirements

Cross Government Guidelines - <https://design-system.service.gov.uk/patterns/addresses/>

Further Constraints and Requirements for bulk mail handling organisations

- Addresses captured across multiple interactive and non-interactive channels, by 1st, 2nd and 3rd parties
- 90%+ validated Royal Mail PAF (Post Address Format) addresses required for bulk mail discounts
 - Upon print, match addresses to PAF by including Mailsort and DPS (Delivery Point Suffix) within Envelope barcode for UK Mail/Royal Mail sorting
 - Support as many up-to-date addresses as possible and minimise free-keyed addresses
 - BFPO (British Forces Post Office) military addresses do not have a DPS, and are very low volume
- Minimise the need to free-key addresses
 - Ensure quality, minimise returned mail rates
 - Supplement PAF addresses with Local authority addresses (not the other way around)
 - Include new build and multiple residence properties
- Conform to output constraints, for example
 - 45 chars address line width on envelope window
 - Two recipient lines, five address lines plus postcode (or BFPO number)
- Welsh alternative addresses supported where available
- Allow BFPO capture without postcode, with BFPO number validation
- Allow mixed case address capture

DVLA Requirements

DVLA Specific Requirements (we like to make things difficult for ourselves)

- All addresses, including free keyed addresses, must contain a valid post town postcode combination
 - This assists with data quality, where pre-populating the post town based on postcode ranges derived from PAF data improves address quality
 - As well as stopping addresses being rejected from DVLA vehicles register, and post towns being replaced by the Drivers register 🤖
- Country and address type constraints depending on service
 - For example, UK only, GB only, including/excluding Channel Islands, PO box addresses, sets of BFPO addresses... 🤖
- Require proof of residency for commercial addresses 🤖
- Business Names removed where already present in recipient lines (vehicles only)
- We have had a requirement to monitor addresses for profanities (more on this later) 🙋
- Application fees that depend on a change of address, implying address comparison
- Flag addresses on known suspicious addresses list, implying address comparison
- Re-format addresses in multiple formats
 - Capture and display mixed case, but output in upper case on envelope and licences
 - Picklist format; one line; 2 line; 5+1 lines; differing character sets, line lengths and constraints

Legacy Requirements 🤔

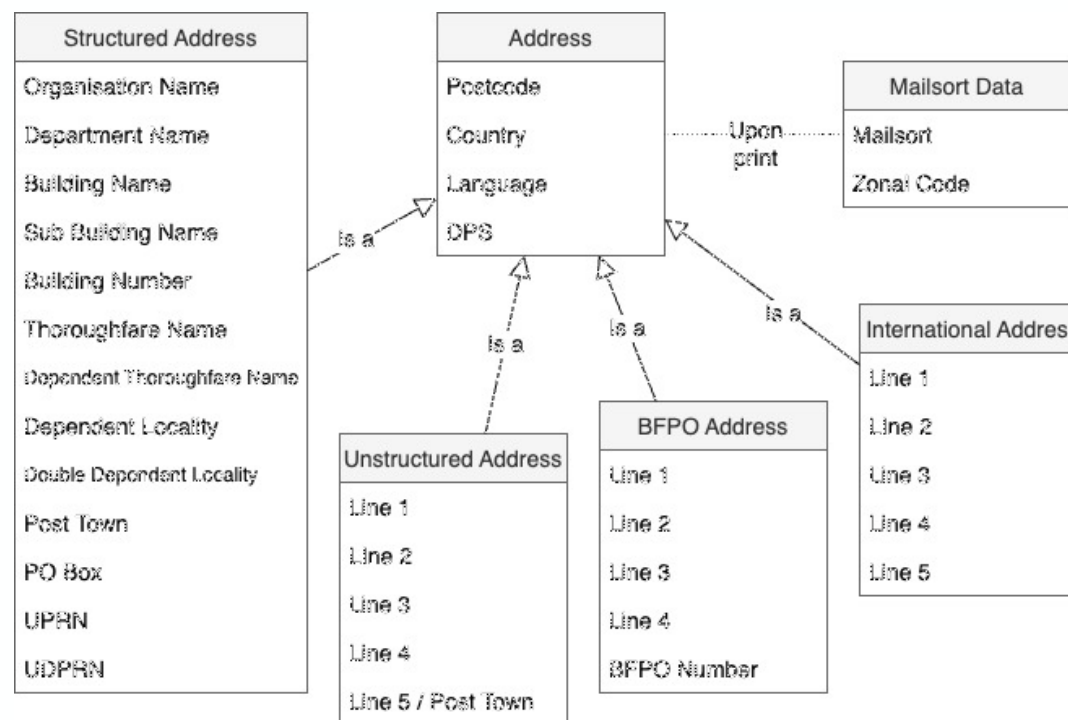
Examples of further legacy constraints

Not strategic but still enforced -

- 30 char address line limits, use of supported thoroughfare abbreviations
- 20 char post town (vehicles only)
- BFPO, Welsh and other special address types distinguished by using hardwired identifiers in postcode field
- Addresses stored in upper case
 - They are also supplied from OS / GeoPlace as upper case despite PAF being mixed
- Legacy character set constraints
 - Diacritic character substitution
 - Removal of dots and commas - drivers only
 - Removal of other unsupported non alpha-numeric characters found in some PAF and more in Local Authority addresses
 - Minimum characters on address lines, including 3 alphas on each line - drivers only
 - Parenthesis must be paired – drivers only

Address Data

- Storing structured PAF address data allows maximum flexibility in address processing and output format
- Royal Mail PAF source data
 - Required for bulk mail handling and delivery
 - BFPO addresses
 - Welsh addresses
 - Non-GB
 - New Build and Multi-residence files not available through NGD
- Local Authority used to supplement
 - Country attribution
 - New build residential addresses
 - Multi-residence addresses
 - Commercial addresses
- Local store of addresses required to support pre-processing and non-functional requirements

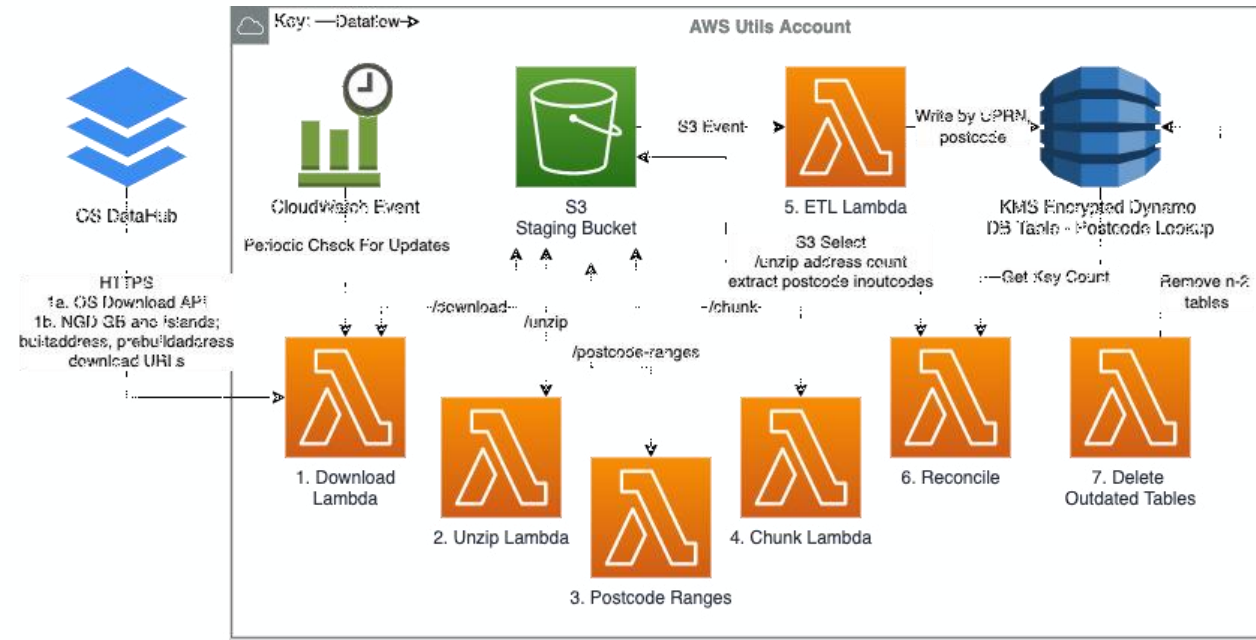
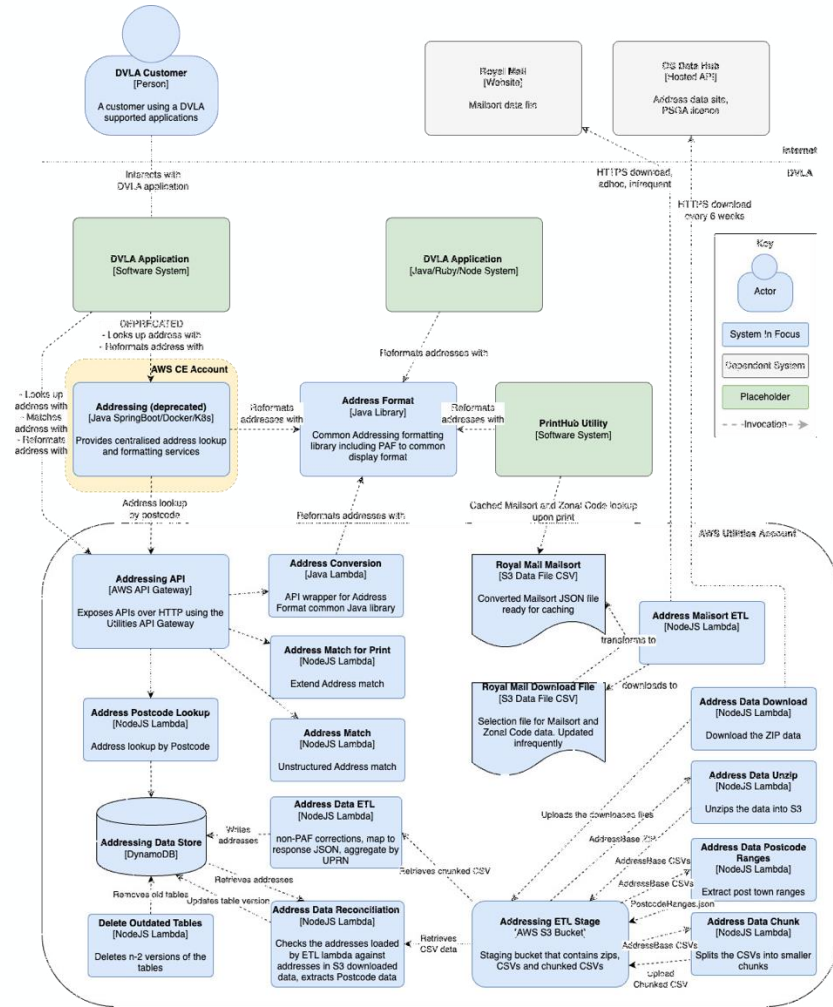


Local Addressing Solution using NGD

Example detail of a serverless solution that is re-usable, generic and re-deployable

- Address lookup, Address match, Format address
- PAF address formatting libraries for Ruby, Node, but not currently the original Java version, available here:

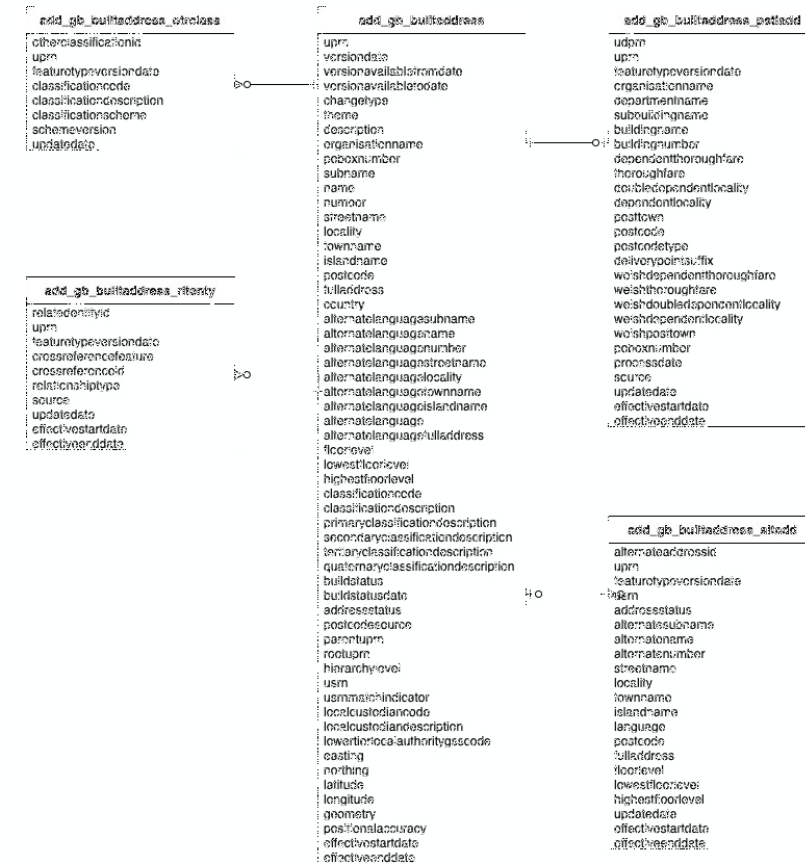
<https://github.com/orgs/dvla/repositories?q=postman-paf>



NGD Dataset Benefits

NGD benefits over AddressBase –

- Updated daily
- Combines multiple datasets
 - Download API allows flexible selection of required datasets
 - For address capture, only a small subset is required: Built-Address and Pre-build-Address, for GB and Islands datasets
- Support for combining Royal Mail PAF and Local Authority addresses
 - De-duplication using UPRN
 - Country attribution
 - Local Authority addresses mapped to PAF-like structure



NGD Usage for Address Capture

- Questions

- Which addresses should be included for residential address capture?
 - Requires use of `classificationcode`, `postcode`, `source`, `addressstatus` and `buildstatus`...
- Should address capture prioritise Royal Mail PAF or Local Authority addresses? NGD?
- What about commercial addresses?
 - Should we supplement PAF with additional Local Authority addresses?
 - Where we have both for a UPRN, which is more up-to-date, reliable? Should we return both when different?

- NGD Mapping Challenges

- Data model clarity
- Address classification
- Address ordering
- Completing local authority address mapping to PAF data structure
- Local Authority post town corrections
- Local Authority data quality concerns
- Mixed case PAF addresses only available in upper case
 - Retrospective conversion to mixed case is error prone



Examples

Post towns

There are 1482 English language post towns recognised by Royal Mail. Local Authority addresses have 16,688 distinct English language towns, including empty

Examples from investigating supplement PAF with Local Authority Addresses

Wrong classification?

"ADDRESS": "TOILET, UNIT 5, BURNFIELD HOUSE, 4A, BURNFIELD AVENUE, GIFFNOCK, EAST RENFREWSHIRE, G46 7TL",
"UPRN": "131033042", "STATUS": "APPROVED", "CLASSIFICATION_CODE_DESCRIPTION": "Office / Work Studio",

PII?

"ADDRESS": "DYNASTY RIME INVESTMENT CO LTD & LLOF MANAGING TRUSTEE LTD 020 7317 4649 OR 07989 559 948, SECOND FLOOR PHONE ROOM, COTTAM HOUSE, 36-40, YORK WAY, LONDON, ISLINGTON, N1 9AB",
"UPRN": "10096364593",

No post town, road name

"ADDRESS": "LUCE VIEW, A747, DUMFRIES AND GALLOWAY, DG8 0JU",
"UPRN": "137117259", "STATUS": "APPROVED", "LOGICAL_STATUS_CODE": "1", "CLASSIFICATION_CODE_DESCRIPTION": "Detached", "POSTAL_ADDRESS_CODE_DESCRIPTION": "A record which is linked to PAF"

Should these be addressable, current, residential?

"ADDRESS": "2, PENPARC, C3042 JC PP29/1/1 TO JUNCTION U3099 VIA WOLFSCASTLE, CAS-BLAIDD, HWLFFORDD, PEMBROKESHIRE, SA62 5NT",
"UPRN": "10023952348", "STATUS": "APPROVED", "CLASSIFICATION_CODE_DESCRIPTION": "Detached",
"ADDRESS": "PARK COTTAGE, C167 FROM WYNDGARTH HOUSE TO JUNCTION WITH Y2258 AT CORNER COTTAGE, REYNOLDSTON, ABERTAWE, SWANSEA, SA3 1AD",
"UPRN": "10011727477",

Profanities

To investigate whether we could alert on inappropriate free keyed addresses, we found over 1M addresses that contained a word from an identified bad word list

"ADDRESS": "FUCKOFFEE, 215, BETHNAL GREEN ROAD, LONDON, E2 6AB",



Driver & Vehicle
Licensing
Agency

Thank you



INVESTORS IN PEOPLE™
We Invest in people Gold

APGB Presentation

Geospatial Commission Contracts Regional Conference –
Cardiff 2024

Kathryn Lucas, Bluesky International Ltd.



APGB Introduction

- What is APGB?
- Core Products
- Case Study
- What's new?
 - 5cm
 - 25cm DSM
 - Lot 3
 - Moving toward a 2 year update programme

Core Products

12.5cm Aerial Photography (RGB) | Location: Dyfed



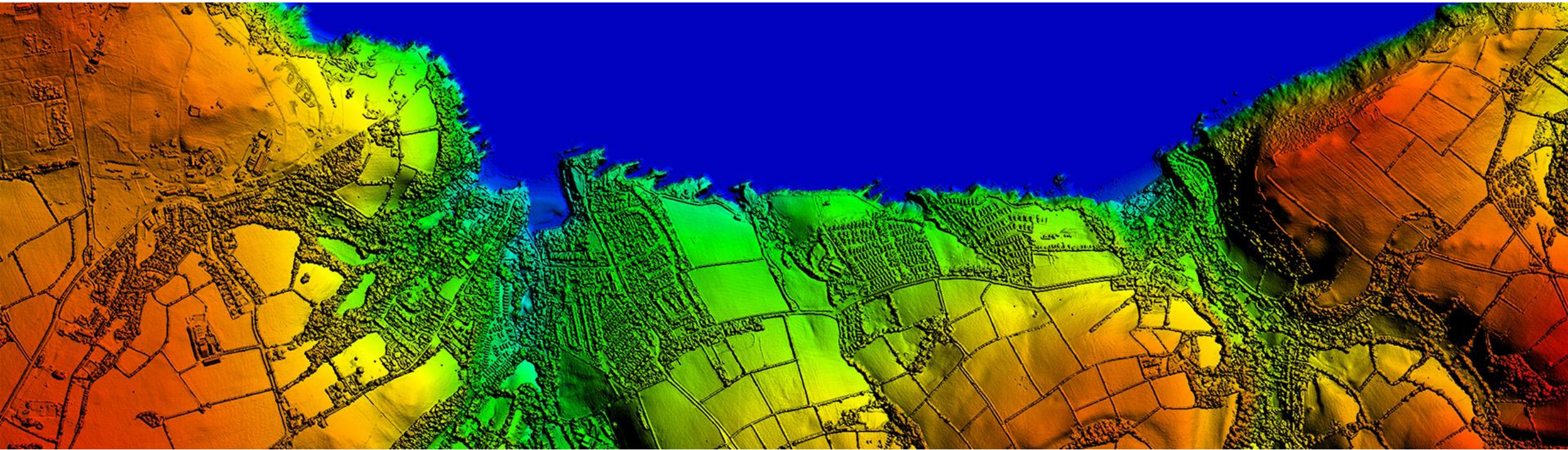
Core Products

50cm Colour Infrared (CIR) | Location: Dyfed



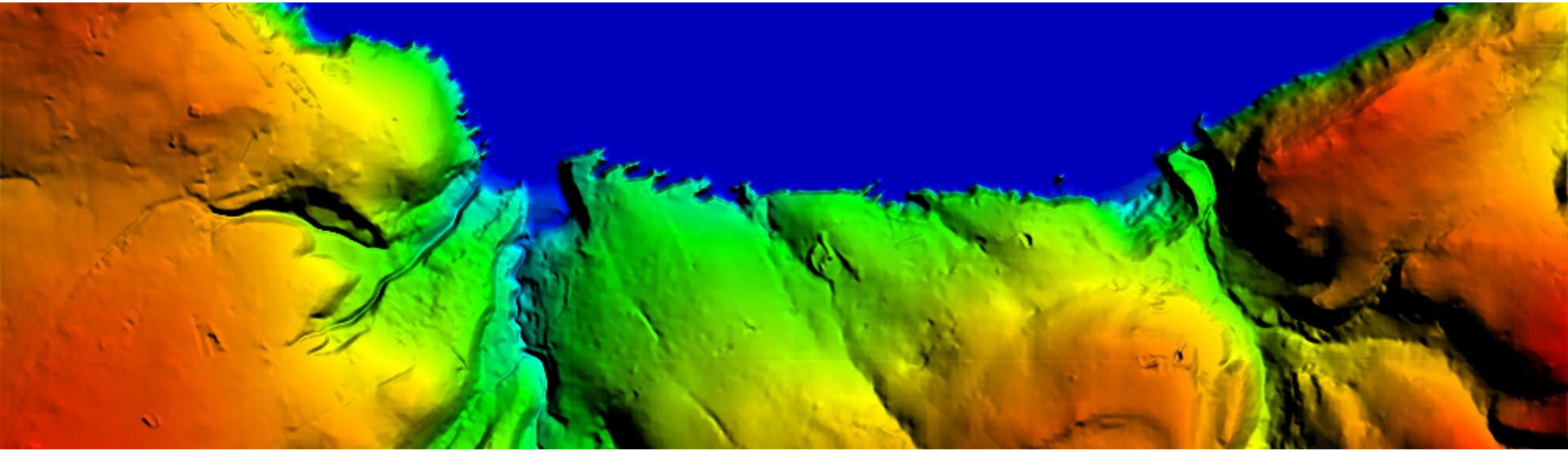
Core Products

2m Digital Surface Model (DSM) | Location: Dyfed



Core Products

5m Digital Terrain Model (DTM) | Location: Dyfed



APGB Case Study

The Mersey Forest Partnership



Client: The Mersey Forest is created from a partnership of local authorities (Cheshire East, Cheshire West and Chester, Knowsley, Liverpool, Sefton, St.Helens, Halton and Wirral), landowners, the Forestry Commission, Natural England, Environment Agency, businesses, and local communities.

Summary: The Mersey Forest's Natural Flood Management (NFM) team are working to create effective and sustainable flood prevention and reduction measures. Their ethos is to protect what is there, to restore and to mimic nature. Additionally NFM should improve water quality, biodiversity, habitats and climate resilience.

Challenge: Over the past decades and centuries, people have changed the course of river paths. In UK cities in particular we have a heavily modified water network. This was primarily due to the need in the post-war era to make the land more productive. However, it is now apparent from these historic changes coupled with the effects of climate change, that there is a need to slow down water flow and store water in upper catchment areas.

Hard engineering is incredibly expensive and not particularly aesthetic so natural flood management solutions need to be found.

APGB Case Study

The Mersey Forest Partnership



Solution: Using Bluesky's 12.5cm aerial imagery and Height data via the APGB download portal, the Mersey Forest are able to create flood management interventions that can then be introduced to land owners and community groups.

The aerial data enables clear plans to be shared with contractors and land owners for cost effective flood management solutions that are sympathetic to the natural environment.

Results: Using Bluesky's data has enabled a time and resource efficiencies, saving time and cost because the team are able to assess exactly what materials contractors need for natural flood management projects.

They can see where there is a need to intercept water and slow it down by knocking the peak flow off meaning there is lower water levels.

The data has resulted in the team being able to provide comprehensive end-to-end reviews from the initial appraisal through to the design and delivery on-site and future monitoring.

5cm Aerial Photography

5cm aerial photography of 25 cities is available to APGB Members via the Mapshop. More to come!

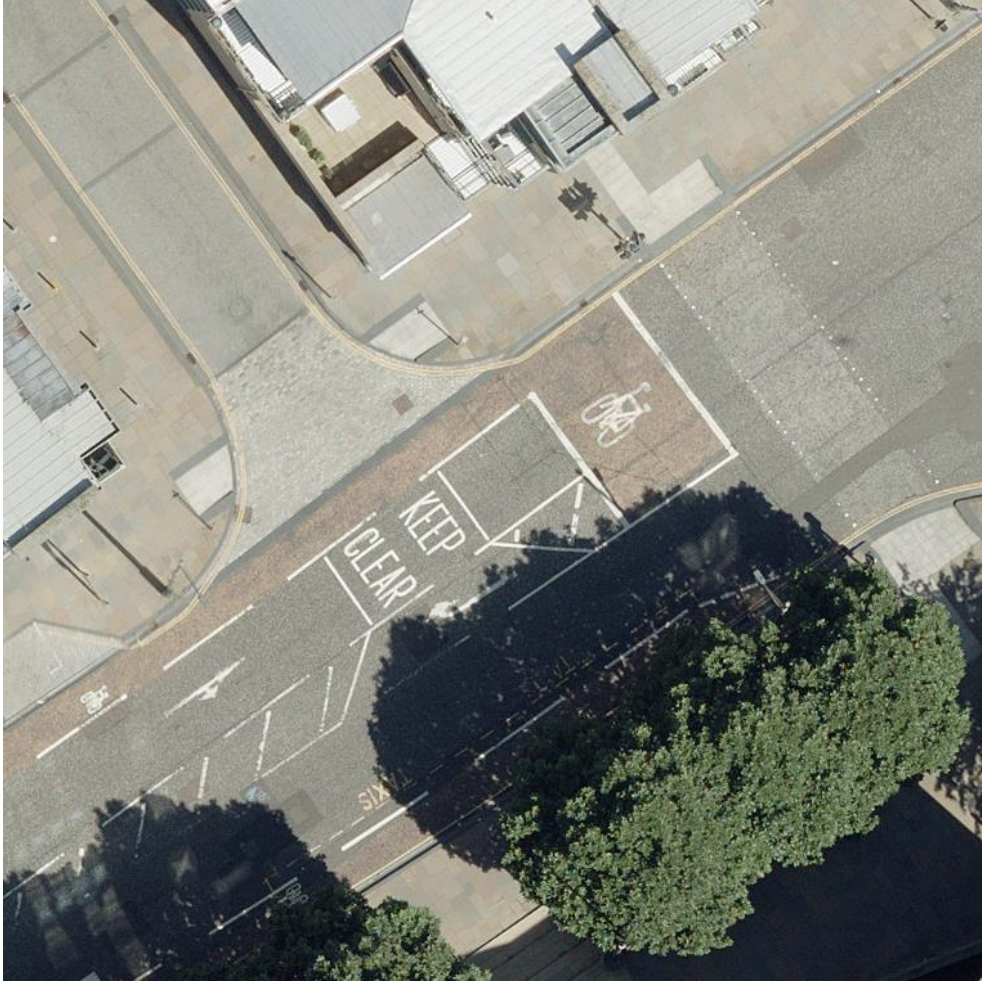


5cm Aerial Photography

- Clearer, sharper, richer
- Increased accuracy
- Applications:
 - Planning enforcement
 - Asset inventories
 - AI/ML
 - Event planning
 - Security
 - Urban greening/BNG



5cm/12.5cm Aerial Photography Comparison



5cm



12.5cm



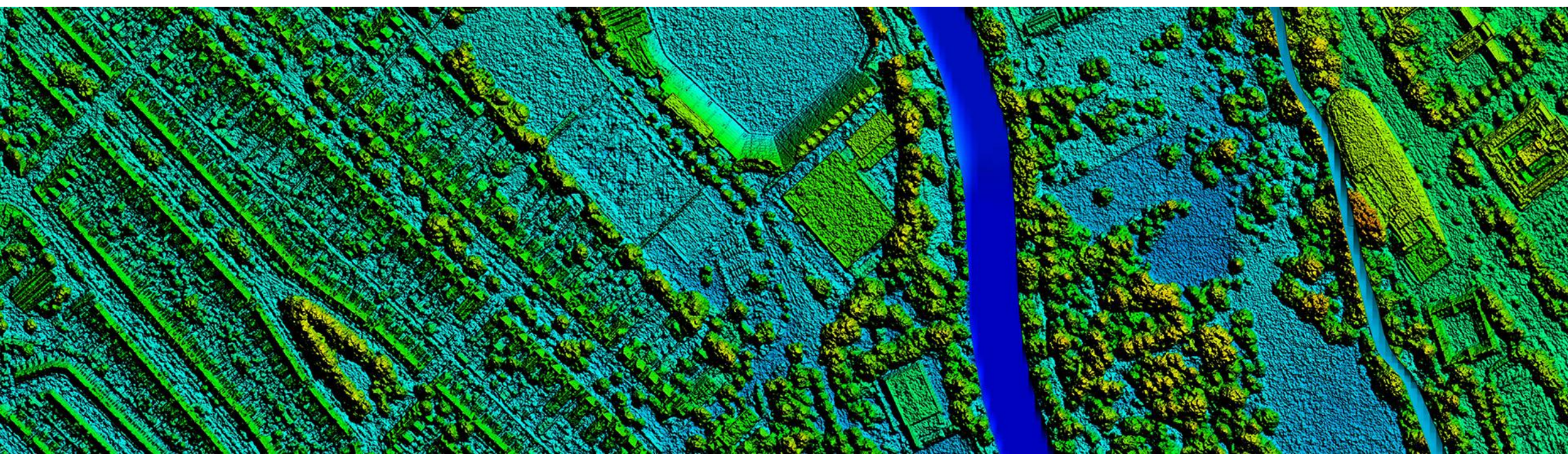
5cm RGB



12.5cm RGB

25cm DSM

25cm DSM for Great Britain is available to APGB Members
by request



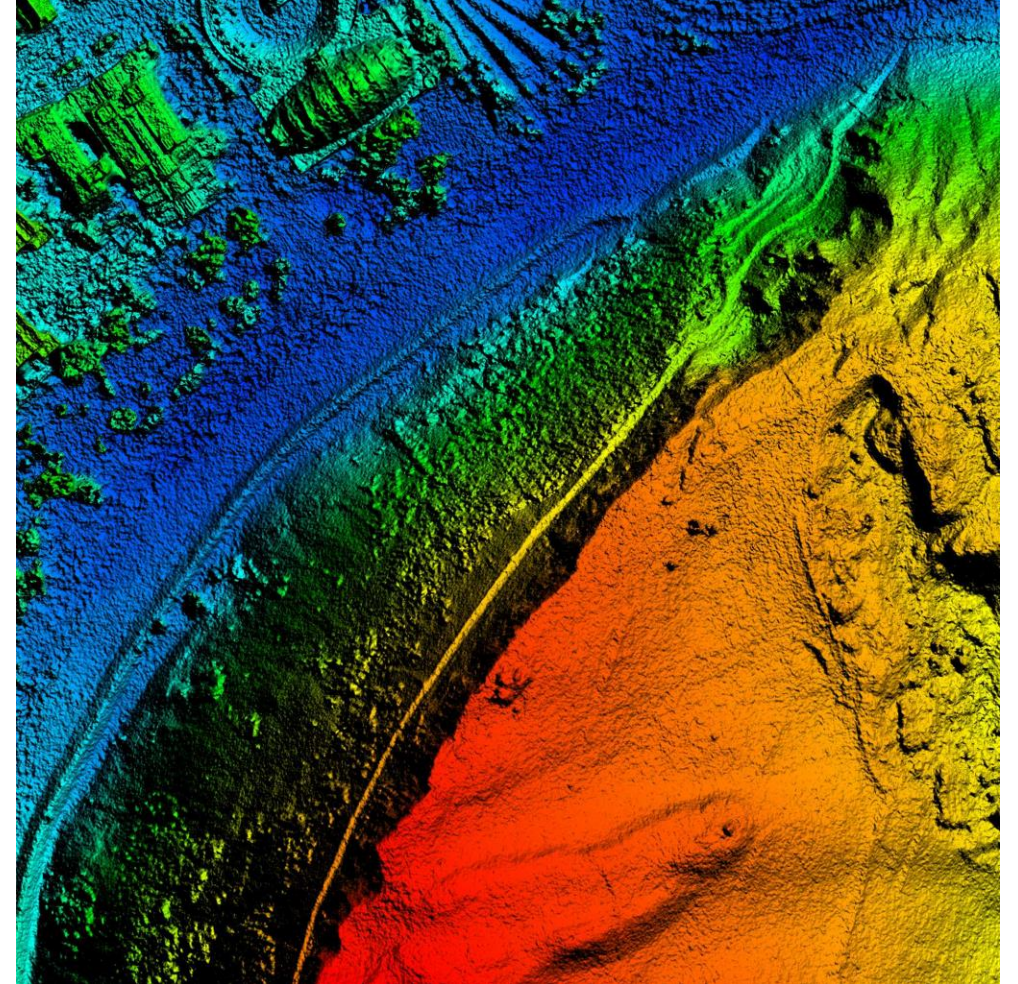
25cm DSM

25cm DSM for Great Britain is available to APGB Members
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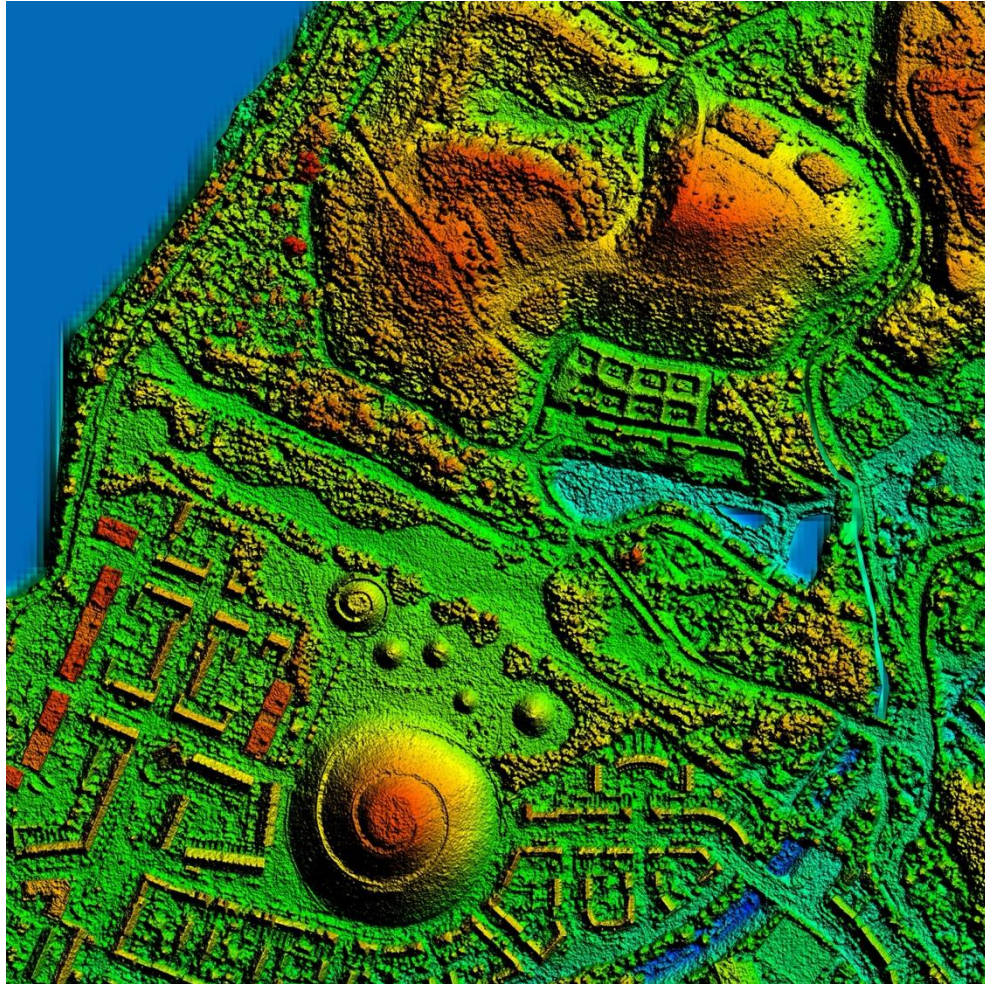


25cm DSM

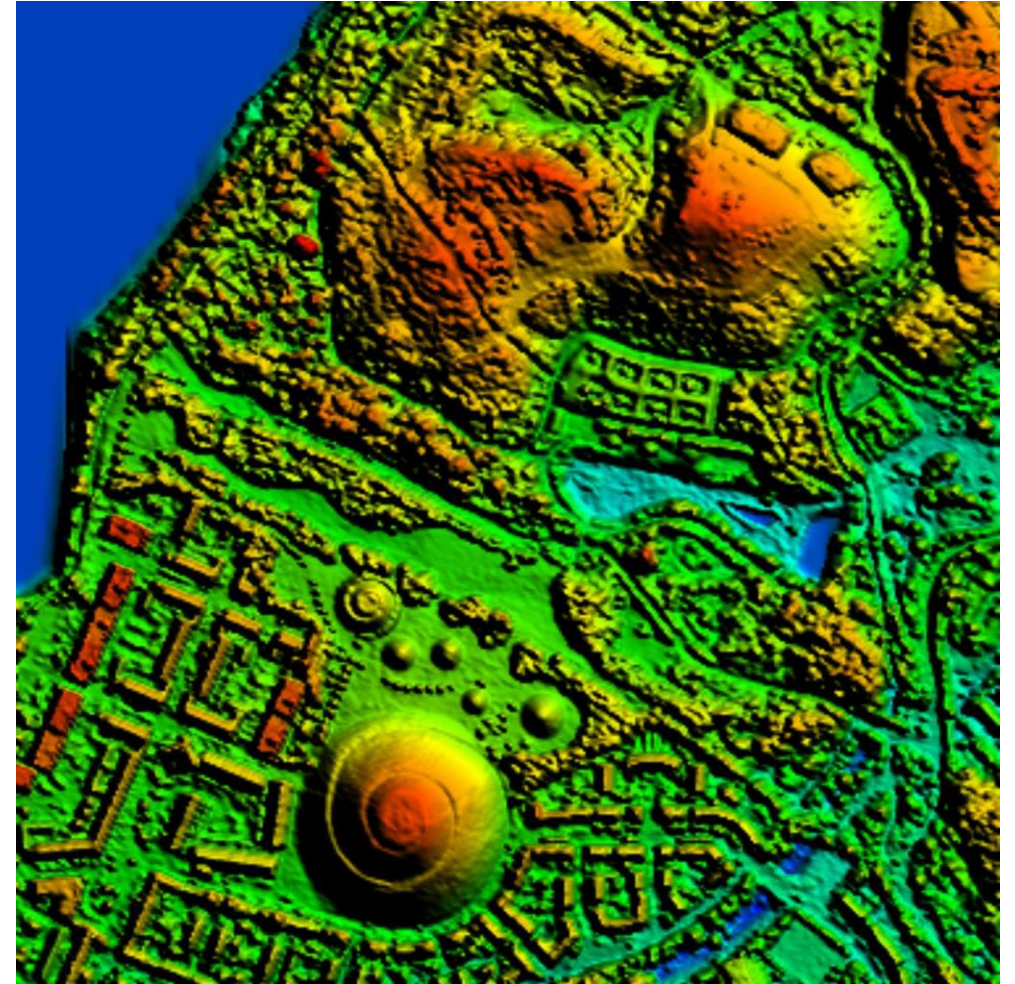
- Denser, more detailed surface
- Feature rich
- Increased accuracy
- Increased number of applications for:
 - LoS/ZVI analysis
 - Visualisations/Public engagement
 - Change detection
 - Land use analysis
 - Infrastructure/Urban planning



25cm/2m DSM Comparison



25cm



2m

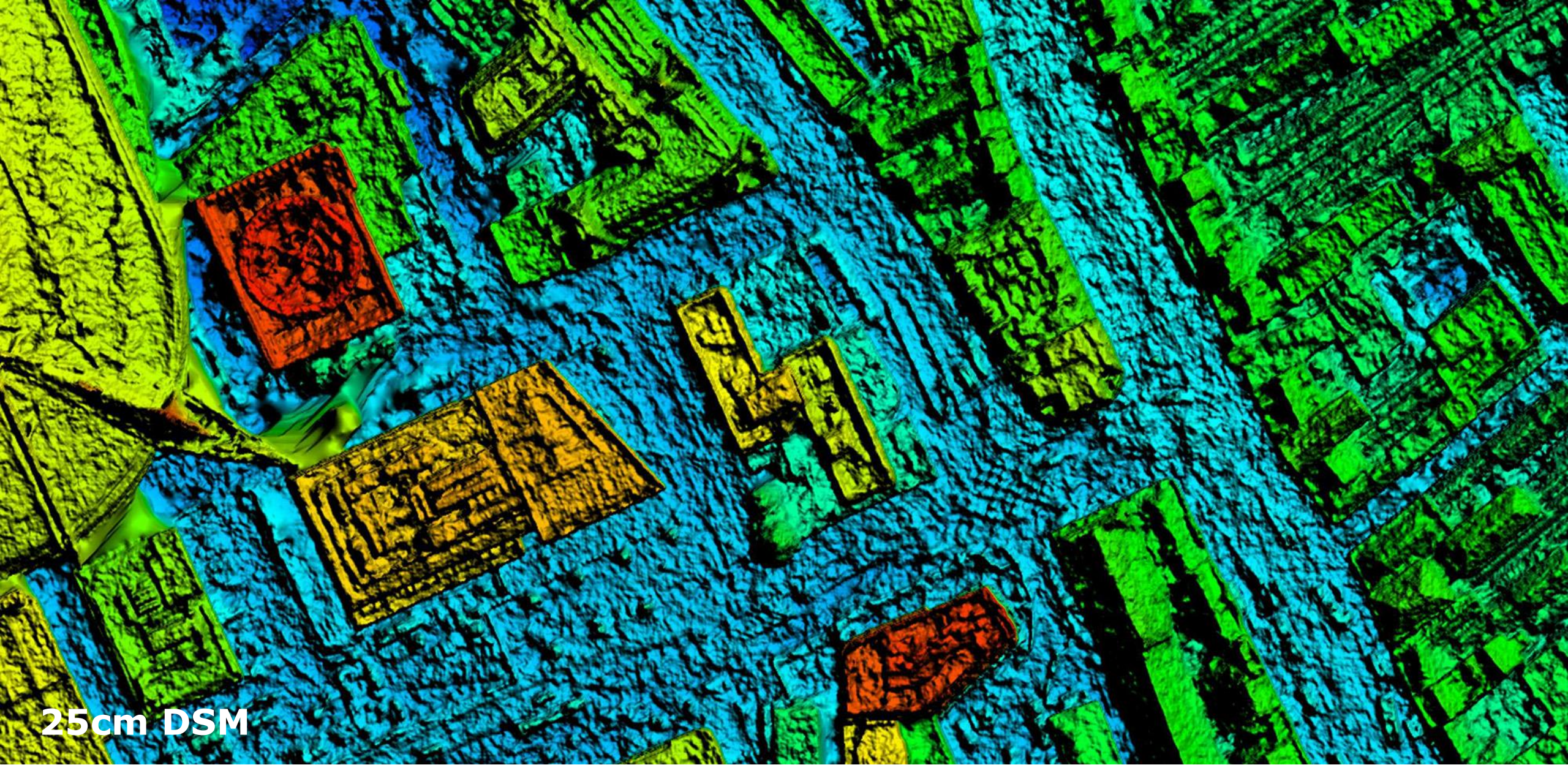
25cm/2m DSM Comparison



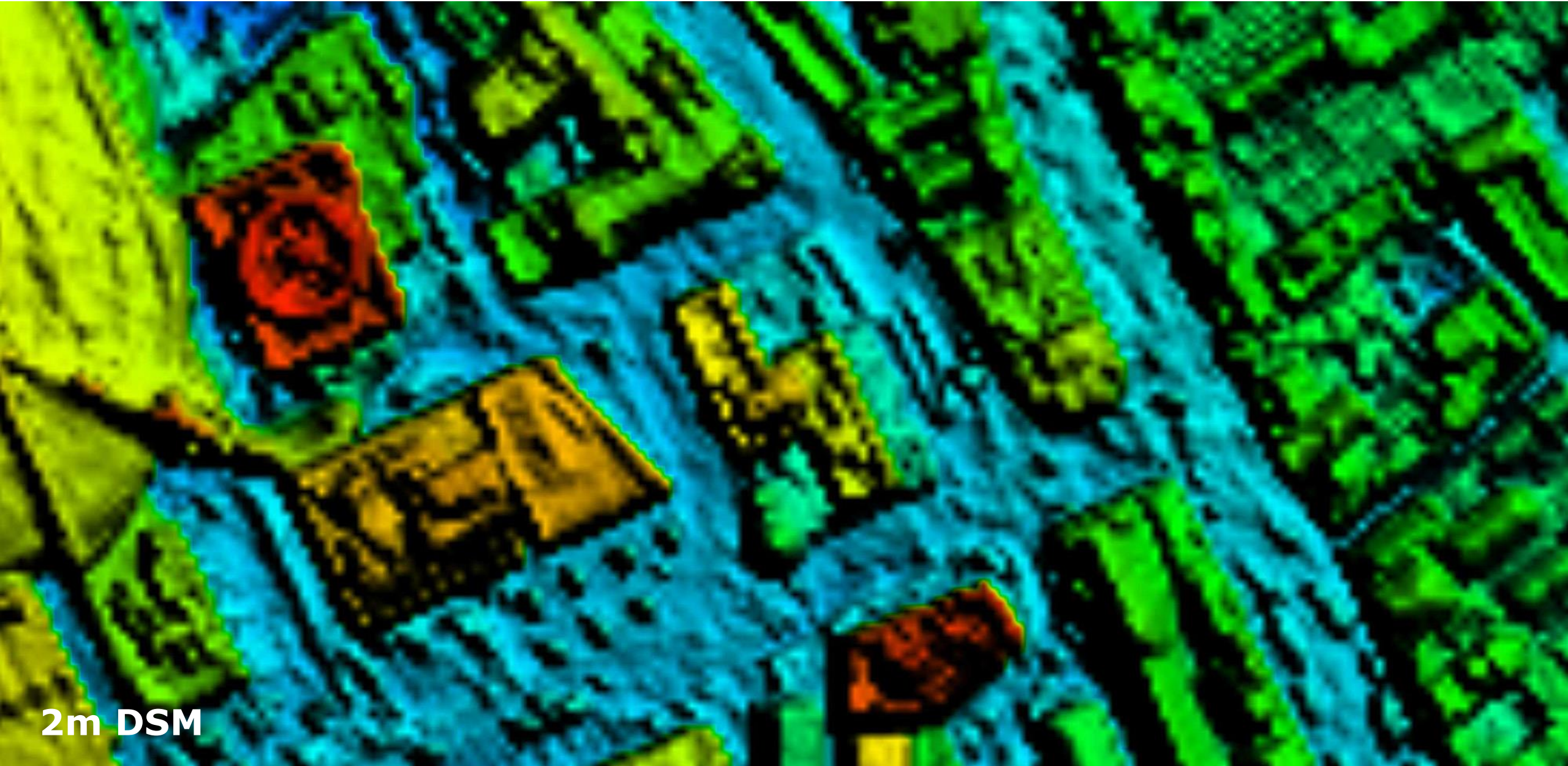
25cm



2m



25cm DSM

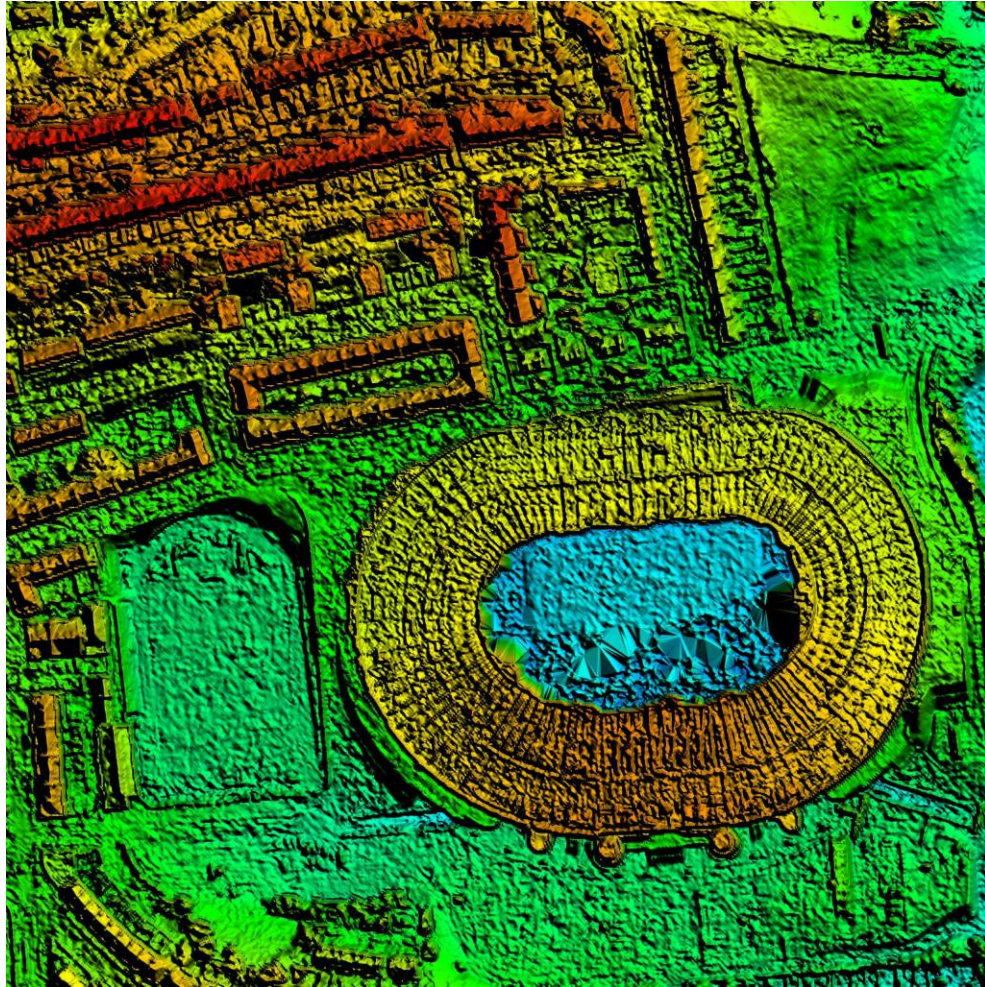


2m DSM

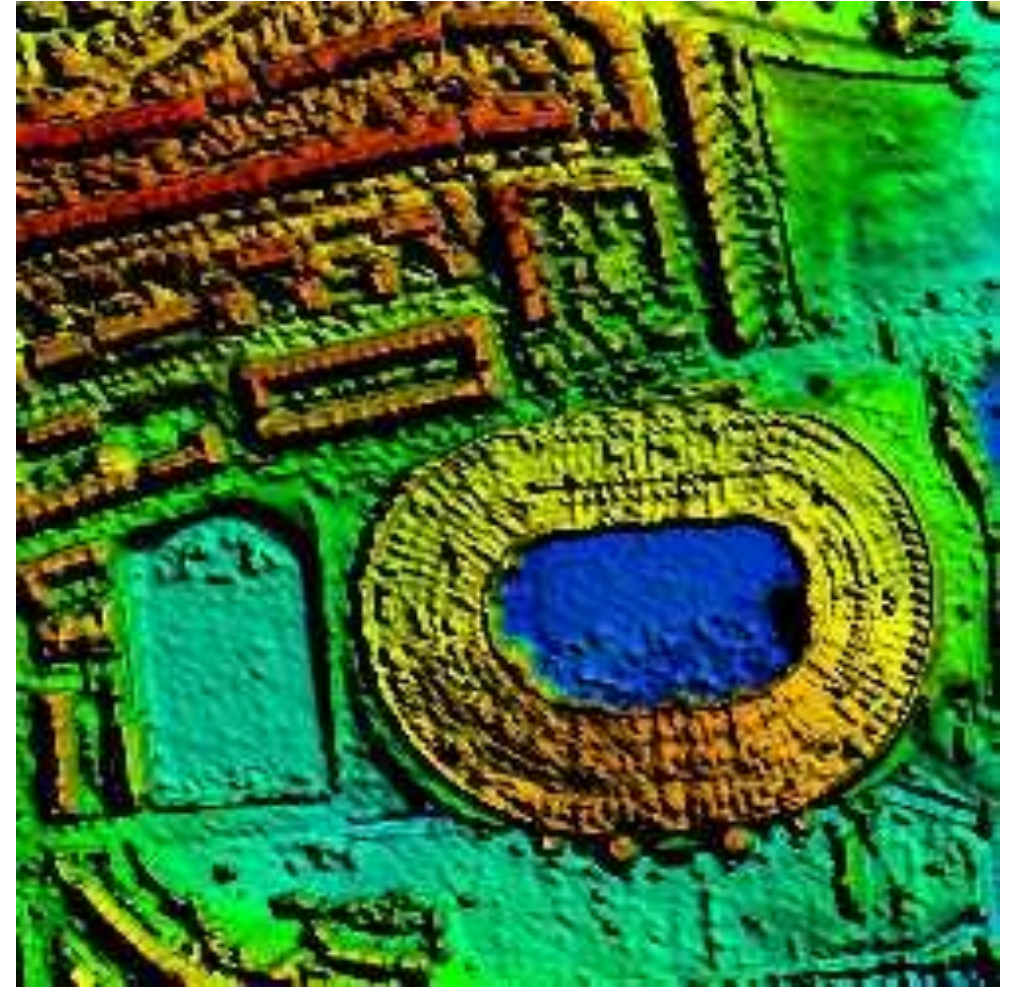


12.5cm RGB

25cm/2m DSM Comparison



25cm



2m

25cm/2m DSM Comparison



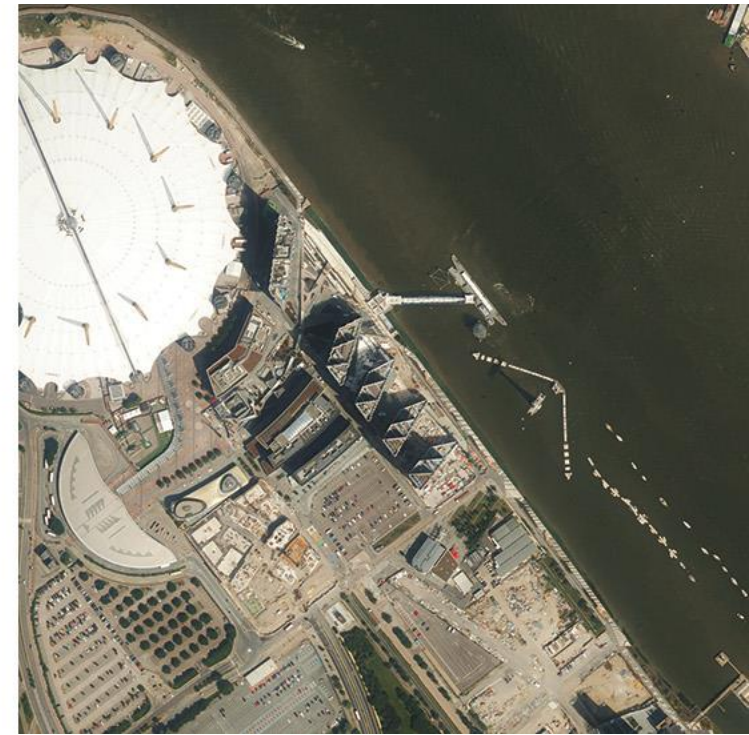
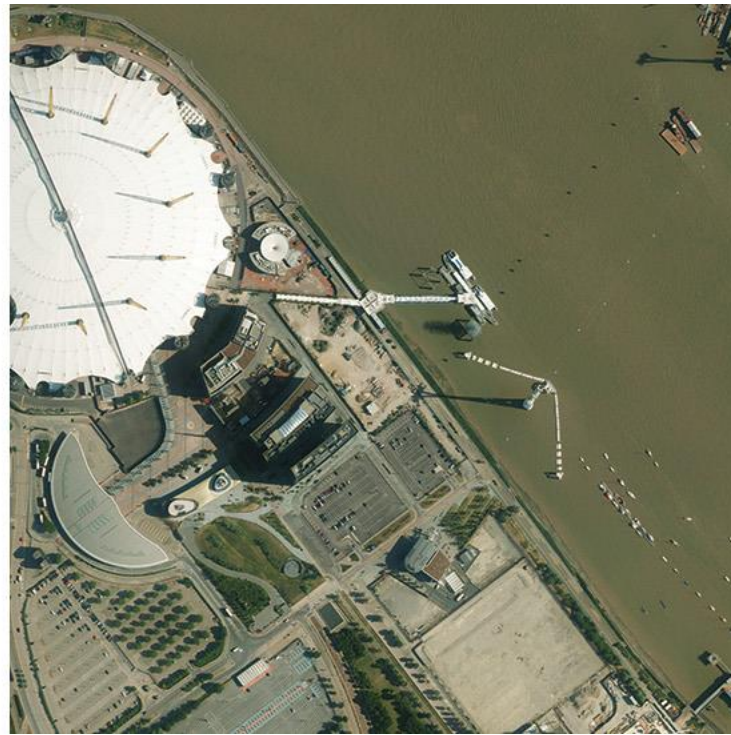
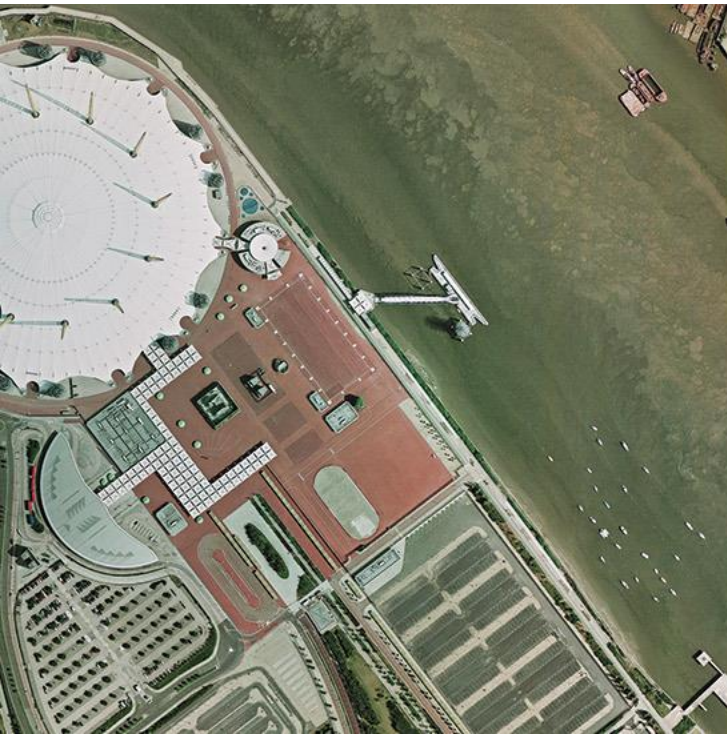
25cm



2m

Historical Aerial Photography

Historical Photography dating back to 1999 is available to all members via the Mapshop & Web Services.





2014



2017



2023

APGB Stats

- Nine new Unique Members in this contract:
Crown Estate Scotland, East Suffolk District Council, South Derbyshire District Council, The North East of Scotland Transport Partnership, Worcester City Council, Crofting Commission, Clackmannanshire Council Oadby & Wigston Borough Council
- **492** Members have signed the new licence
- **2,414,802 sqkm** sqkm already delivered. 14% increase on the same period in 2023
- **21** orders of 5cm Aerial Photography

APGB FAQs

- Can my sub-contractors access the Products?
Yes, as long as a signed Sub-contractor Licence is in place they can access the Mapshop and Web Services
- What copyright statement needs to be used?
Lot 1: © Bluesky International Ltd
Lot 3: © Bluesky International Ltd and Getmapping Ltd
- How do I see if my area has been updated?
The planned flying, capture updates and currency shapefiles of all products are available at APGB.co.uk

Thank you

Bluesky International Ltd
Kathryn Lucas



Introducing the NEW APGB Web Services

APGB Lot 2

GC Public Sector & PSGA event

Aerial Photography and Height Data Web Services

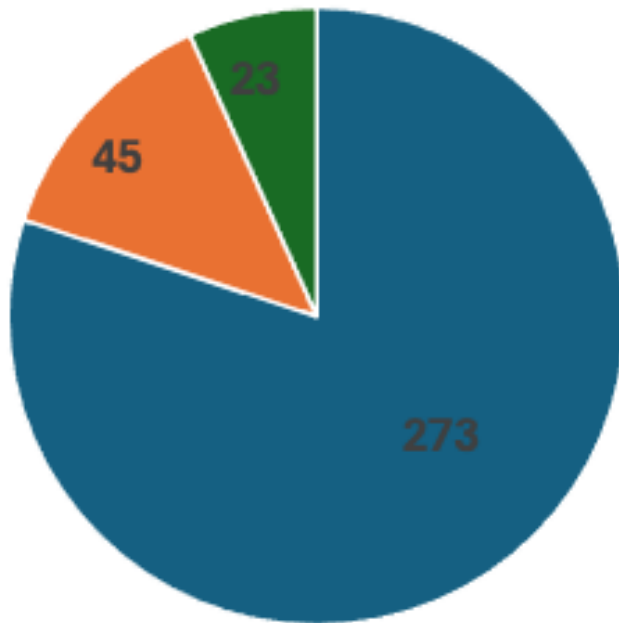
- OVERVIEW OF SERVICES
- MEMBER USAGE
- PERFORMANCE DATA

APGB WEB SERVICES OVERVIEW

- SERVICES
 - WMS / WMTS
 - WFS
- DATA
 - AERIAL PHOTOGRAPHY (RGB) 12.5CM
 - COLOUR INFRARED AERIAL PHOTOGRAPHY (CIR) 50CM
 - DSM / DTM AS SHADED RELIEF
 - HISTORIC AERIAL PHOTOGRAPHY GOING BACK TO 1999
 - INDEX OVERLAY LAYERS FOR CURRENT AND HISTORIC DATA

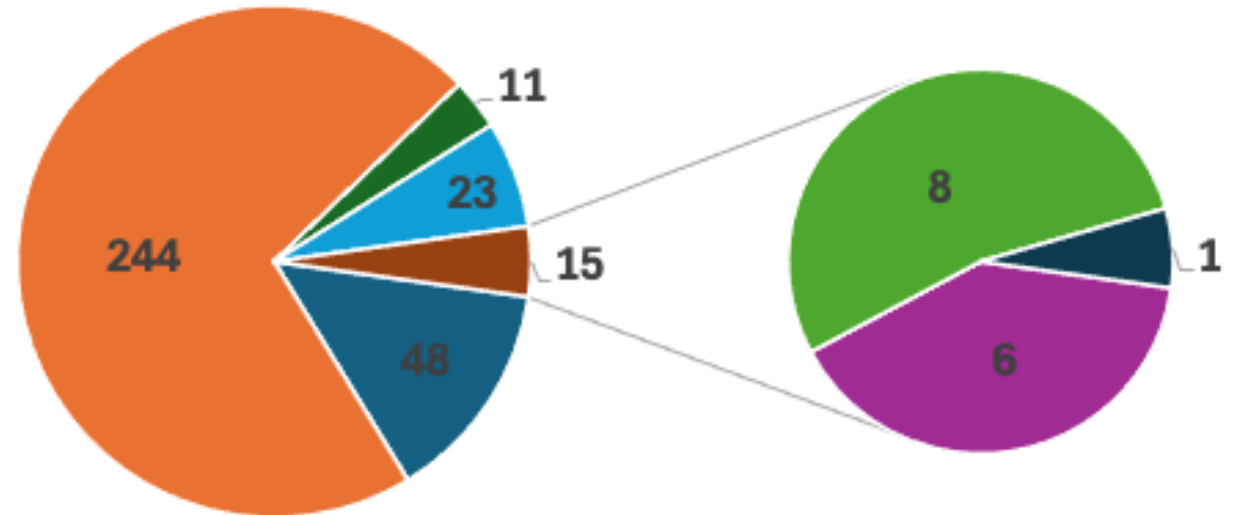
APGB USAGE BY MEMBER

MEMBERS BY REGION



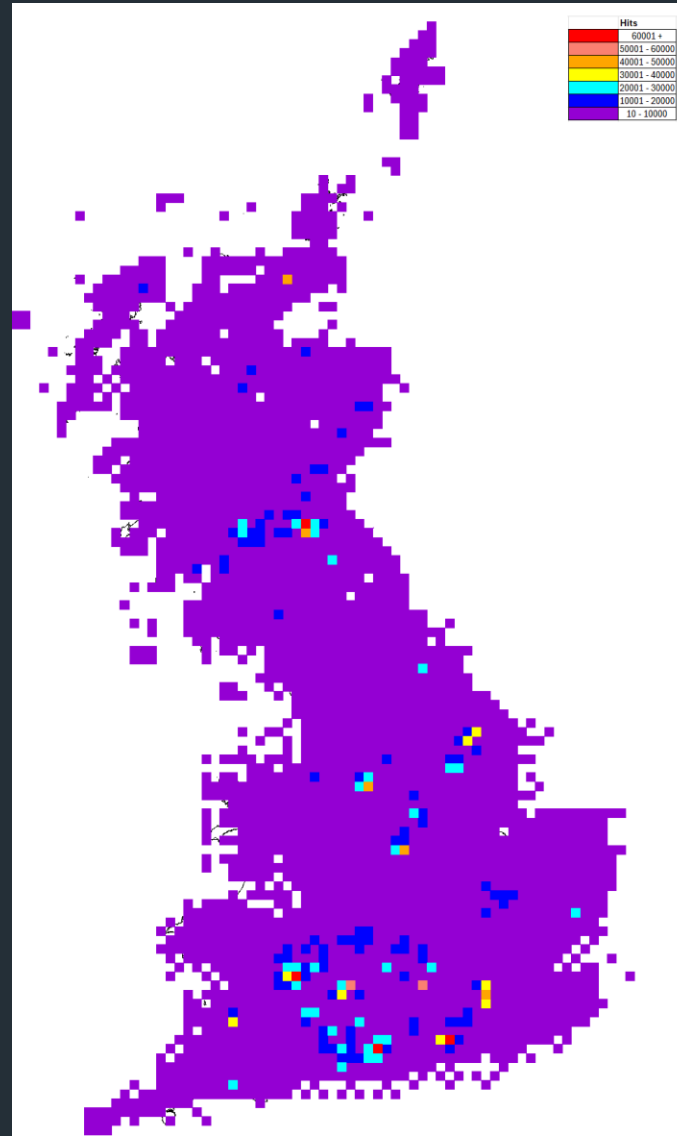
■ England ■ Scotland ■ Wales

MEMBERS BY SECTOR



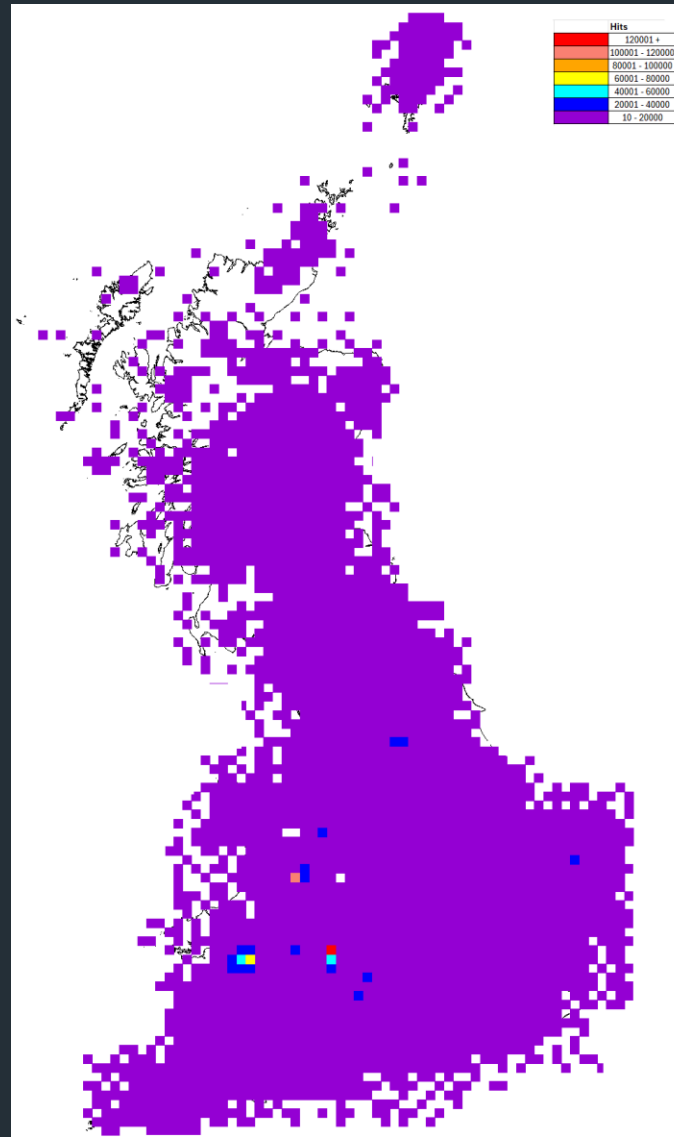
■ Central government ■ Local government ■ National Park
■ Emergency service ■ Other organisation ■ Local council
■ NHS

APGB MEMBER USAGE – WMS HEAT MAP



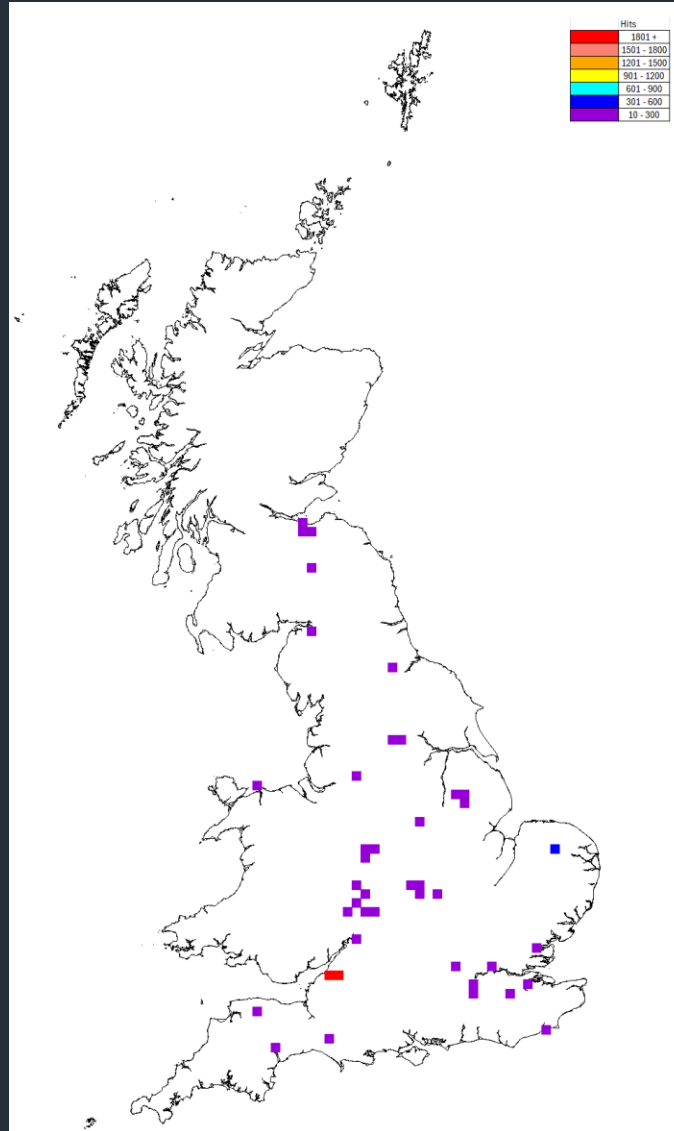
	Hits
	60001 +
	50001 - 60000
	40001 - 50000
	30001 - 40000
	20001 - 30000
	10001 - 20000
	10 - 10000

APGB MEMBER USAGE – WMTS HEAT MAP



	Hits
	120001 +
	100001 - 120000
	80001 - 100000
	60001 - 80000
	40001 - 60000
	20001 - 40000
	10 - 20000

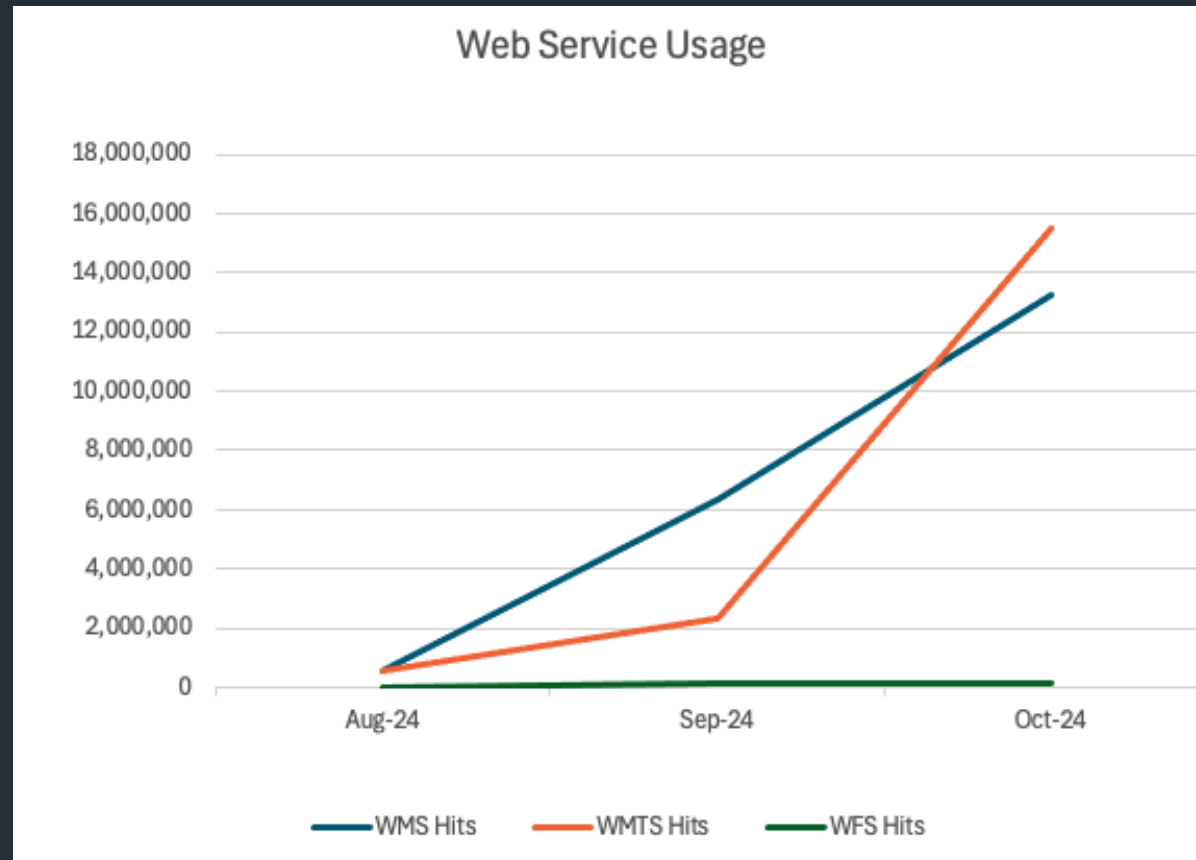
APGB MEMBER USAGE – WFS HEAT MAP



	Hits
	1801 +
	1501 - 1800
	1201 - 1500
	901 - 1200
	601 - 900
	301 - 600
	10 - 300

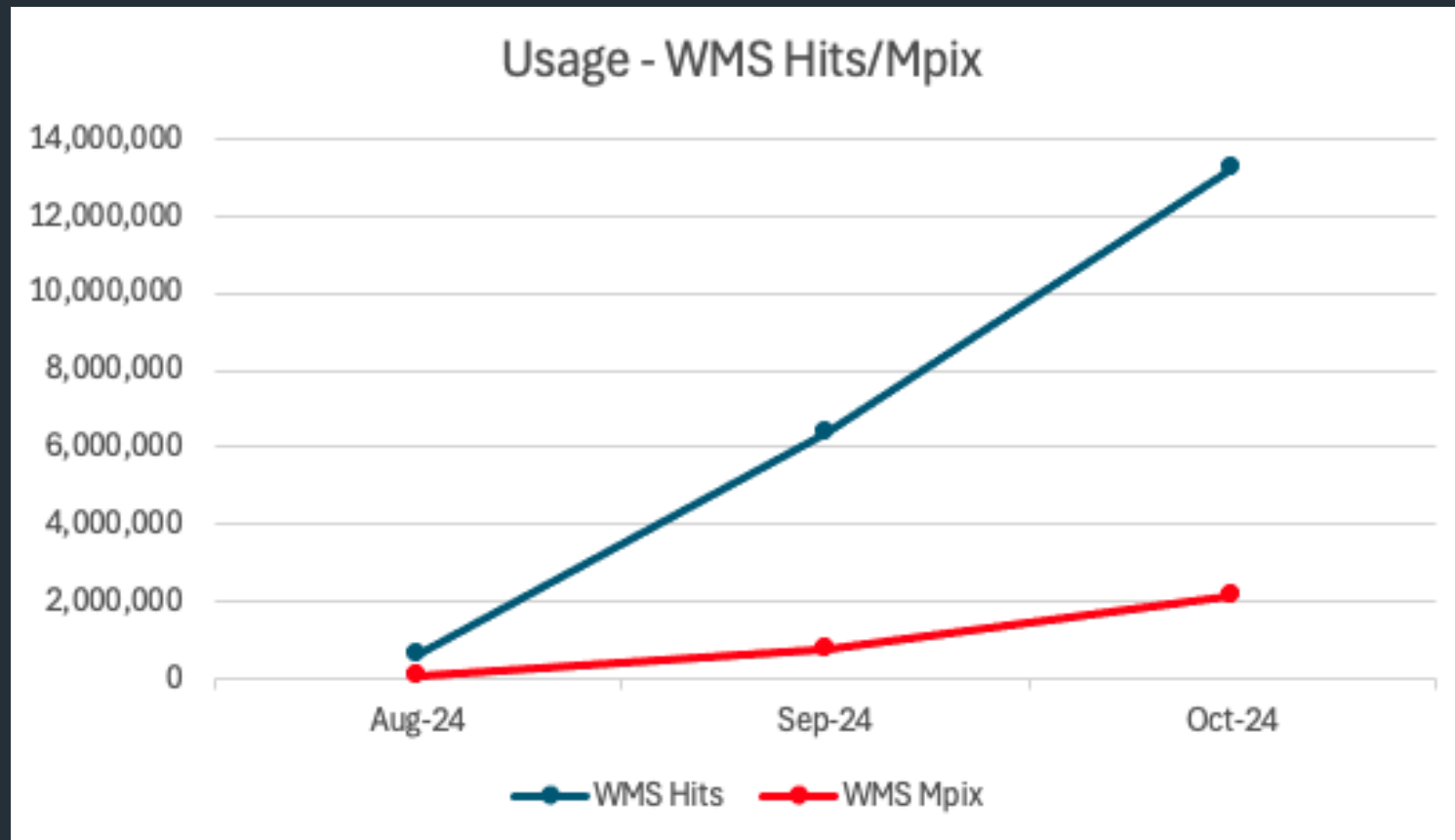
APGB MEMBER USAGE – TOTAL HITS

MEMBER SERVICE REQUESTS (HIT COUNT BY MONTH)



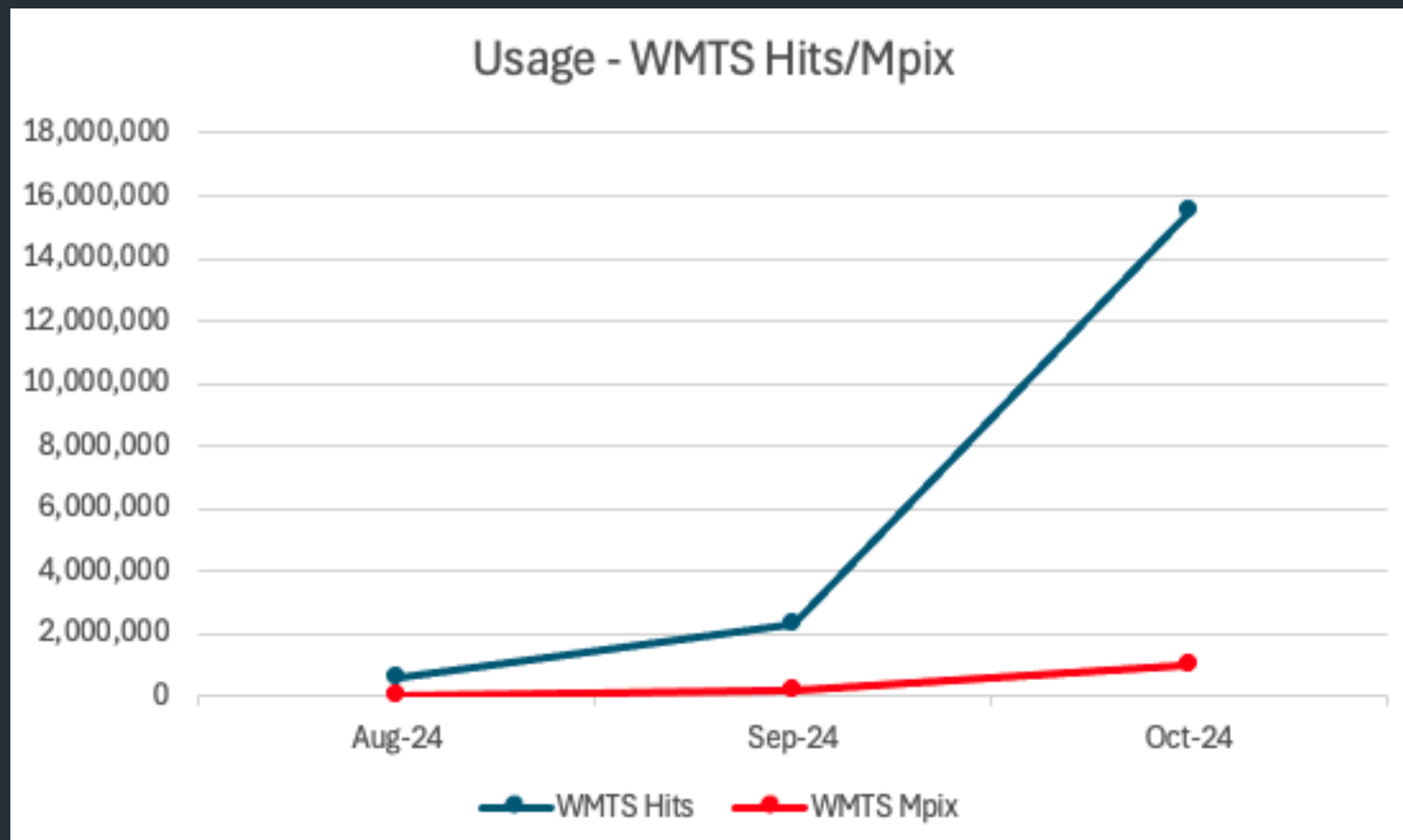
APGB MEMBER USAGE – WMS HITS/MPIX

MEMBER WMS SERVICE REQUESTS (HIT COUNT BY MONTH)



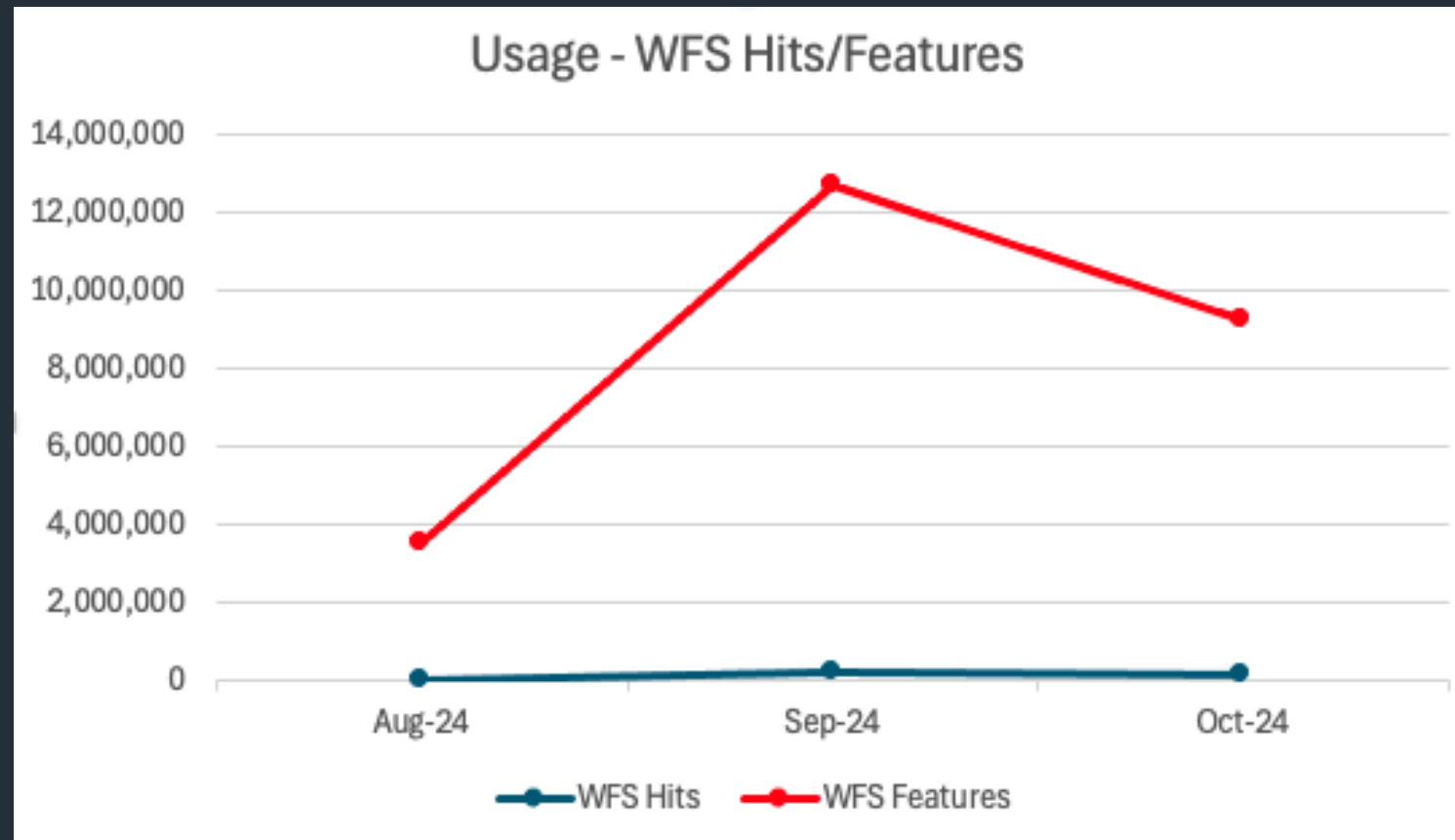
APGB MEMBER USAGE – WMTS HITS/MPIX

MEMBER WMTS SERVICE REQUESTS (HIT COUNT BY MONTH)



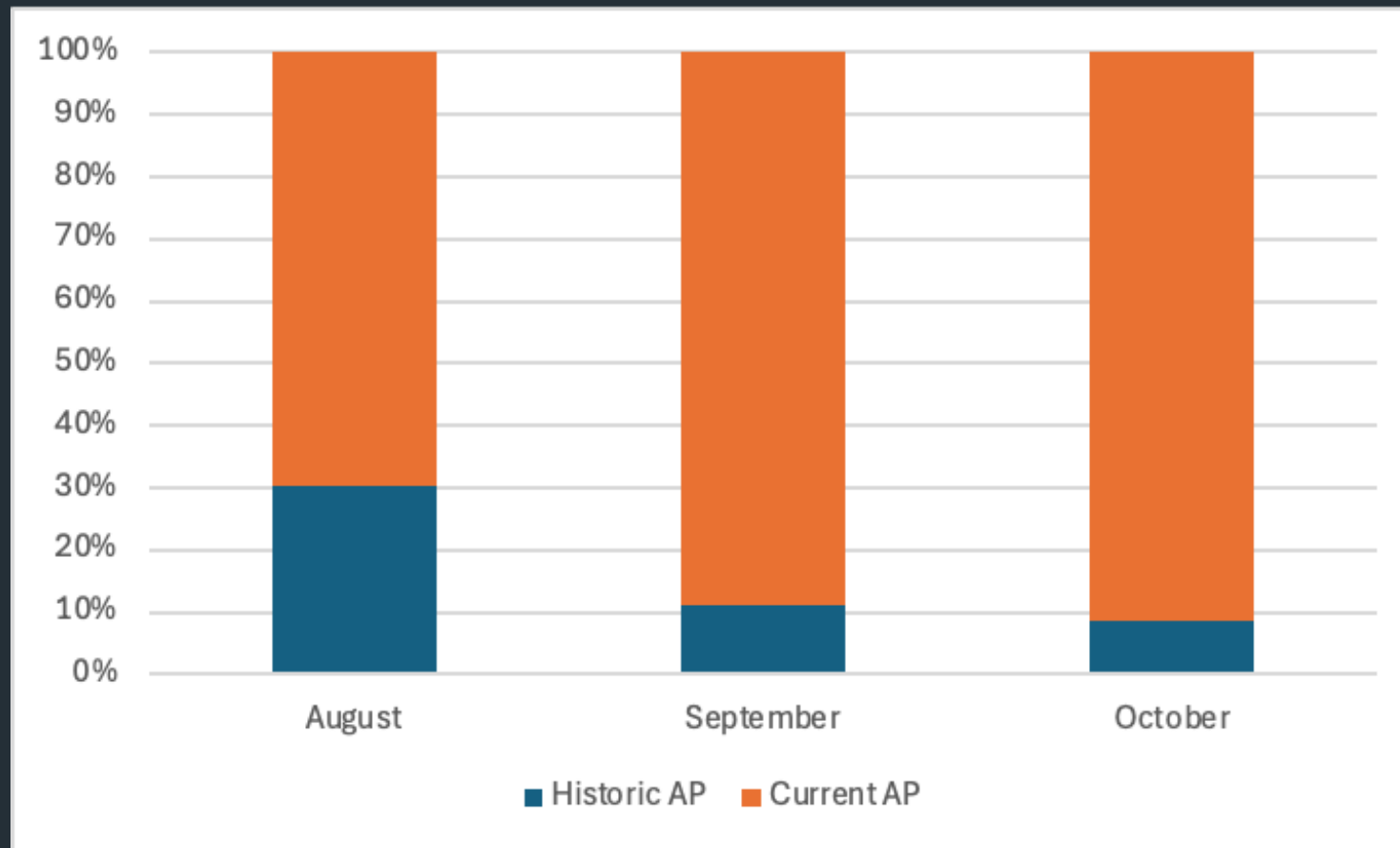
APGB MEMBER USAGE – WFS HITS

MEMBER WFS SERVICE REQUESTS (HIT COUNT BY MONTH)



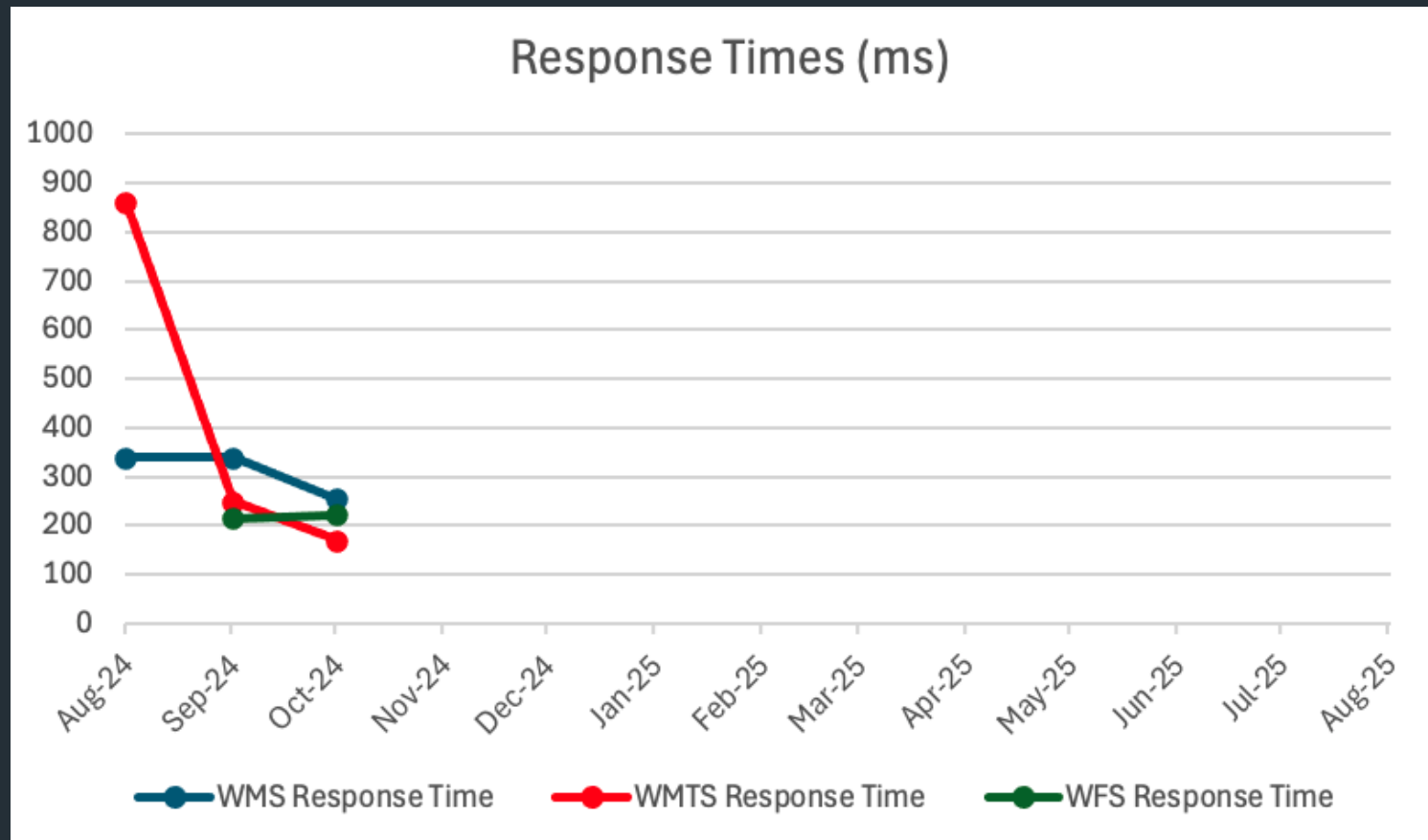
APGB MEMBER USAGE – HISTORIC AP USAGE

MEMBER HISTORIC / CURRENT SERVICE REQUESTS (AS PERCENTAGE OF TOTAL)



APGB PERFORMANCE DATA

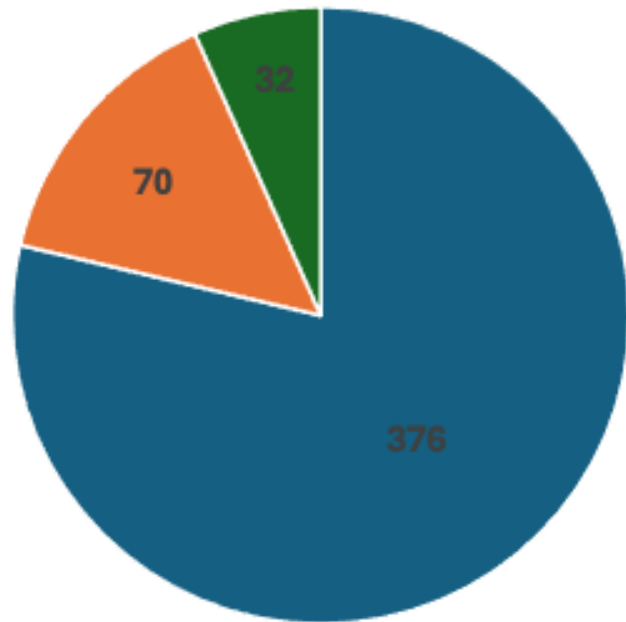
SERVICE PERFORMANCE BY MONTH



APGB LOGGED TICKETS

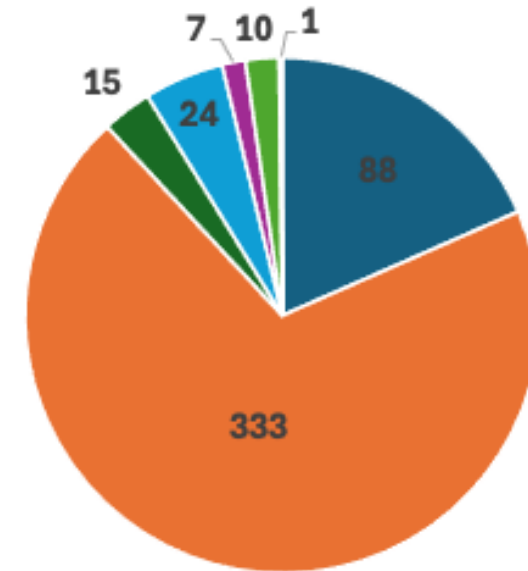
TICKETS LOGGED BY MEMBERS FOR THE REPORTING PERIOD

Number of support tickets by region



■ England ■ Scotland ■ Wales

Number of Support tickets by sector



■ Central government ■ Local government ■ National Park ■ Emergency service
■ Other organisation ■ Local council ■ NHS

APGB LOGGED TICKETS

TICKETS LOGGED BY MEMBERS FOR THE REPORTING PERIOD

79% tickets are New feed requests

THANK YOU

Helen Wattie / helen.wattie@getmapping.com

PSGA DEVELOPMENTS AND UPDATE

Rory Prentice

EVERYTHING YOU COULD HAVE READ
IN THE PSGA NEWSLETTERS,
BUT PROBABLY DIDN'T HAVE TIME TO

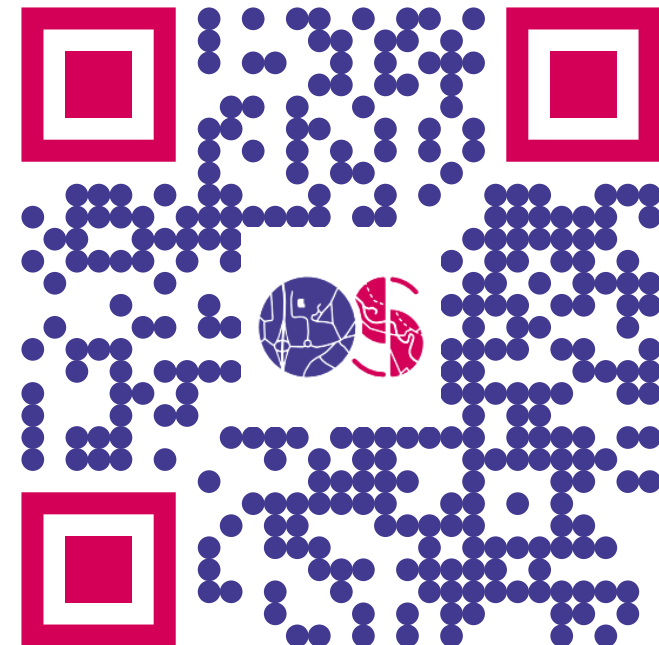
PSGA Communications

- **Newsletters** for regular updates on the PSGA
 - latest data releases
 - webinars and events
 - latest case studies and blogs
 - product and service updates
 - sign up at os.uk/psganews
- **OS website** for latest PSGA news, blogs and over 20 case studies published so far this year for inspiration on use cases
- **Webinars** delivered by OS product, data and licensing experts
 - 13 PSGA webinars hosted in 2024
 - webinar recordings available on the PSGA members area
- **Social media** follow Ordnance Survey on X, LinkedIn and YouTube



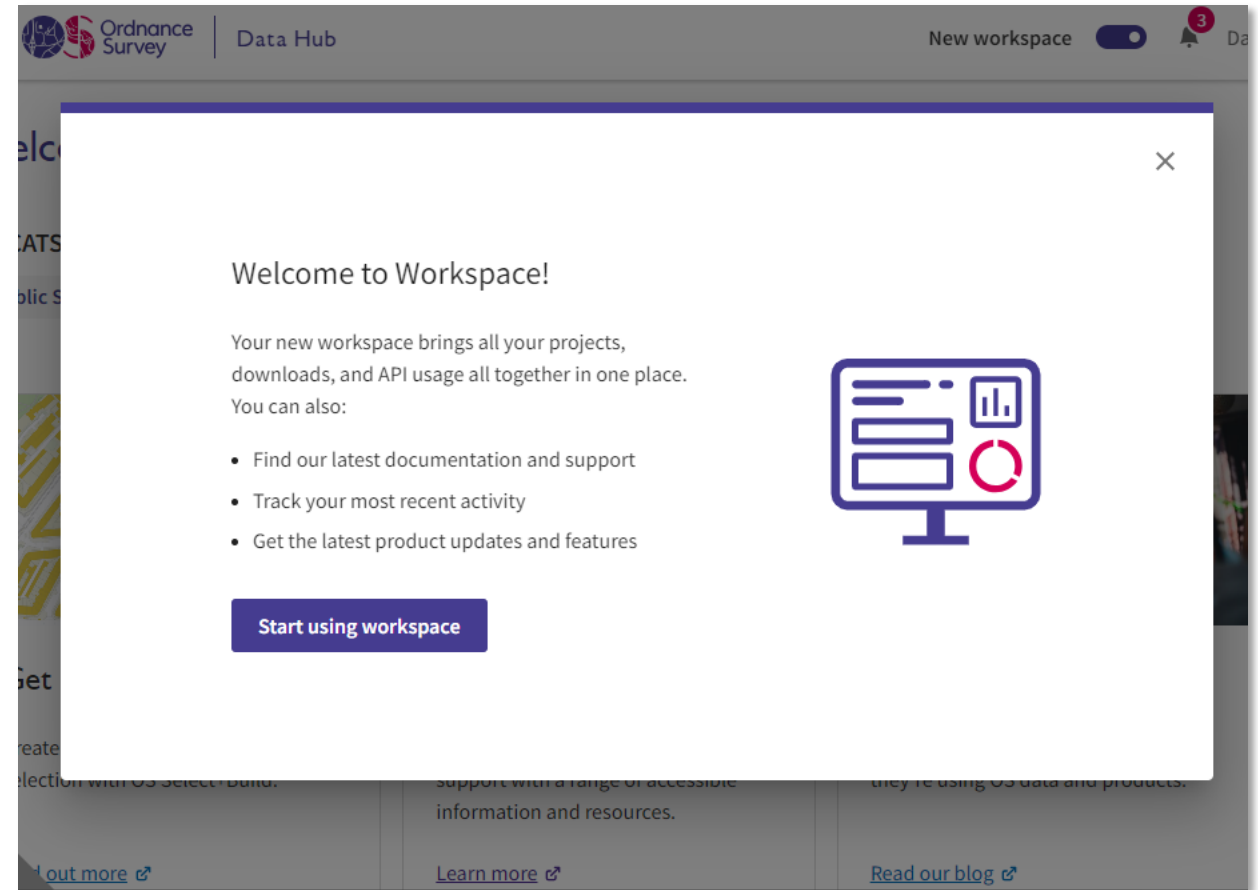
Registration for this year's annual regional events is open!

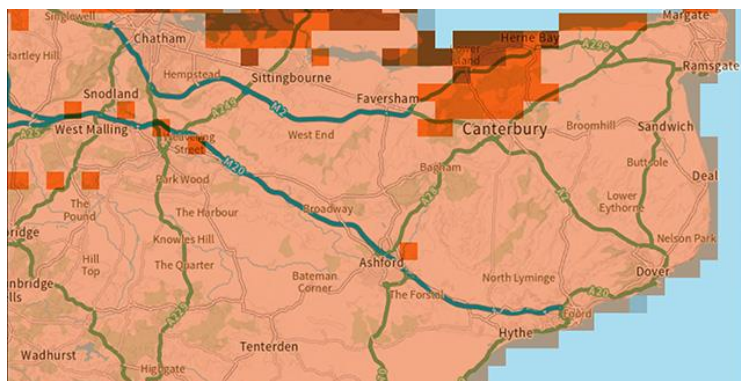
The Geospatial Commission and Ordnance Survey (OS) are hosting in-person events this autumn. Discover the value of geospatial to the public sector and get the support you need from OS and Aerial Photography data experts and OS Channel Partners.



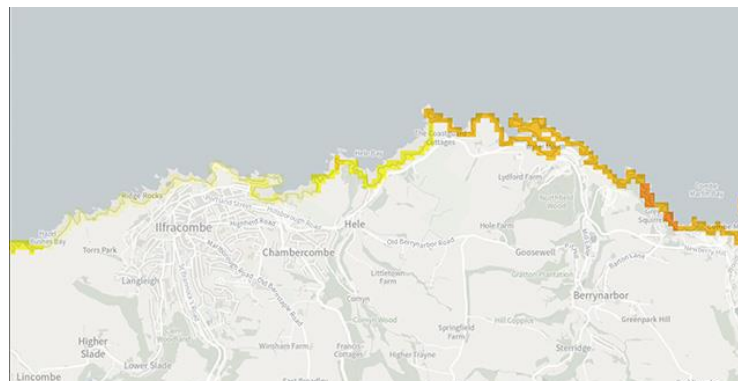
What's new - OS Data Hub

- **Delete** and **edit** recipe name now available in OS Select+Build
- **BGS Open datasets** available via the OS Data Hub
- New OS Data Hub **Workspace & Team Spaces** functionality

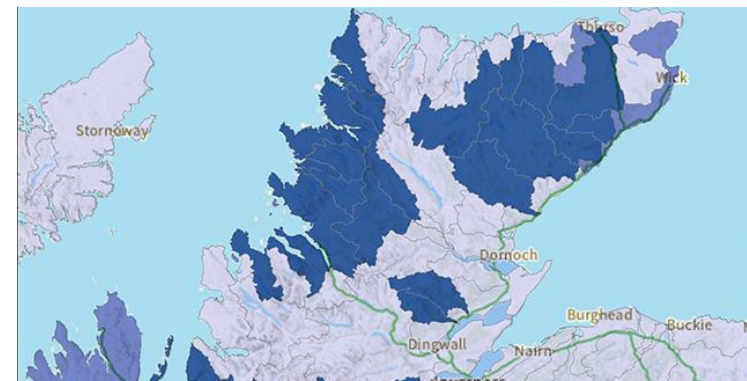




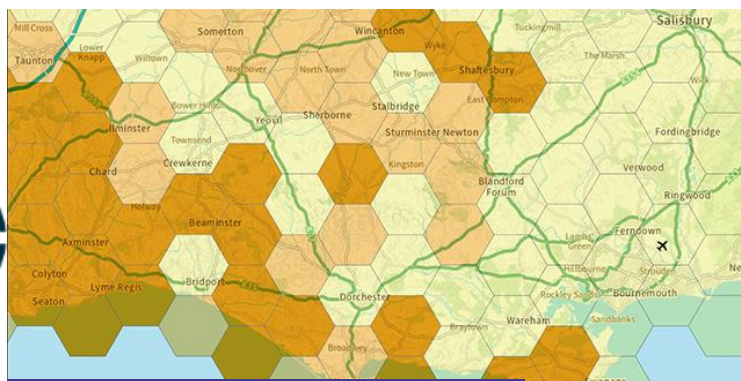
Geoclimate – shrink/swell



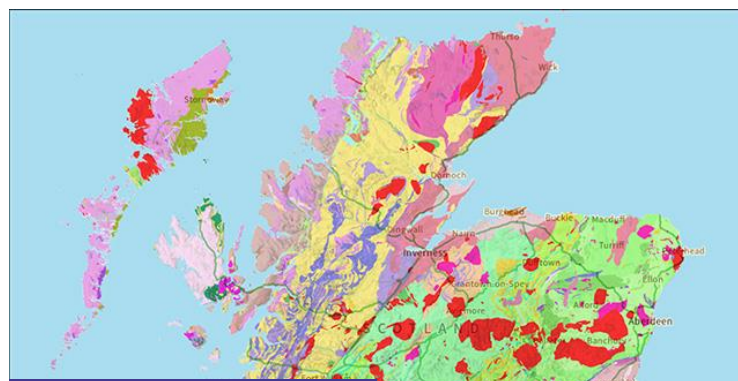
GeoCoast Open



GeoScour Open



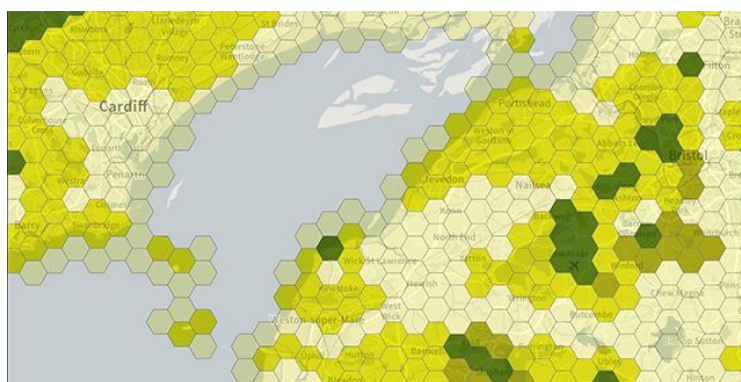
GeoSure 5 km hex grid



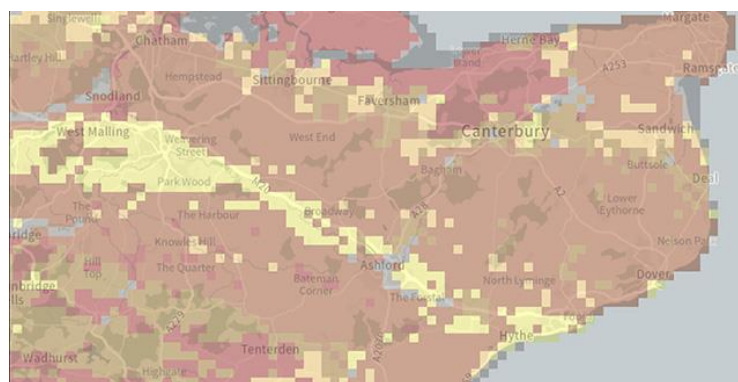
Geology 625K



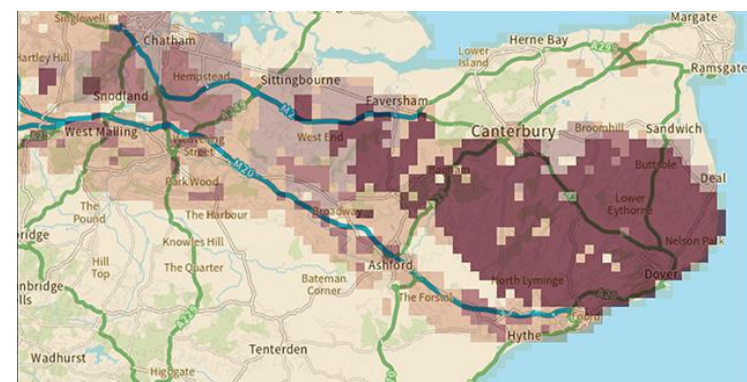
Hydrogeology 625K



Mining Hazard (not inc. coal)



Soil Parent Material Model



Indicative Atlas of Radon



2

[Find out more](#)

[Learn more](#)

[Read our blog](#)

1

44,552
of unlimited**

**As a member of the [PSGA](#) you are entitled to free Public Sector data transactions

Age Group	Percentage
18-24	28%
25-34	22%
35-44	18%
45-54	15%
55-64	12%
65-74	8%
75-84	5%
85+	2%

 [Examples and Tutorials](#) 



Pricing and Licencing



- Updated PSGA licensing guide available that simplifies the guidance around sharing OS data and publishing your derived data.

[PSGA Member Licence Start Guide](#)



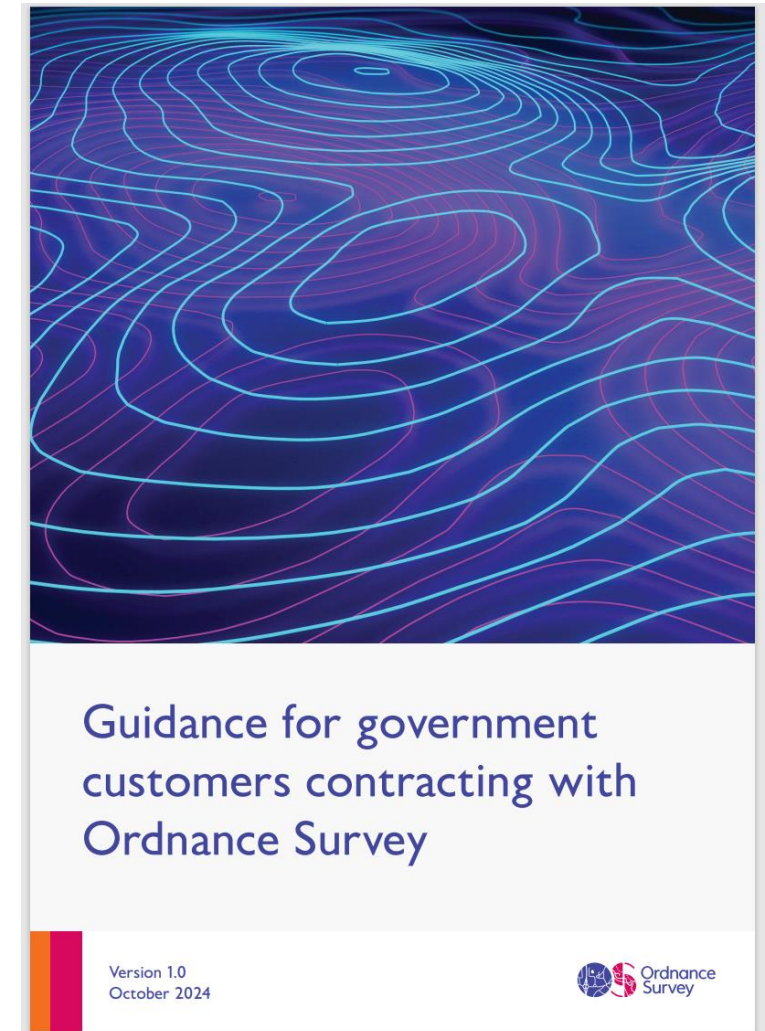
- Updated PSGA Member Licence (May 24) available with some updated URLs. Latest version of the licence is on our website:

[PSGA Member Licence v 3.0](#)

Guidance for contracting with Ordnance Survey

- Your membership of the PSGA can facilitate the use of OS data, services and capabilities to deliver your outcomes.
- We've created guidance that helps set out additional options for accessing OS data and services that aren't covered by the PSGA

Guidance for government customers working with Ordnance Survey



OS NGD Enhancements – March 2024

NEW OS NGD DATA



OS NGD Buildings theme

- Simple building description
- Building age & construction material
- Basement presence



OS NGD Structures theme

- Location, nature and properties of field boundary



OS NGD Transport theme

- Location of tram tracks



OS NGD Land Cover attribution

- Habitat classification schemes
- Percentage coverage of land cover




OS NGD Geographical Names theme

- Names & location of road junctions

March
2024


OS NGD Enhancements – September 2024

OS NGD LAND USE




Enhanced Land Use Attribution

- + New classification schemes



Increased Completeness


- + Greater coverage for both Residential and non-residential sites



Enhanced topographic features attribution

- + Land Use attribution now present on component parts


OS NGD STRUCTURES



Bridge Interactions

- + Attribution identifying the network passing over and under a bridge

OS NGD BUILDINGS

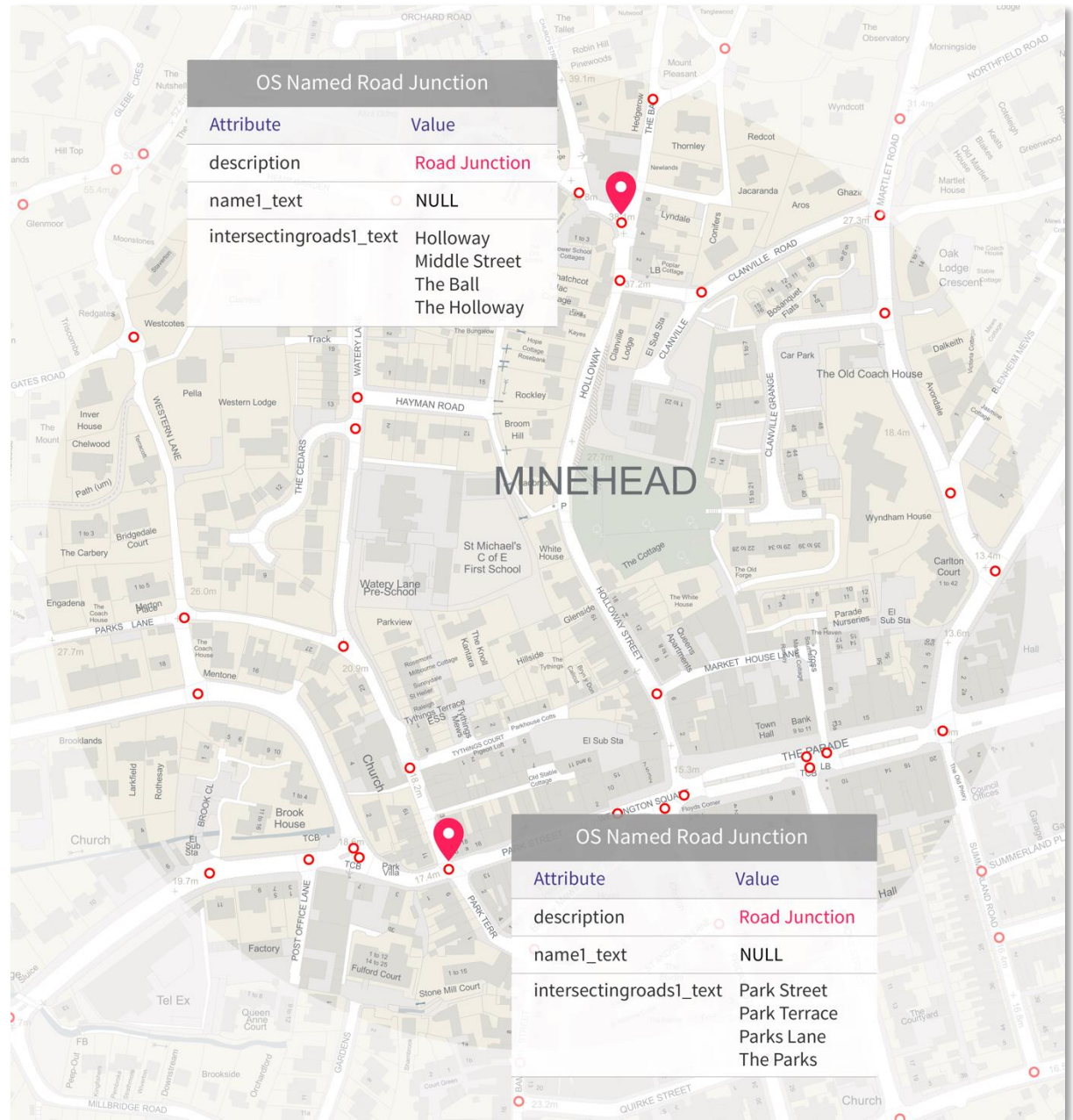


Number of Floors

- + The maximum number of occupiable floors at or above ground level

Other PSGA Product Updates

- Emergency Services Gazetteer
- Multi-Modal Routing Network
- OS VectorMap Local - Vector (MBTiles) specification change in July release
- Improvements to OS Open Built-Up Areas



OS Maps API Styling



Outdoor

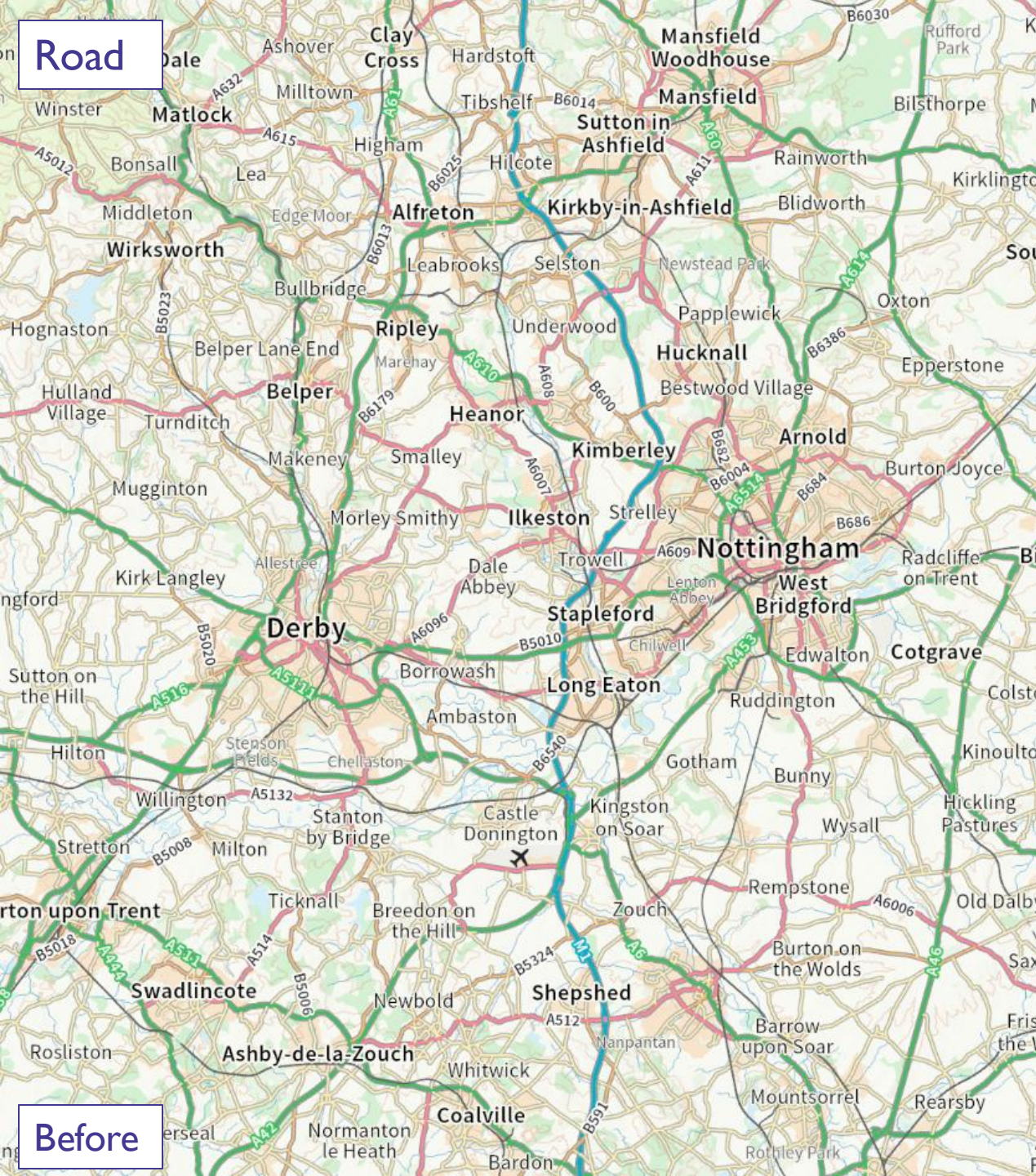


Before

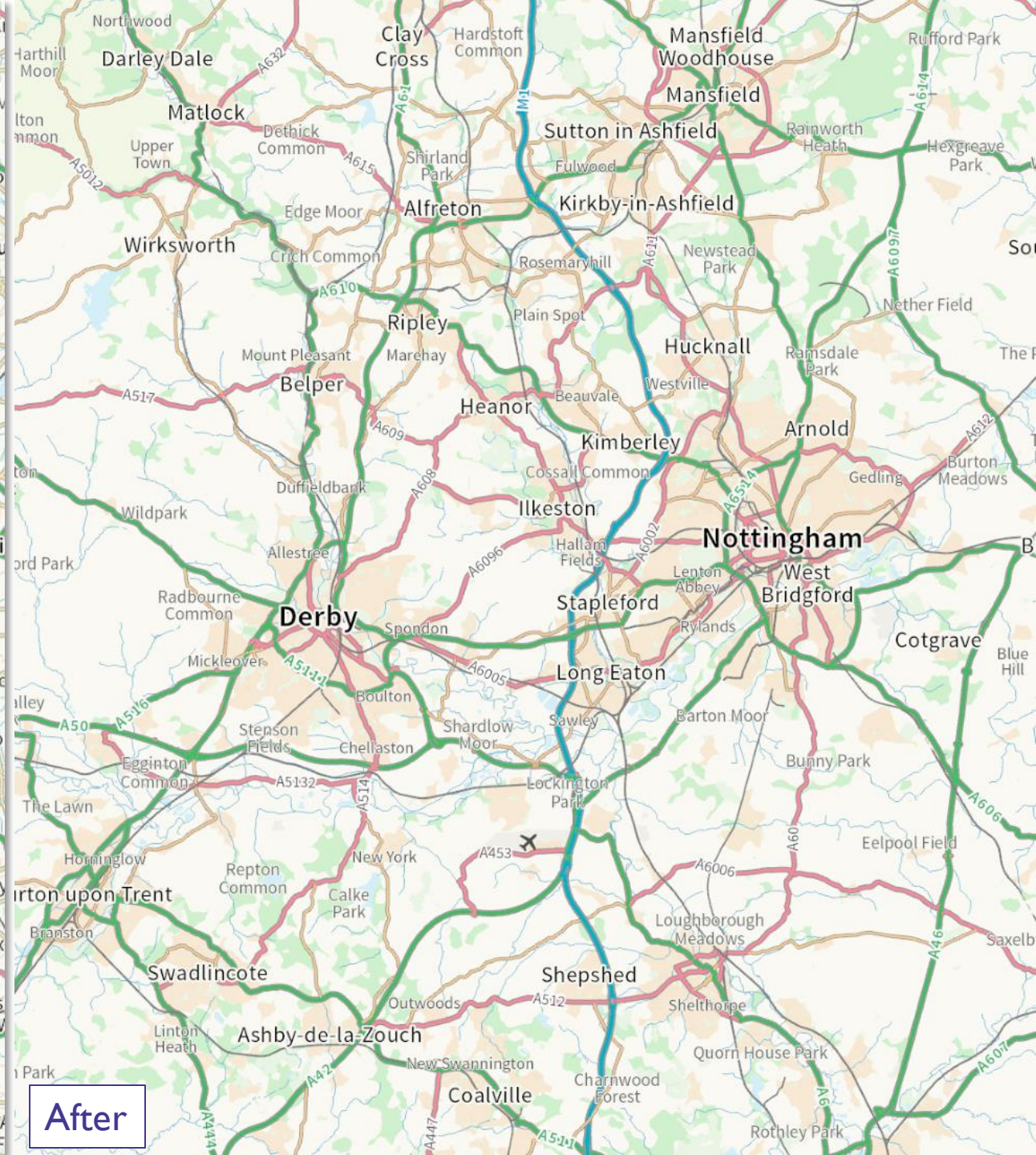


After

Road

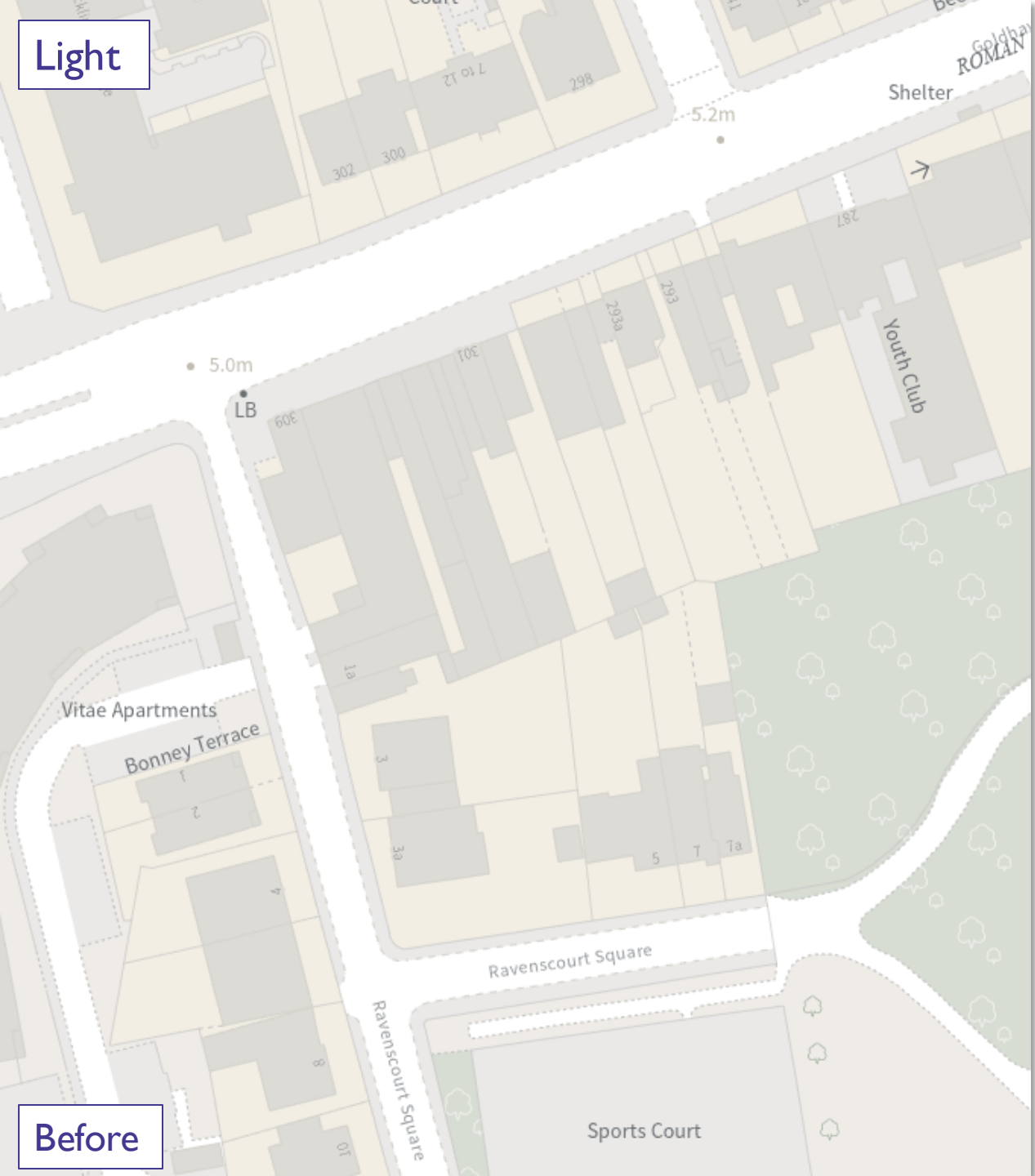


Before

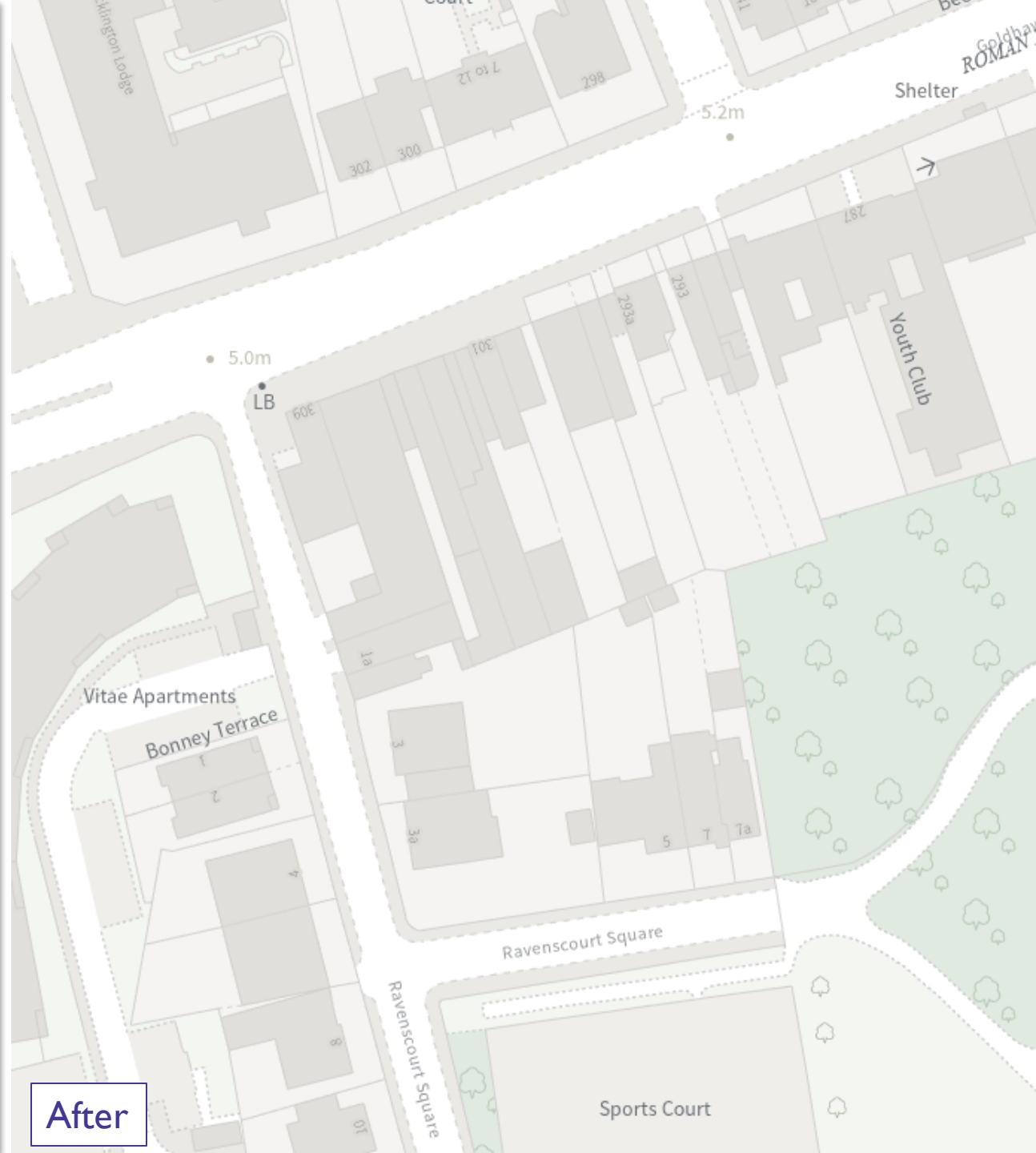


After

Light



Before



After

GB Overview Maps

- We are refreshing the cartographic styling of the GB Overview Maps Open Data product
- It will have closer affiliation with other contextual products with backdrop road data, the inclusion of shading for National Park areas and improved text.
- Acknowledging customer feedback on synchronicity of product updates, annual update/publication will move from December to January to synchronise with the publication of MiniScale
- New version will be available to download via the OS Data Hub in January 2025.

GB Overview



GB Overview Plus



More Than Maps

- Wider Documentation platform
<https://docs.os.uk>
 - More than Maps
 - OS Downloads
 - OS NGD
 - APIs
- Updated Product Viewer
- OS NGD Product Viewer





More than Maps

GEOGRAPHIC DATA VISUALISATION

Guide to cartography >

Guide to data visualisation >

GeoDataViz assets >

DATA IN ACTION

Examples

DEMONSTRATORS

Product Viewer

Addressing & location demonstrators >

Contextual demonstrators

Customer best practice >

Network Demonstrators >

OS MasterMap Generation APIs >

OS NGD (National Geographic Database) >

OS MasterMap® demonstrators

TUTORIALS

GIS >

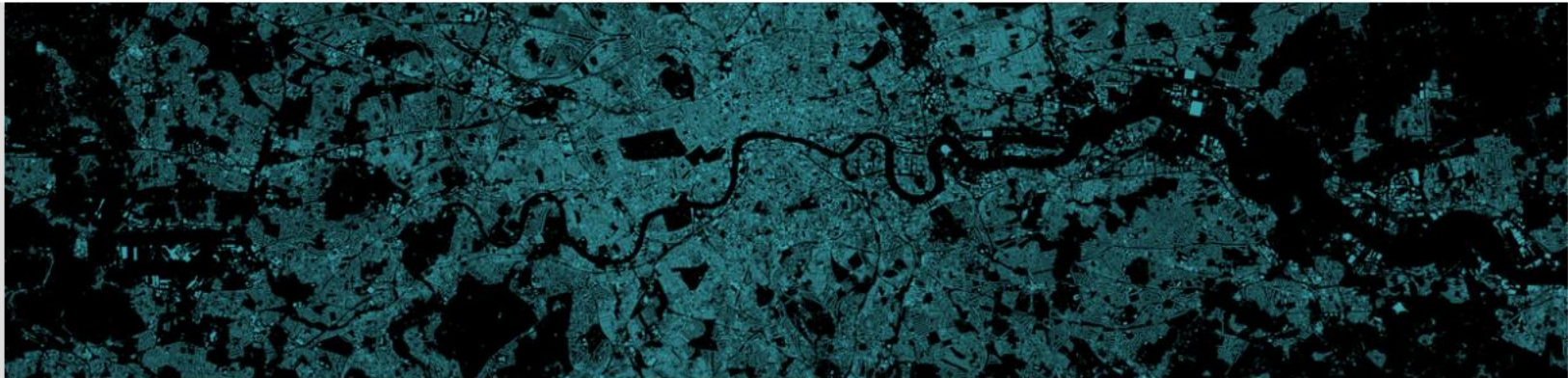
Web >

APIs >

DEEP DIVE

Introduction to address matching

Guide to routing for the Public Sector >



More than Maps

More than Maps is a new self-serve platform that provides a **one-stop shop for all your technical geospatial support**. Access a range of information via an easy-to-use site that includes tutorials, demonstrators and case studies.

If you are looking for the Ordnance Survey National Geographic Database (OS NGD) gitbook then you can find that using the link below.

[Ordnance Survey National Geographic Database \(OS NGD\)](#)

Geographic data visualisation

Geographic data visualisation is the design process of turning data concerned with physical, human, or location-based geography into a compelling story or argument; or at the very least a clear visual presentation of information.

This section contains a wealth of information to help you with the creation and design of your map or data visualisation.



Geographic data visualisation

Data in action

Demonstrators

Tutorials

Deep dive

Code

Resources

Was this helpful?



More than Maps

GEOGRAPHIC DATA VISUALISATION

[Guide to cartography](#) >[Guide to data visualisation](#) >[GeoDataViz assets](#) >

DATA IN ACTION

[Examples](#)

DEMONSTRATORS

[NEW Product Viewer](#)[Addressing & location demonstrators](#) >[Contextual demonstrators](#)[Customer best practice](#) > Powered by GitBook**NEW** Product Viewer

OS NGD Product Viewer

Interactive Demonstrator of OS NGD
Generation data

OS MasterMap Product Viewer

Interactive Demonstrator of OS
MasterMap Generation data[Previous
Examples](#)

Next

[Addressing & location demonstrators](#)

Last updated 25 days ago

[More Than Maps](#)

Welcome to the OS **NGD** Product Viewer

Share the OS **NGD** Product Viewer with others

[LinkedIn](#)[QR code](#)[Email](#)[Link](#)

We have three sample data areas for you to explore. Click on the area that interests you and discover OS **NGD** data through the map viewer tool.

Currently excluding:

- Cross Reference table data
- Address Islands (none of the sample areas are included in this dataset)
- OS NGD Land - Landform point (there is no data in the sample areas)
- OS NGD Transport Network - Tram on road, Railway Link Set (there is no data in the sample areas)
- OS NGD Transport RAMI - Reinstatement point Reinstatement area, Maintenance point, Maintenance area (there is no data in the sample areas)
- Previous versions of data (newest version only included)



EXETER



NEWPORT

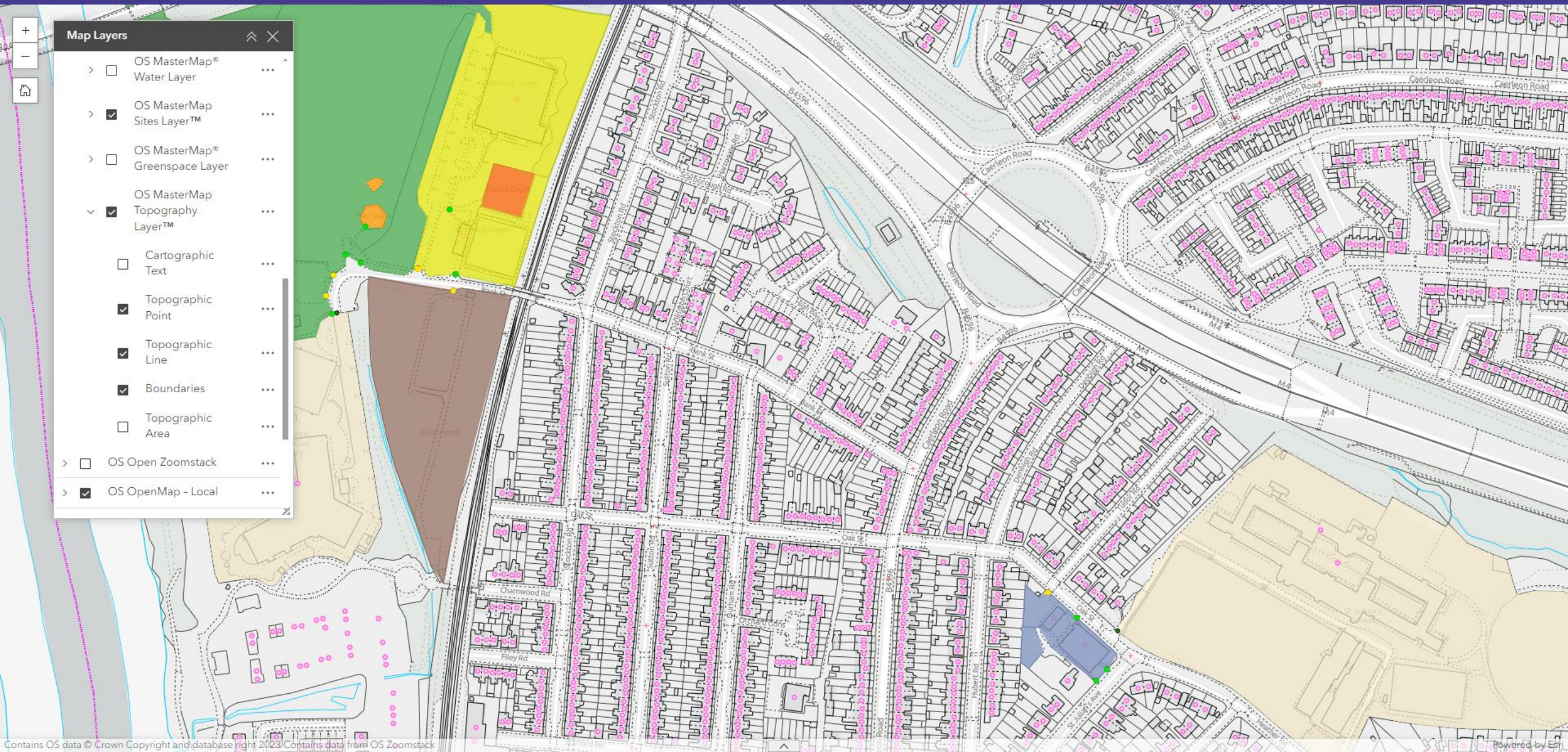


INVERNESS





Product Viewer Beta



+

-

🗲

OS NGD Data

⌵ ⌵

☐ Historic Address

...

☐ Non Addressable Object

...

☐ Pre-Build Address

...

☐ Street Address

...

⌵ ☐ NGD Administrative and Statistical Units

...

⌵ ☒ NGD Buildings

...

⌵ ☒ Building Features

...

⌵ ☐ NGD Geographical Names

...

⌵ ☐ NGD Land

...

⌵ ☒ NGD Land Use

...

⌵ ☒ Land Use Features

...

☐ Site Access Locations

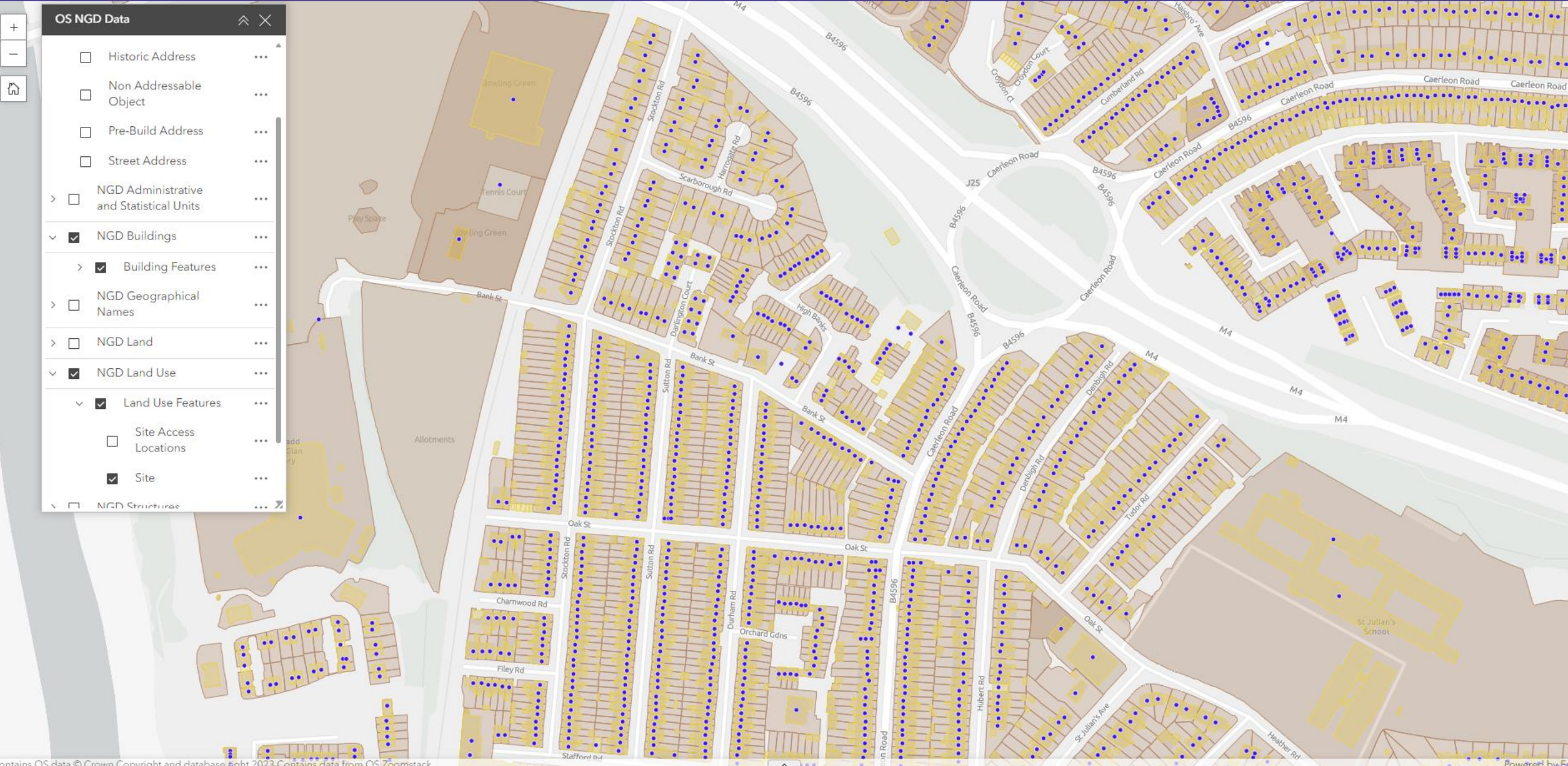
...

☒ Site

...

⌵ ☐ NGD Structures

...



Thank You!

PSGA Helpdesk psga@os.uk

Tel: 03453 75 75 95

Rory Prentice

rory.prentice@os.uk





Geospatial
Commission



Ordnance
Survey

WELCOME BACK

The next session will start at 15:20



OS NGD Case Study

Frank Blades – Master Data Coordinator
Ceredigion County Council



Cyngor Sir
CEREDIGION
County Council

Data Team

The Data Team is part of the Application Support Team which falls within the Customer Contact & ICT Department of Ceredigion County Council. Our work includes:

- GIS & Digital Mapping
 - Maintain the LLPG & NSG
- Utilising OS Data Resources
- Corporate Data Maintenance
 - Bespoke Data Projects

Meet The Team



Frank Blades
Master Data Coordinator



Matthew Gray
Master Data Team Leader



Steffan Jones
Master Data Coordinator



Ceredigion



Cyngor Sir
CEREDIGION
County Council

Examples of OS Data Usage by Ceredigion Council

- Internal & External Maps – OS Base Mapping
- LLPG – OS Address Theme
- Planning Enforcement Caravans Project – OS Buildings Theme
- Place Name Project – OS Geographical Names Theme (namedarea)
- Traffic Team – OS Average Speed Data
- Adopted Highways – OS Land (Roadtrack&path)
- Refuse Collection Project – OS Buildings Theme / OS Address Theme / OS AddressbaseCore



Refuse Collection Project

Holiday Accommodations

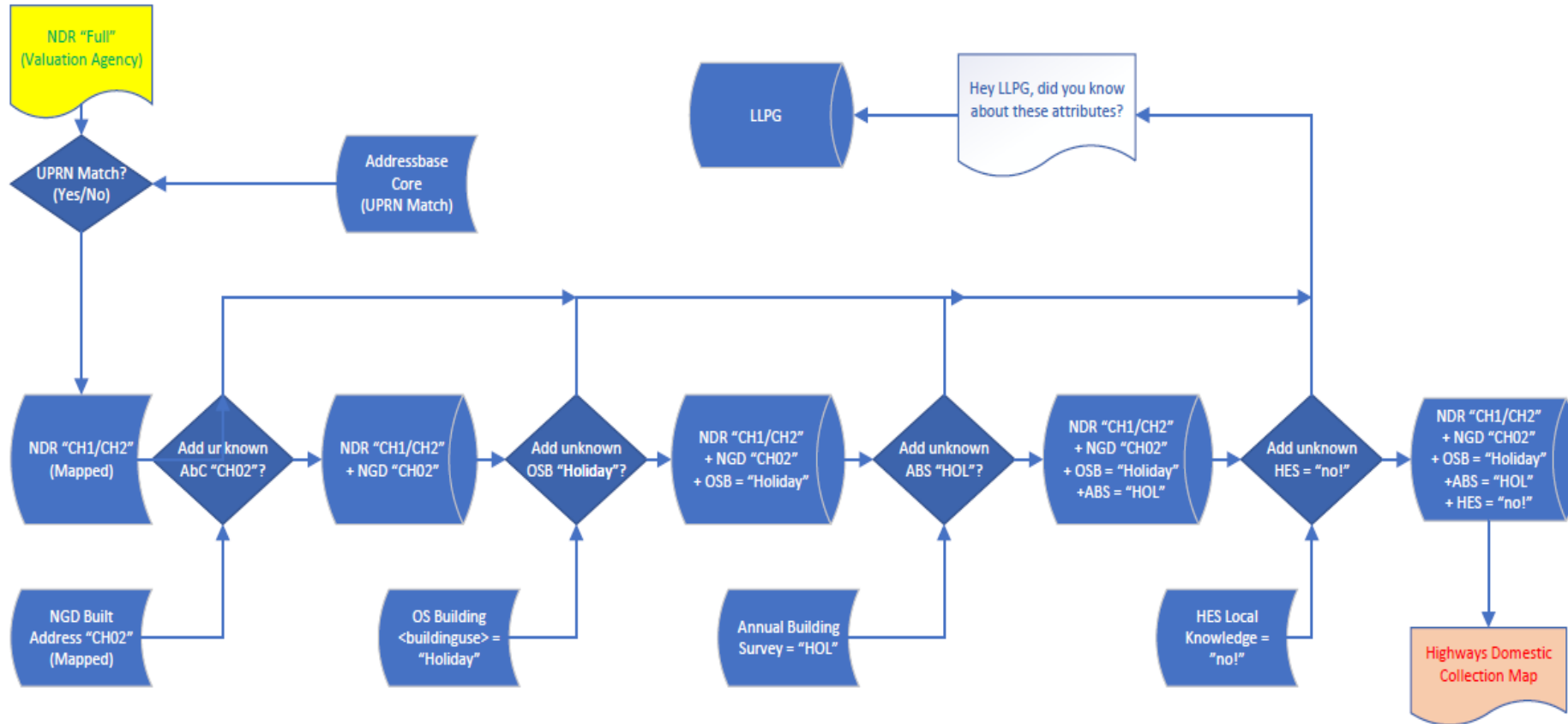
Introduction

The Data Team were asked to provide a mapping tool to allow Council Waste Operatives (Highways Team) to easily identify Holiday Homes. The data and mapping component will be integrated into an application designed for installation on a tablet. This tablet will be deployed within the cab of the refuse collection vehicle, serving as a GPS-enabled rolling map for real time navigation and operational use.

This process allows the Council to streamline refuse collection and avoid the operatives inadvertently collecting commercial refuse. It also serves to improve data quality across the authority, and this will ensure residents receive best quality service.



FME Workflow



Data Utilisation

We utilise OS NGD to obtain essential address and polygon data for properties. To ensure a high degree of accuracy in our addressing system, we cross-reference Council Tax data with OS NGD address products. This methodology not only enhances the precision of our addressing but also enables us to assign Unique Property Reference Numbers (UPRNs).

NGD Themes

- Buildings / Building Features / Building
- Address / GB Address / Built Address

OS Downloads

- AddressbaseCore



Data Enrichment

To create a more robust dataset, we source several internal data sources to cross reference Holiday Home addresses. This comprehensive approach ensures that our data is both rich and reliable.

Internal Data

- Council Tax
- Local Land & Property Gazetteer
- Planning Policy – New properties
- Highways – HES local knowledge



Data Set Creation

We have developed three new datasets to display building polygons across the county.

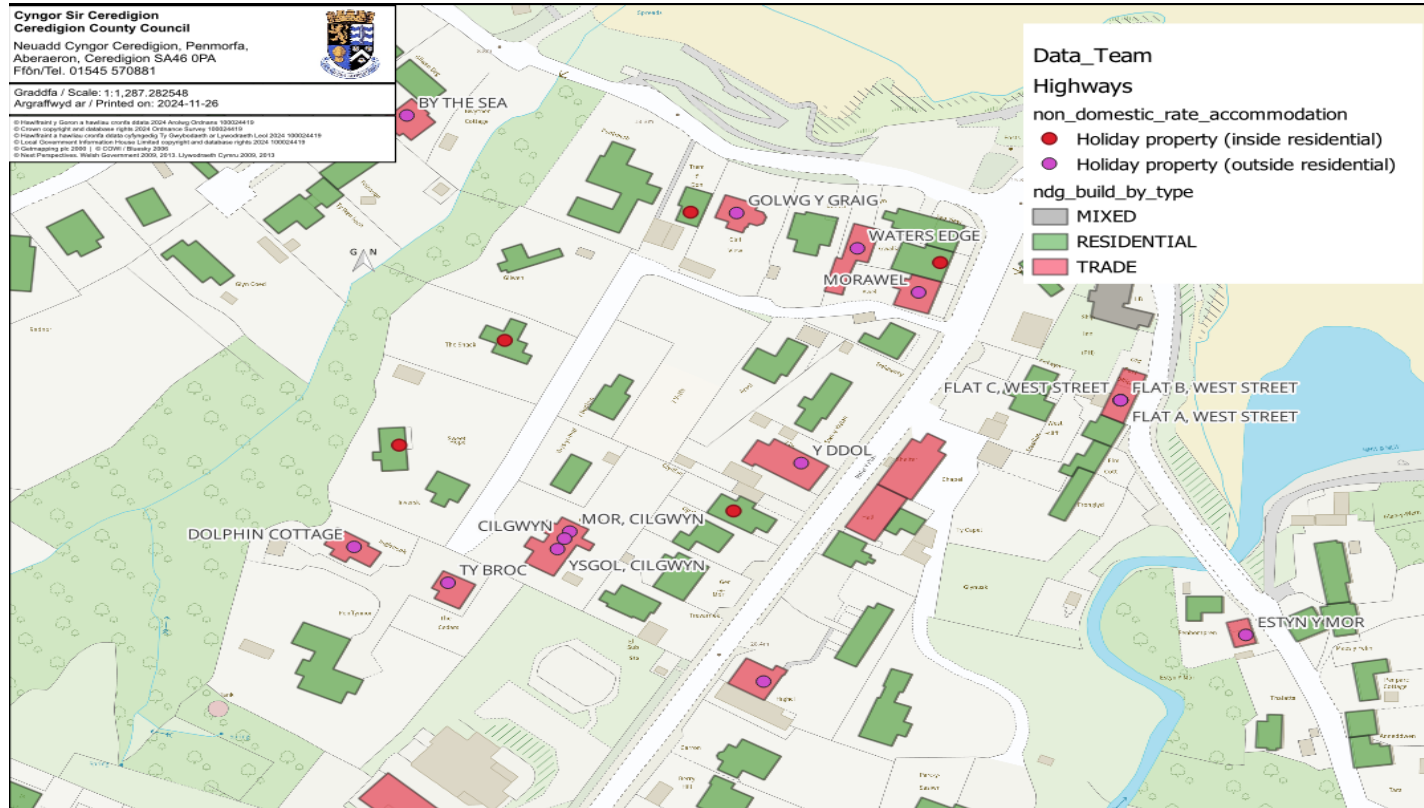
Using the OS NGD Recipe Builder via our OS Data Hub account, we categorised these datasets into building types: mixed use, residential and trade.

1. Mixed use – Filtered recipe on ‘description’ = ‘Mixed use building’
2. Residential – Filtered recipe on ‘building use’ = ‘Residential Accommodation’
3. Non-Residential (Trade) – Filtered recipe on ‘building use’ is not ‘Residential Accommodation / mixed use / unknown / unknown use / agriculture or Aquaculture / transport Road / Transport water’



Analysis and Visualisation

With the Holiday Home locations (points) and Building Type polygons established, we then overlay these datasets. This enables us to visually display Holiday Homes located within 'residential' buildings.



Frank Blades – Master Data Coordinator
Frank.Blades@ceredigion.gov.uk
Ceredigion County Council

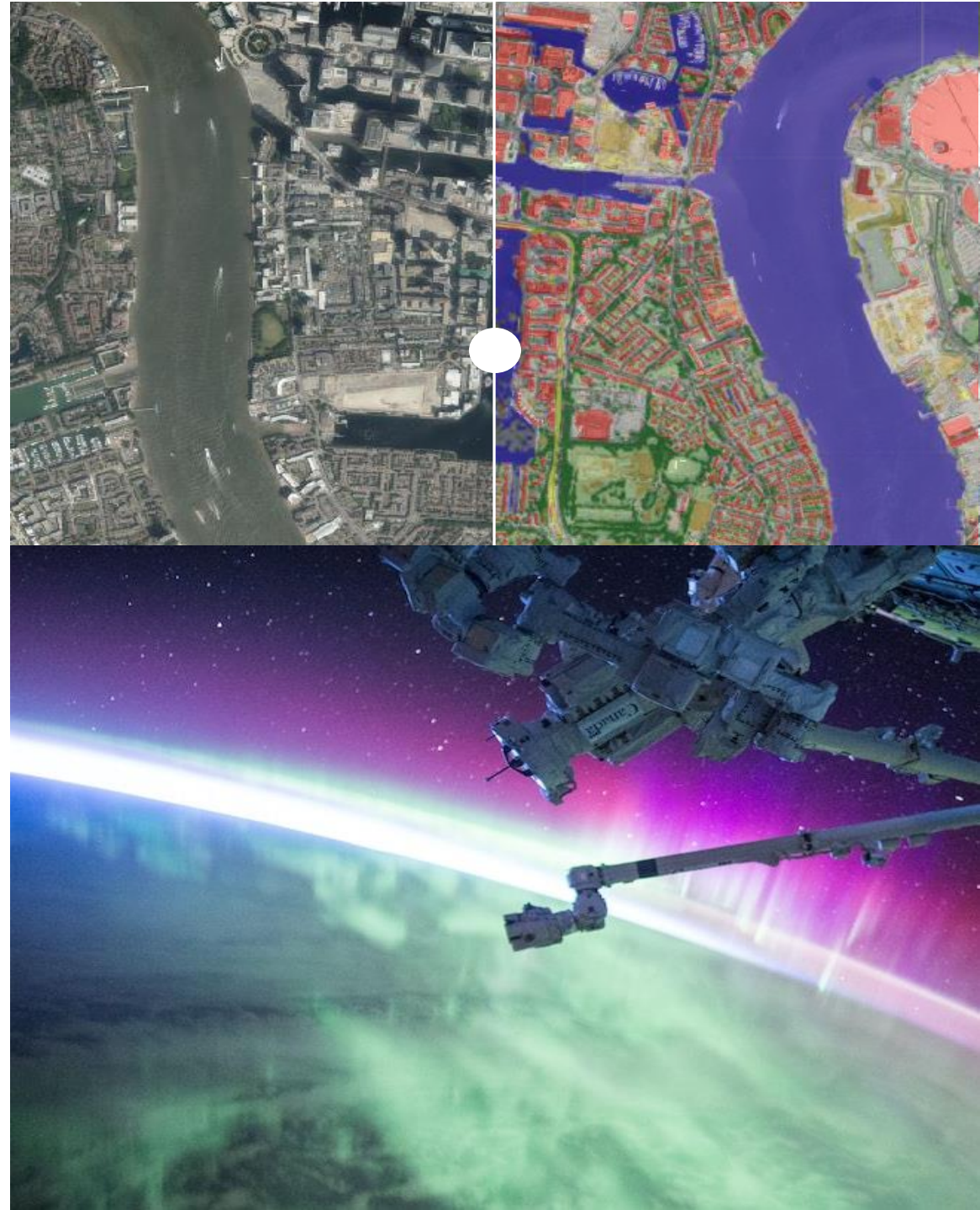


PSGA FUTURE CAPABILITIES- UPDATE

Andy Wilson, PSGA Futures Lead
Ordnance Survey

Original set of PSGA future capabilities...

- UPRN and USRN adoption support
- Higher resolution/3D, more seamless data
- Information hub partnerships
- Improved currency
- Improved coastal zone data
- Position, Navigation and Timing (PNT) resilience
- Dynamic data linkages
- Derived analytical content



User Engagement activities over last 18 months

Public Sector

Mix of structured interviews and sector-based workshops

60 public sector organisations (138 participants)

Additional feedback gathered in a sessions at 4 x PSGA Events, Autumn 2023

Partners

Mix of structured interviews and bilateral workshops

15 Partner organisations (19 participants) + workshop with OS Connect

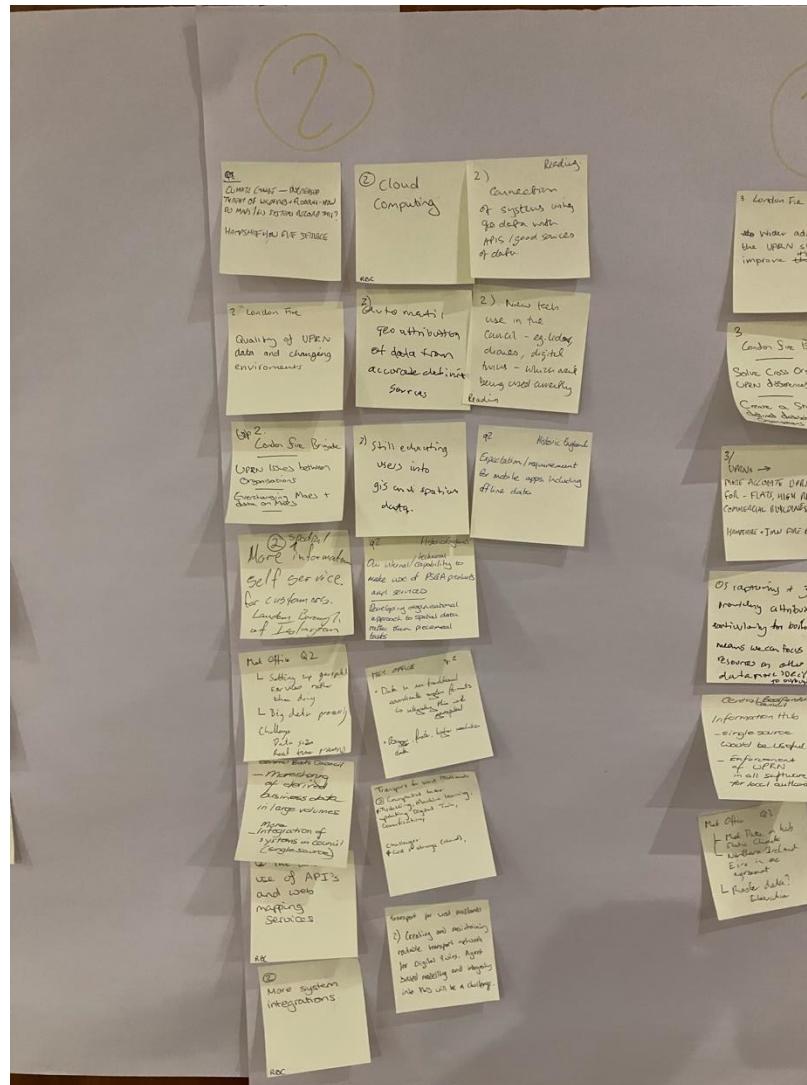
Additional feedback gathered in workshop at OS Partner Conference, March 2024

Analysis & reporting

Findings captured in structured format to support business case evidence

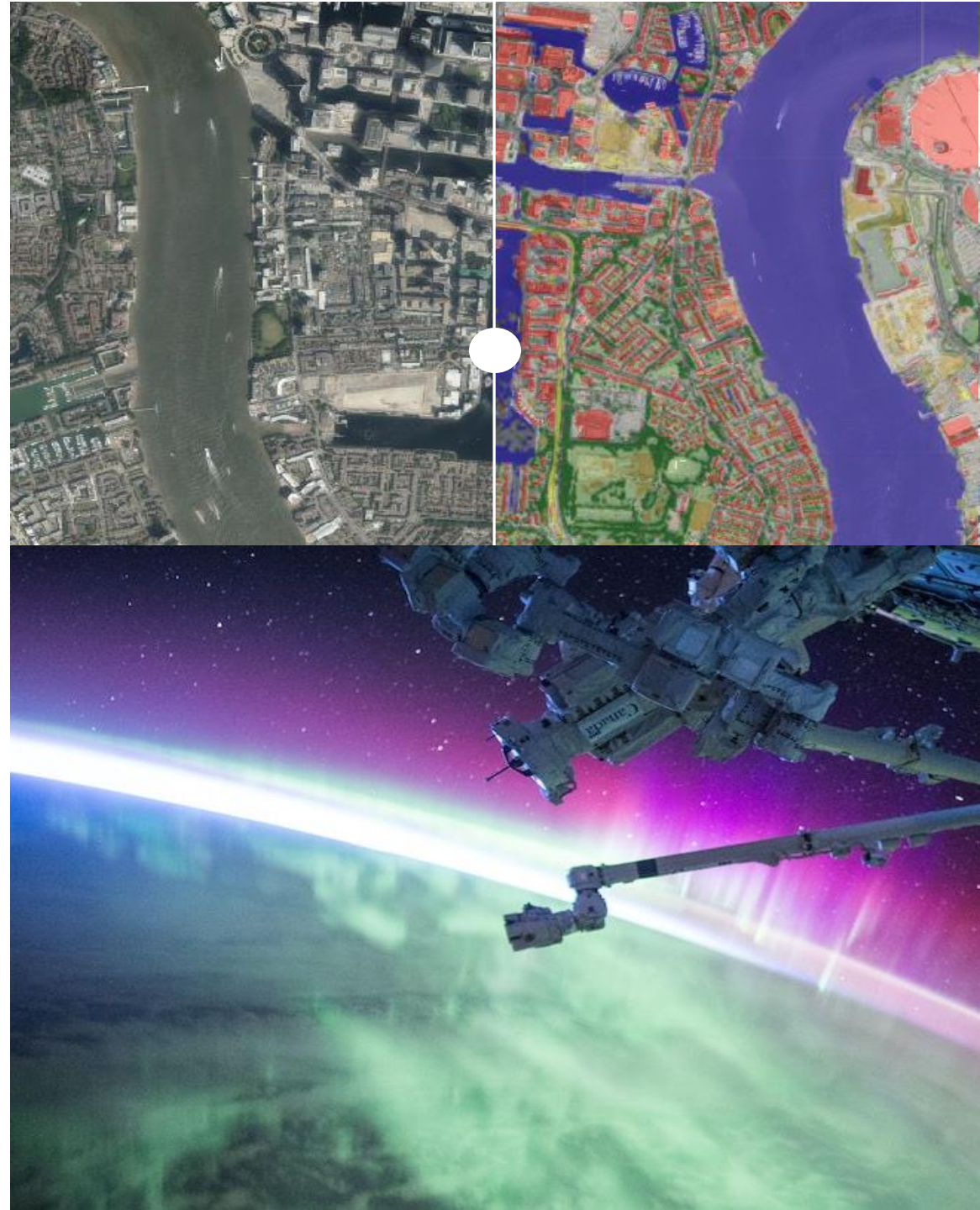
User Engagement Report shared with to GC

PSGA Events- Discovery and analysis of 750+ post its!



Priority Future capability themes

- Enabling linking and sharing
- Better data
- Data and services for safety and security



Summary of importance of requirements

Captured via interviews, workshops and PSGA events

Better data

- 3D geospatial data
- Indoor mapping
- Feature granularity and classification
- Coastal zone
- Derived analytical datasets
- Improve currency
- Improved spatial accuracy
- Change history
- Integration of 3rd party identifiers/data with OS data
- Enabling use of real time data feeds


Enabling linking and sharing

- Access to 3rd party data via OS Data Hub
- Provision of OS data via other platforms
- Reducing barriers to use of OS data
- Identifiers from OS enabling data linking (inc UPRN adoption)


Data and services for safety and security

- PNT capabilities and resilience


Key trends identified by customers as driving changing needs




+ Desire to democratise access to geospatial insights, enabling more applications and increased impact



+ Demand for insights to more complex questions, which in turn is driving needs for more richer, more complete, current, accurate geospatial data.



+ Frustration that it is difficult to aggregate and share geospatial information, both within and between organisations



+ Need to increase efficiency related to managing geospatial data, alongside challenges with capacity and skills (particularly in the public sector)



+ Opportunity for AI to enable increased benefits from geospatial data



Overview of resulting 7 specific propositions

**Data and services
for safety and
security**

Risk mitigation

**PNT
services**

Better data

Enabling evolving
geospatial applications
and policy outcomes

**Enhanced land
cover &
habitat data**

**Enhanced
transport
networks**

**Functional
Economic
Market Areas**

**Enabling linking &
sharing**

Improving efficiency
and effectiveness

**OS Data Hub for
government
geospatial datasets**

**Higher currency &
pre-construction
for properties**

**Enhanced location
information for
emergency response**

Next Steps



Engaging with the Geospatial Commission to determine priorities (subject to Government budgetary processes)

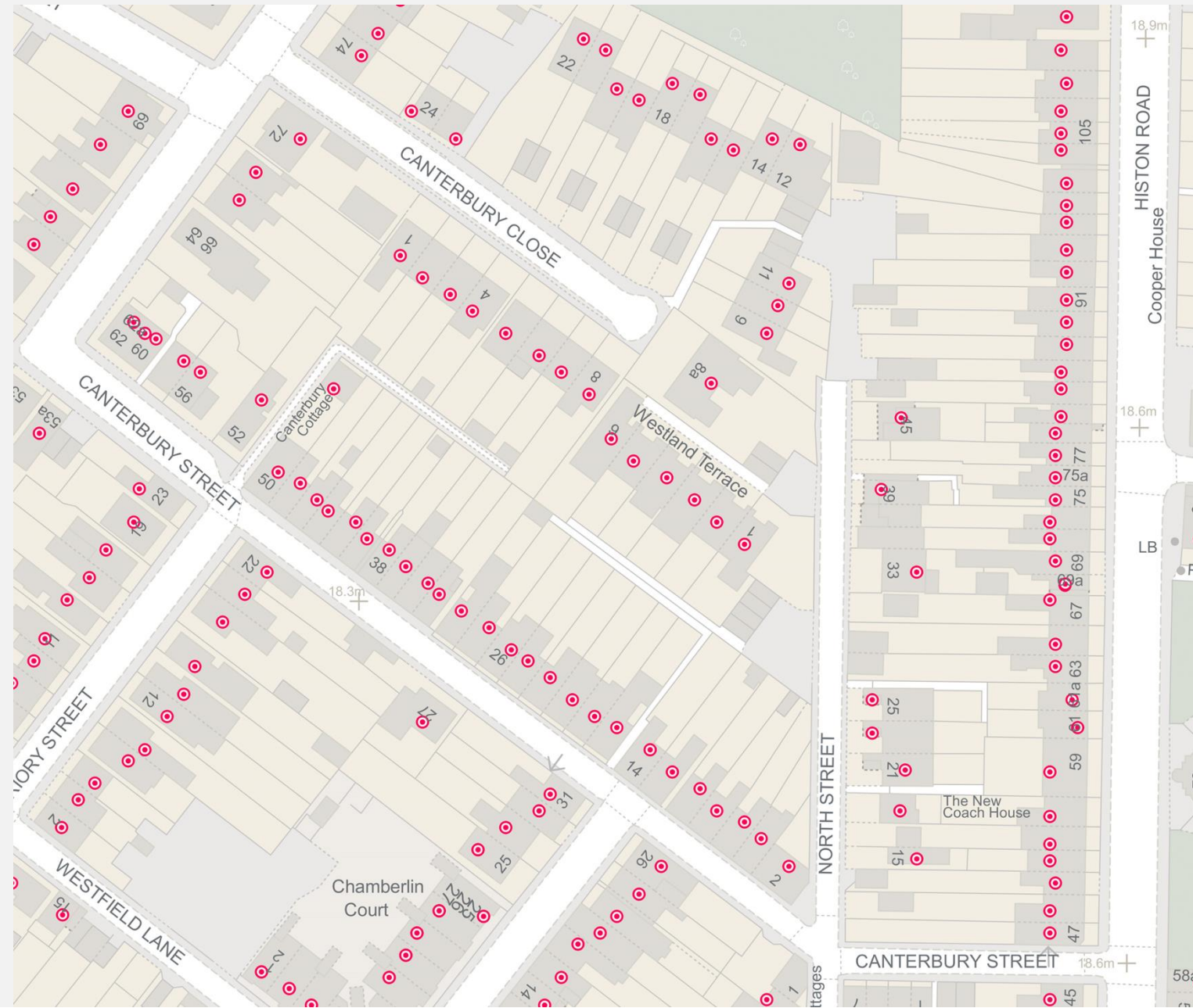


Continued proposition development and engagement with customers to ensure requirements are fit for purpose



Assessing lessons learned from new data releases

Update on Address and Street Information Directory (ASTRID) Trial



The Government Mandate

1 July 2020, the Open Standards Board, via the Government Digital Service (GDS) mandated that:

The **Unique Property Reference Number (UPRN)** and **Unique Street Reference Number (USRN)** are the public sector standard for referencing and sharing property and street information.

All new public sector systems and projects that include address and/or street data should include the identifier.



Government
Digital Service

Specific feedback on visibility and access to UPRN/USRN data from PSGA customers...

“When a gov dep is holding data at UPRN level they should be publishing it openly.”

“Visibility and awareness of data is a real challenge”

“Establish a UPRN data catalogue so you can see who has matched their data to the UPRN – would be really useful”

“Would welcome a UPRN catalogue approach (what’s been linked to UPRNs)”

“Can OS support other gov bodies to develop a standard to follow when they publish their data with UPRN – something similar to INSPIRE”

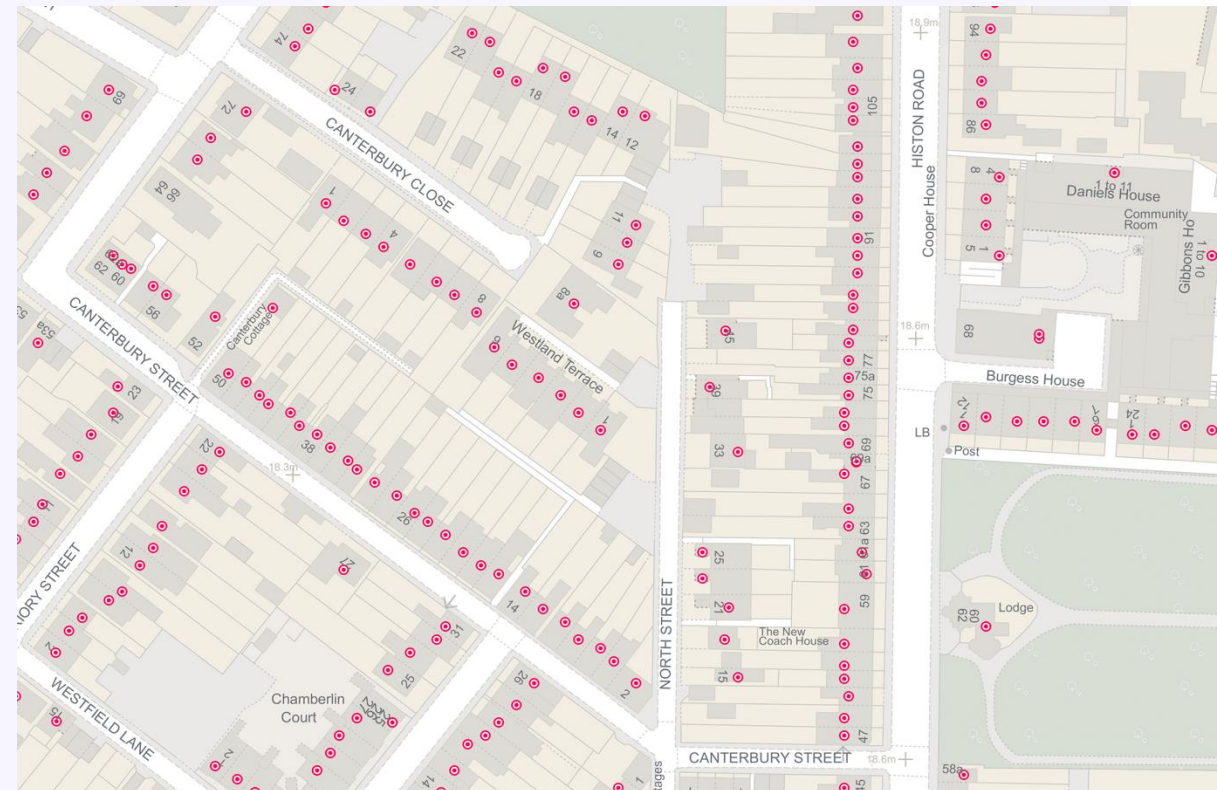
ASTRID Pilot

Pilot for the creation of an on-line searchable UPRN/USRN data directory

This first iteration was a searchable library comprising of the following data fields;

- Dataset attributed to UPRN/USRN? e.g. Energy Performance Certificates, Air Quality etc
- Dataset owner/custodian
- Details of how to obtain dataset
- Update cycle of data

Functionality to request datasets for inclusion if not present.



Domestic property information to support Council Tax Banding	No	Property List	Valuation Office Agency	9/19/2024 8:44 AM	Open register	<div>▼</div>
GP surgeries: Main Sites (Open Government Licensed version)	Yes	GP data	Welsh Government/Digital Healthcare Wales	9/19/2024 8:44 AM	Open register	<div>▼</div>
HMO (Houses in Multiple Occupation) licensing register	No	Property List	Nottingham City Council	9/19/2024 8:44 AM	Open register	<div>▼</div>
Non-domestic property data to support Business Rates valuations	No	Property List	Valuation Office Agency	9/19/2024 8:44 AM	Open register	<div>▼</div>
Risk of Flooding from Rivers and Sea - Properties at Risk	Yes	Flood risk	Environment Agency	9/19/2024 8:44 AM	Open register	<div>▼</div>
Sample BCP LLPG	No	Local Land and Property Gazetteer sample	BCP Council	9/19/2024 8:44 AM	Open register	<div>▼</div>
This is a test	Built	Geopackage	No	Property List	test	9/19/2024 Open register <div>▼</div>

Bulk data uploads in CSV formatted files, please use the template for column headings and table structure



File Name *

Uploaded By

Upload Date



Attach a file

Choose File No file chosen

Submit

Benefits of ASTRID



Provides a single place for PSGA members and the wider market to see what data is already attributed to the UPRN & USRN



Use cases and value can also be captured as part of the subsequent versions of the directory



Will help identify gaps in attribution across government for targeted adoption focus

ASTRID- Phase 2 Next Steps and timeline



If you are interested in participating in the next phase of the trial, please contact tianna.barefoot@os.uk

THANK YOU

Andy.wilson@os.uk



Geospatial
Commission



Ordnance
Survey

THANK YOU

