SPATIAL REFERENCE FRAMEWORKS POWER MODERN COUNTRIES

Carsten Rönsdorf
Head of Advisory Services
OS International

Carsten.Roensdorf@osi.os.uk

Ordnance Survey

We have been mapping Great Britain since 1791

Our data underpins £100 billion of Great Britain's economy

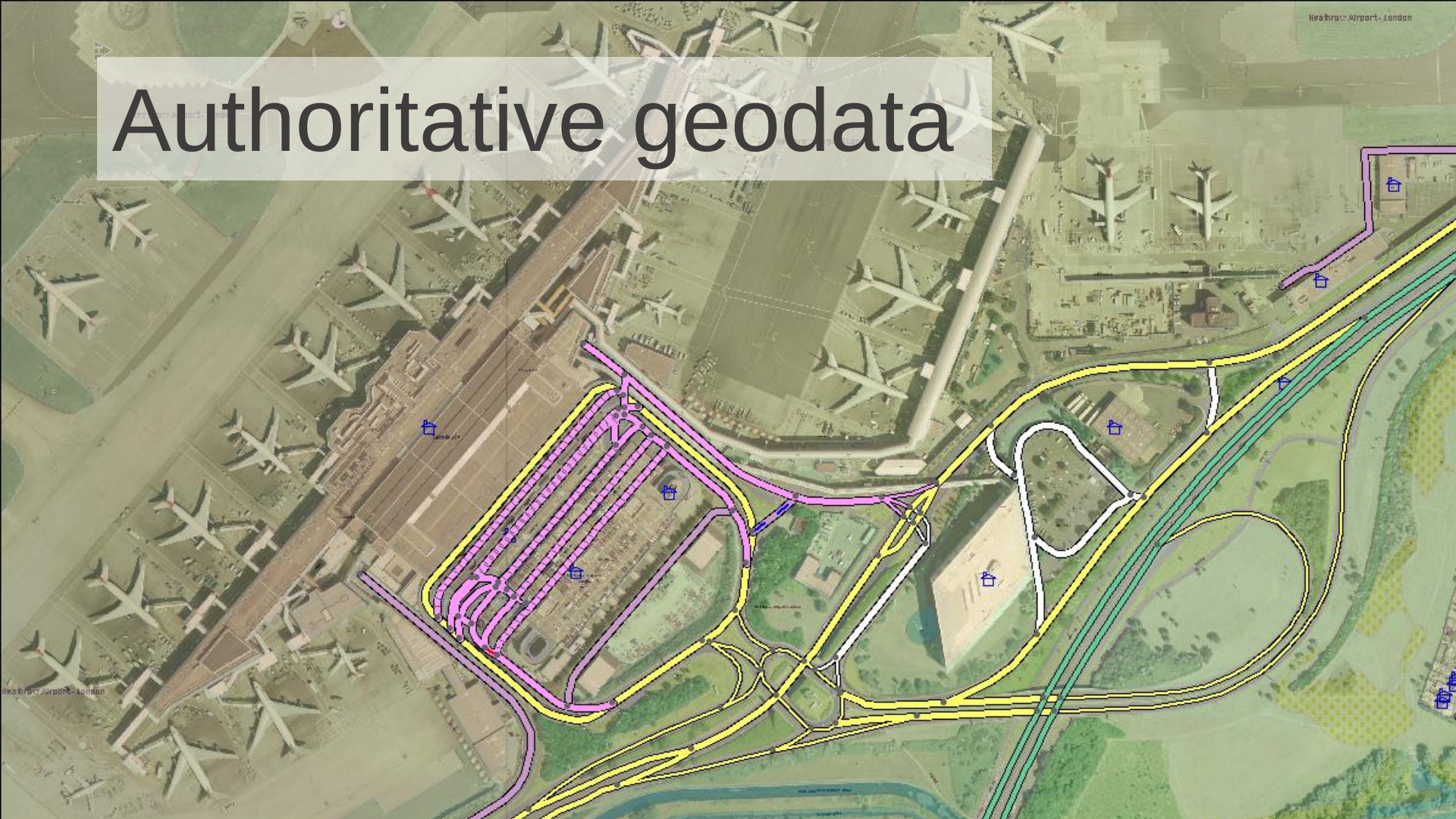
We help Great Britain generate £400 million in new revenues every year

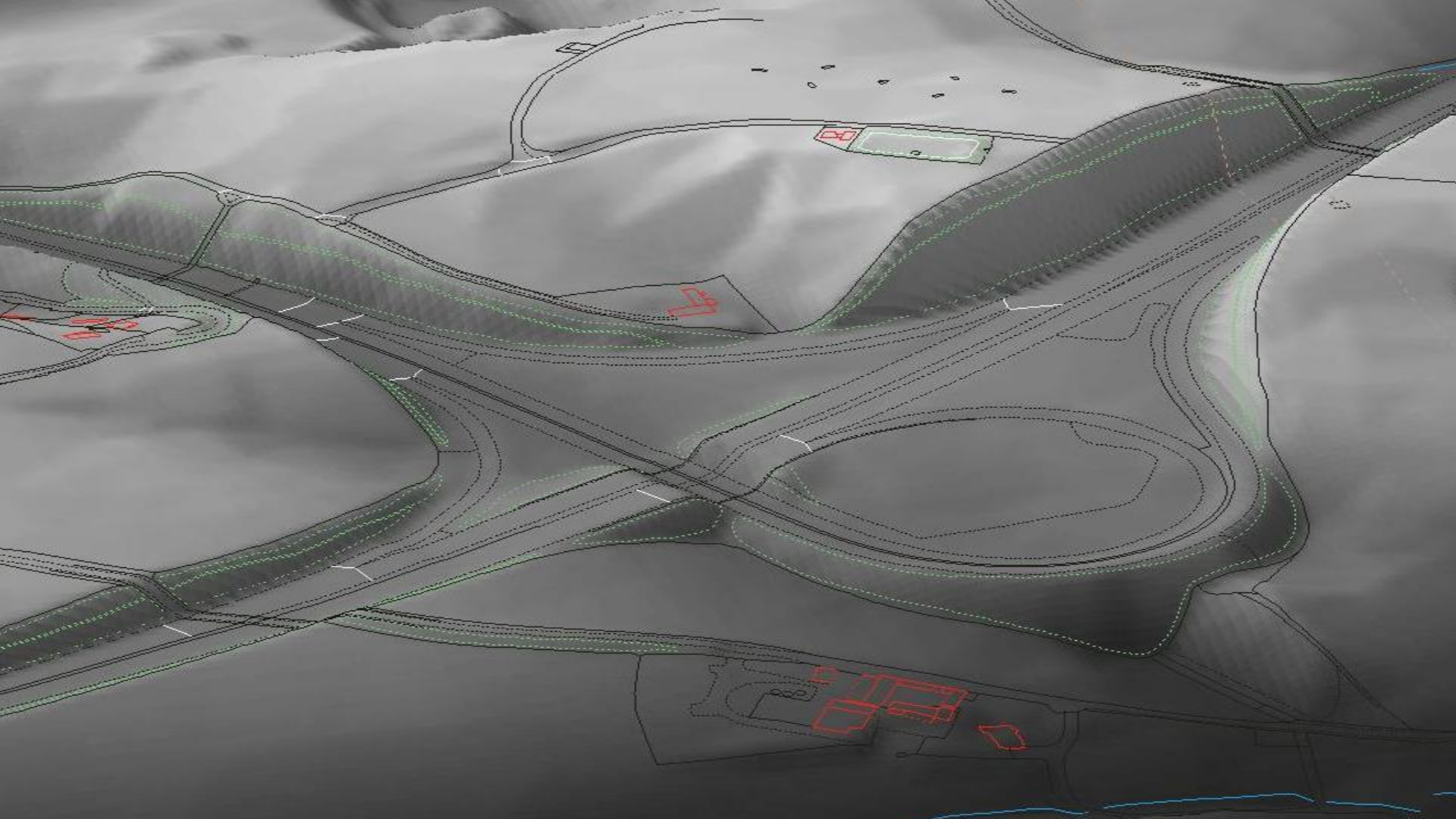
10,000 mapping updates every day

Over 3,500 Public Sector organisations using our data

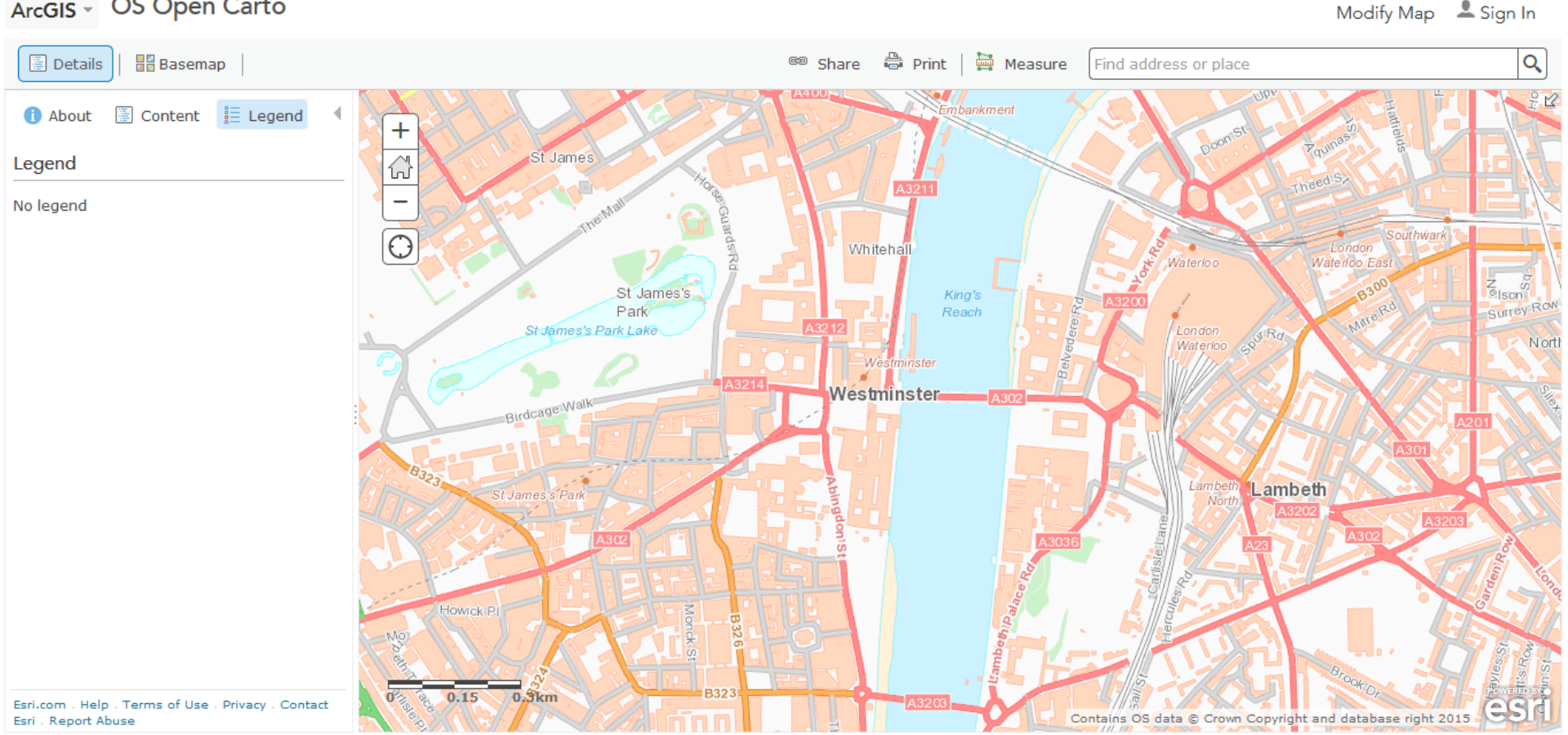
Who we are

Authoritative geodata



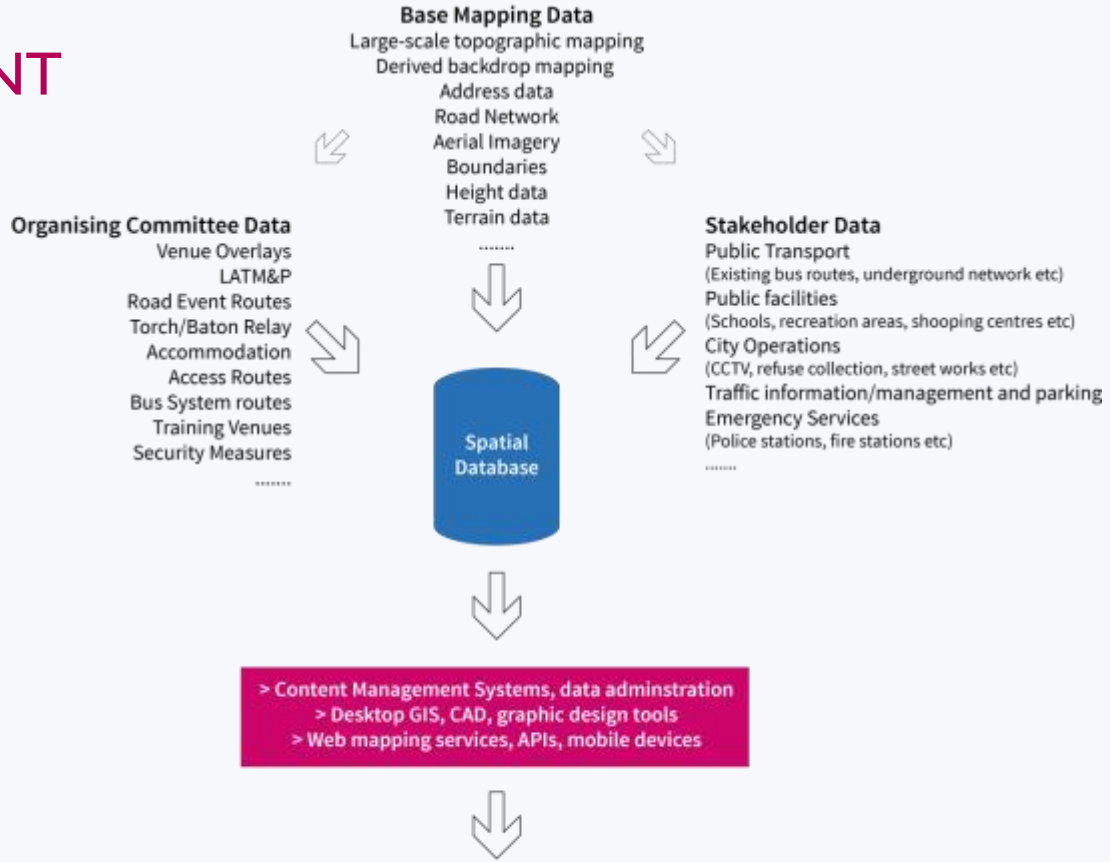


ArcGIS
OS Open Rasters
Modify Map
Sign In
Details
Basemap
Share
Print
Measure
Find address or place
About
Content
Legend
Legend
No legend
Esri.com . Help . Terms of Use . Privacy . Contact Esri . Report Abuse
Workington
Whitehaven
Cockermouth
Keswick
Bassenthwaite
Troutbeck
Penrith
Langwathby
North Pennines
Bishop Auc
Appleby-in-Westmorland
Brough
Barnard Castle
THE PENNINES
Cleator Moor
St Bees Head
St Bees
Egremont
LAKE DISTRICT
Patterdale
Ullswater
Wast Water
Scafell Pike 964m
Ambleside
Kirkby Stephen
Windermere
Coniston
Ravenglass
Broughton in Furness
Coniston Water
Windermere
Kendal
Sedbergh
Leyburn
Bainbridge
YORKSHIRE DALES
Millom
Ulverston
Grange-over-Sands
Kirkby Lonsdale
Dalton-in-Furness
Barrow-in-Furness
Carnforth
Morecambe Bay
Ingleton
Walney
Morecambe
0 5 10km
Contains OS data © Crown Copyright and database right 2015
esri


ArcGIS
OS Open Carto
Modify Map
Sign In
Details
Basemap
Share
Print
Measure
Find address or place
About
Content
Legend
Legend
No legend
Esri.com . Help . Terms of Use . Privacy . Contact Esri . Report Abuse
St James
The Mall
Horse Guards Rd
St James's Park
St James's Park Lake
Whitehall
Embankment
A3211
King's Reach
A3212
Westminster
A3214
Birdcage Walk
B323
A302
Howick Pl
Monck St
B326
B324
Abingdon St
Belvedere Rd
York Rd
Waterloo
London Waterloo
A3200
Spur Rd
Mitre Rd
B300
London Waterloo East
Southwark
Lambeth North
Lambeth
A3202
A3203
A23
A3036
Lambeth Palace Rd
Carlisle Lane
Hercules Rd
A201
A301
Garden Row
Brook Dr
Doon St
Aquinas St
Hatfields
Theed St
Nelson Sq
Surrey Row
0
0.15
0.3km
Contains OS data © Crown Copyright and database right 2015
esri

nationalgrid

DATA MANAGEMENT



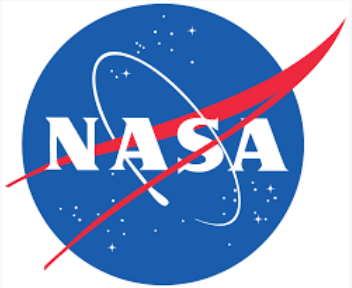
Ordnance Survey

LONDON 2012: WORKING COLLABORATIVELY ACROSS GOVERNMENT: OVER 30 GOVERNMENT STAKEHOLDERS

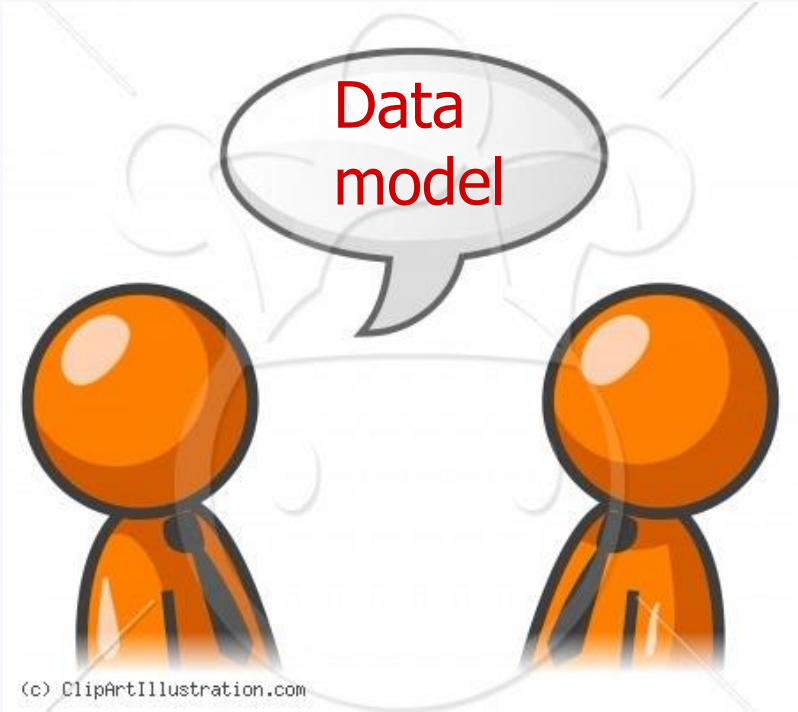
INTEROPERABILITY NEEDS STANDARDS

5th strategic member of OGC

Only strategic member outside USA

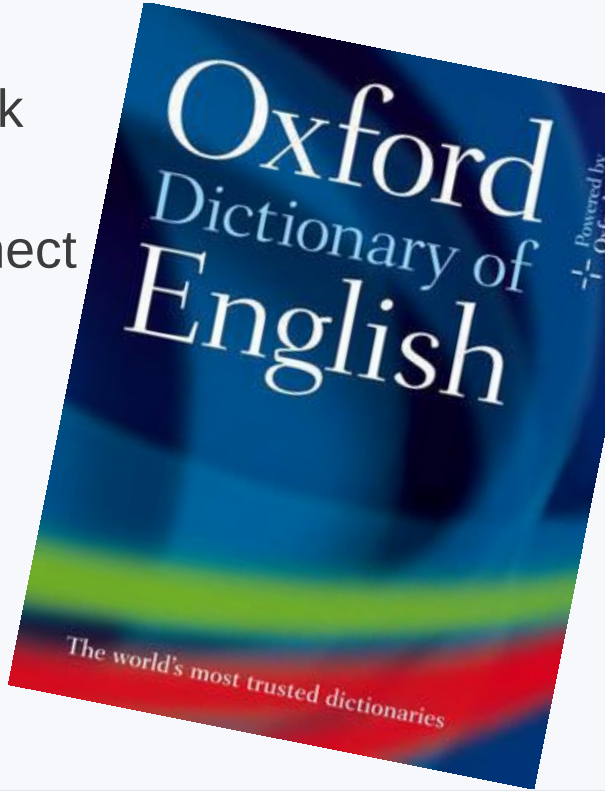


OPEN STANDARDS BASED DATA MODEL



Language to speak about location

To be able to connect and collaborate



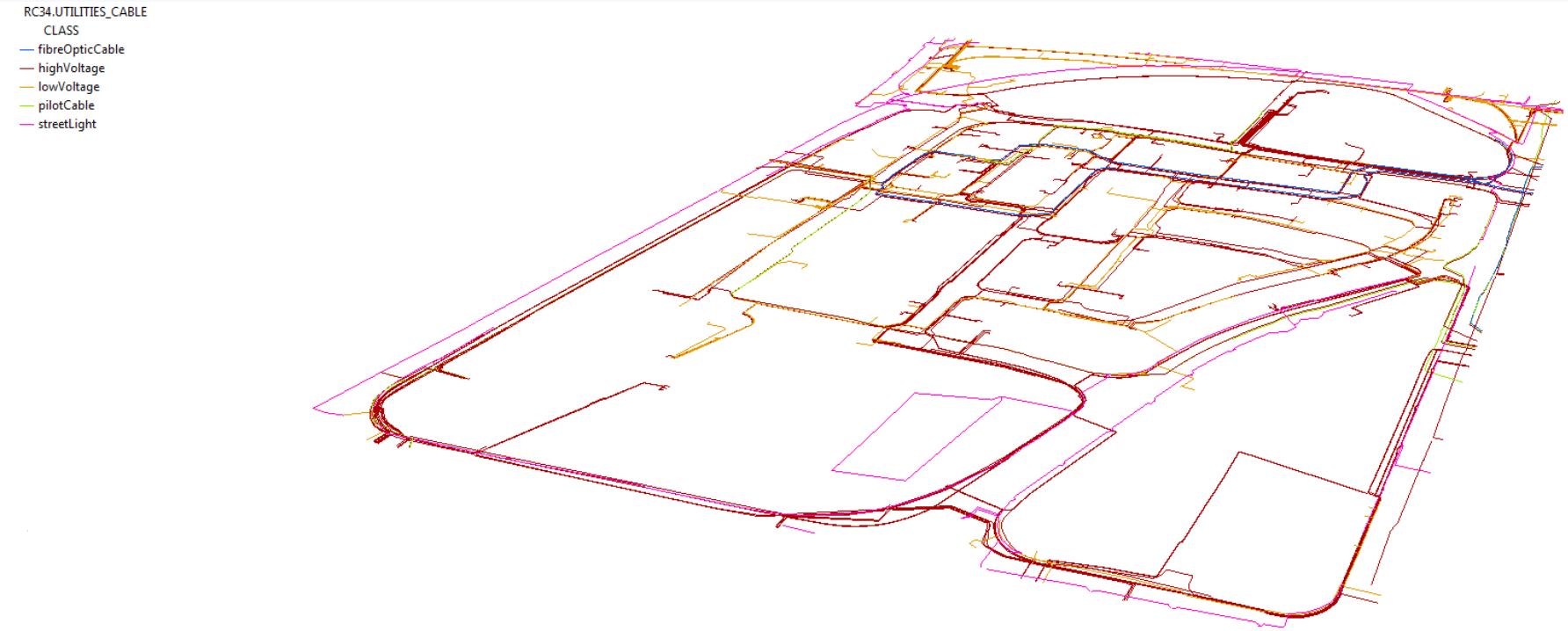
OGC®
Making location count.

CITYGML—LEVEL OF DETAIL

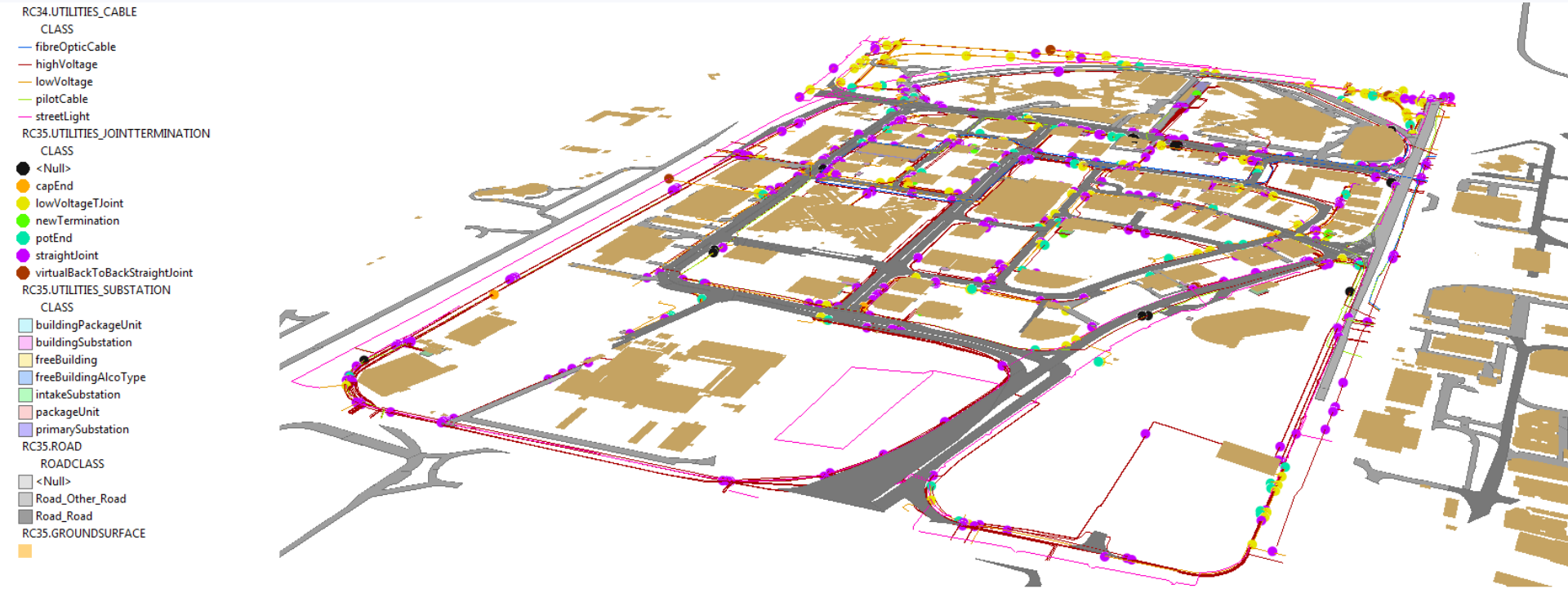
CityGML

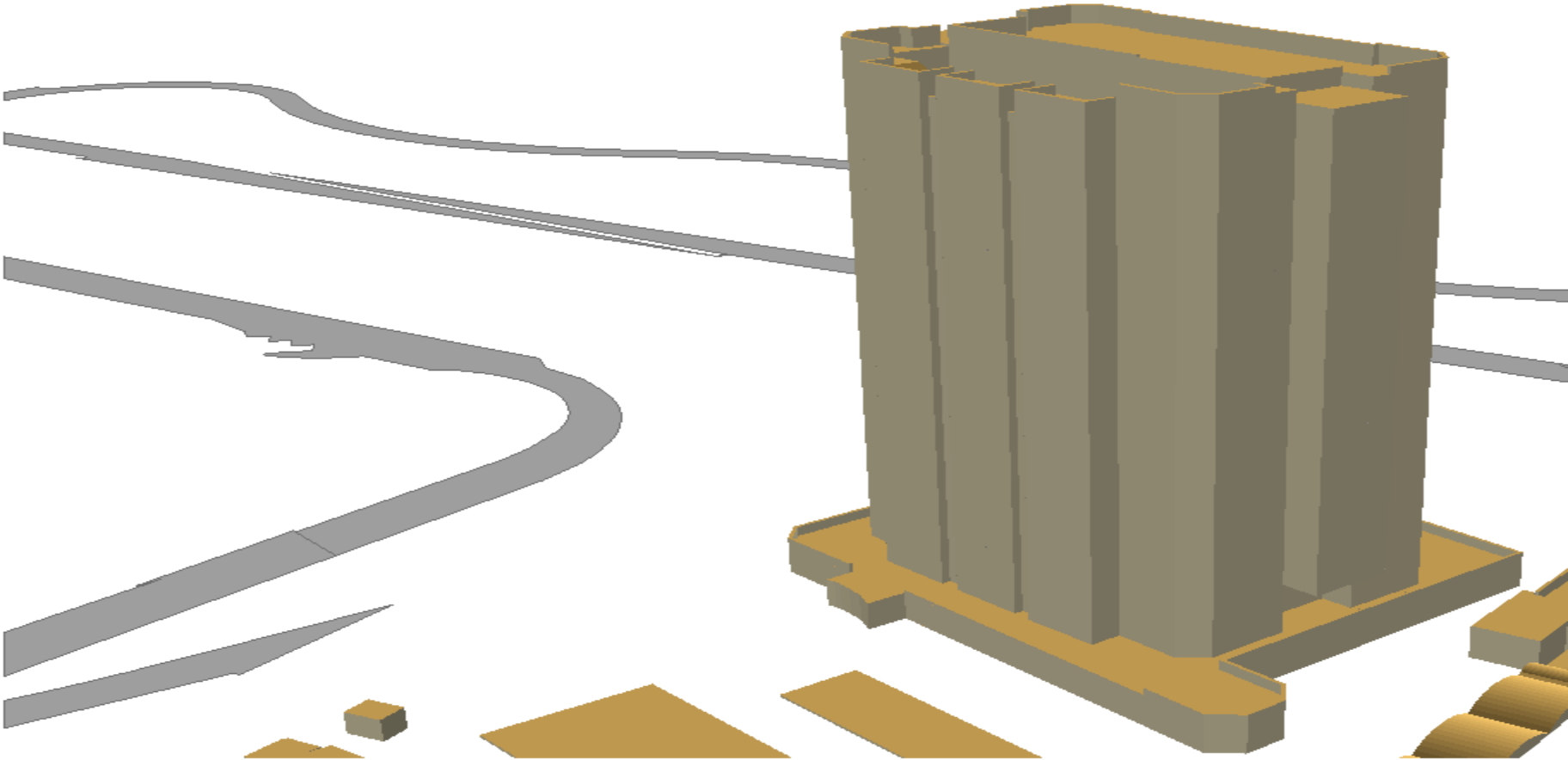
OGC®
Making location count.

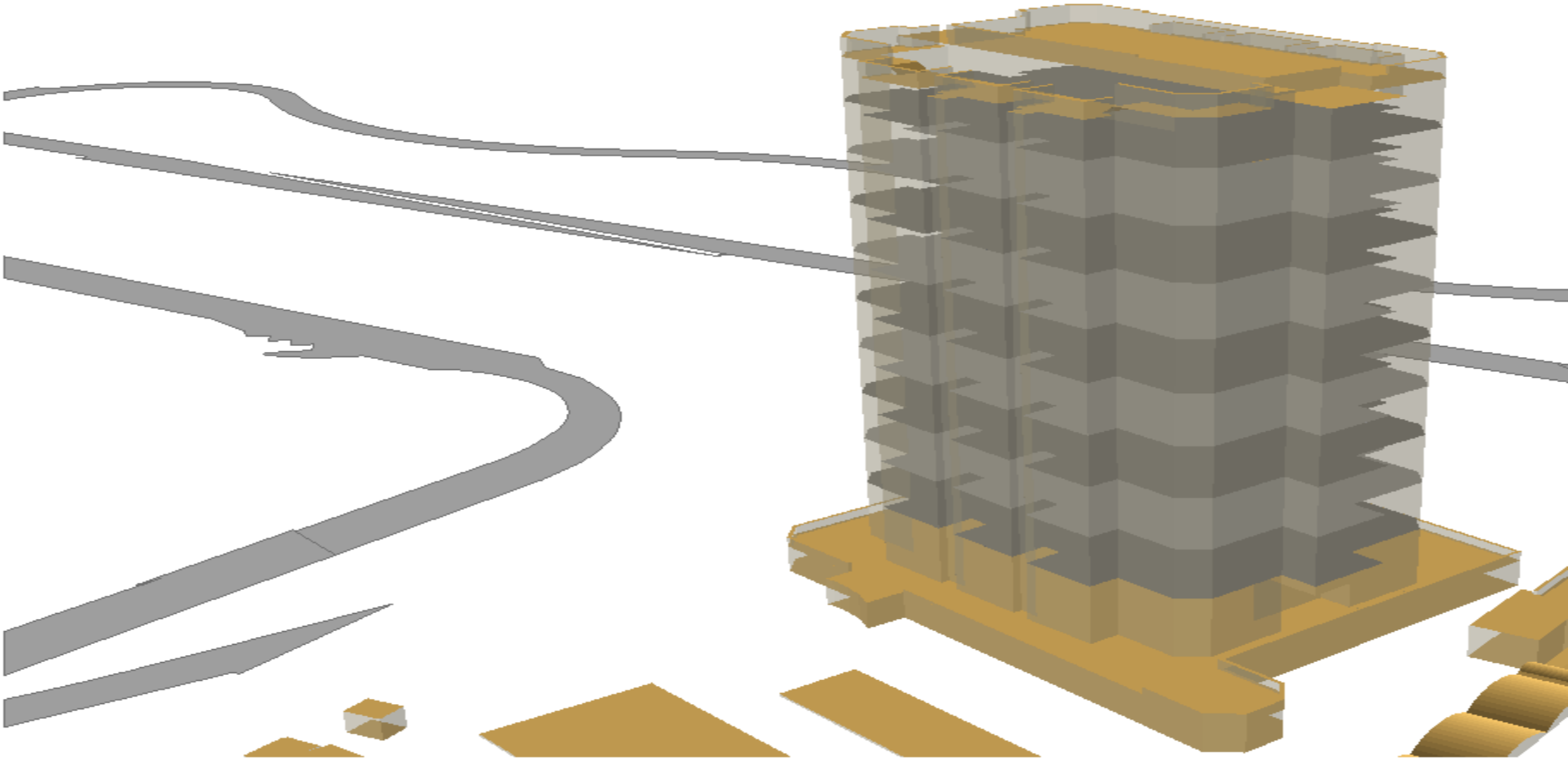
2D DATA

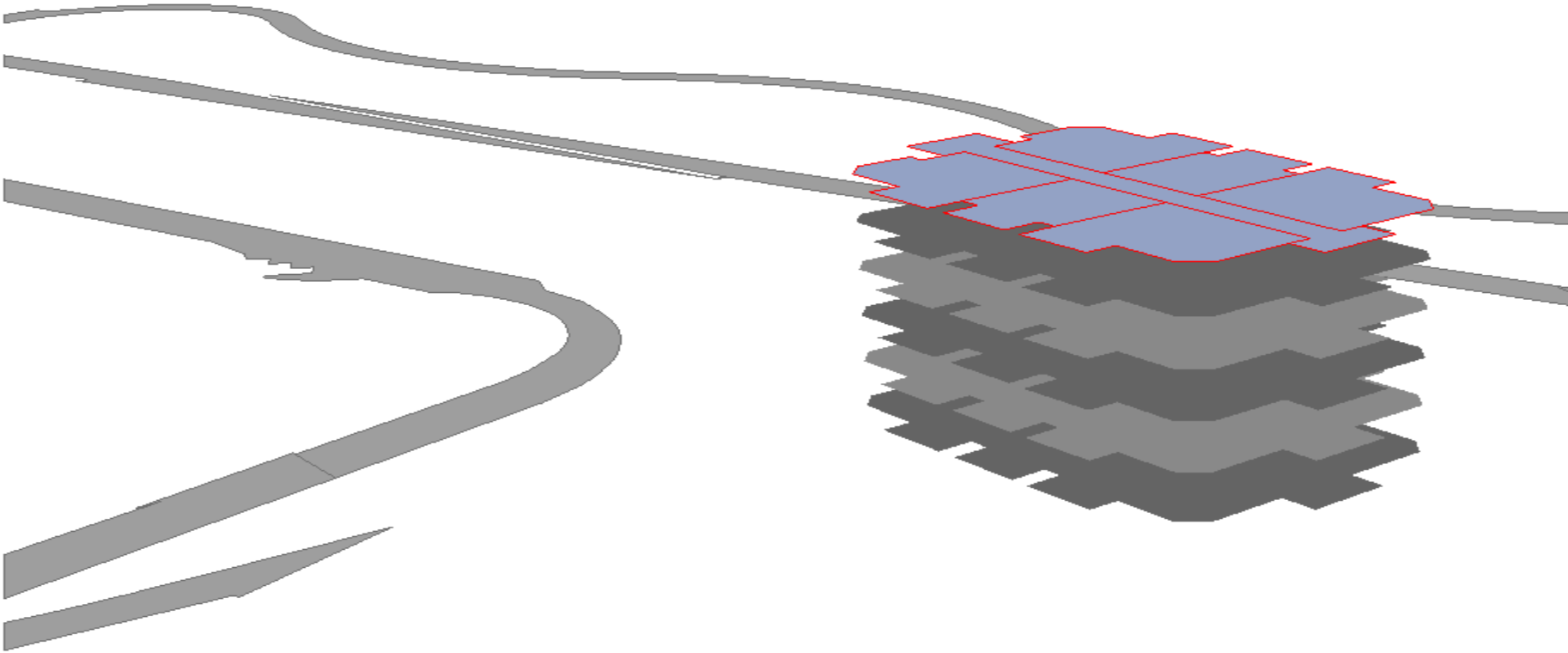

RC34.UTILITIES_CABLE
CLASS
fibreOpticCable
highVoltage
lowVoltage
pilotCable
streetLight

DATA SHARING

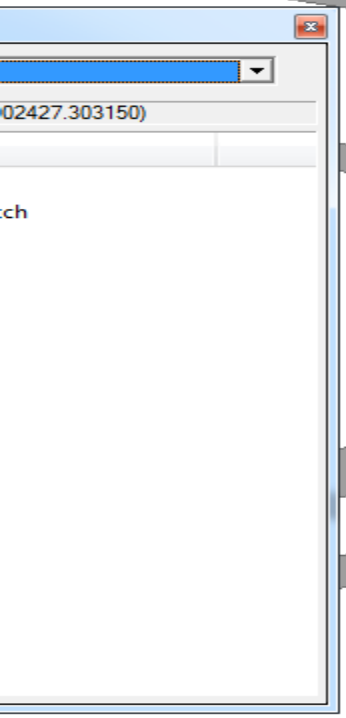


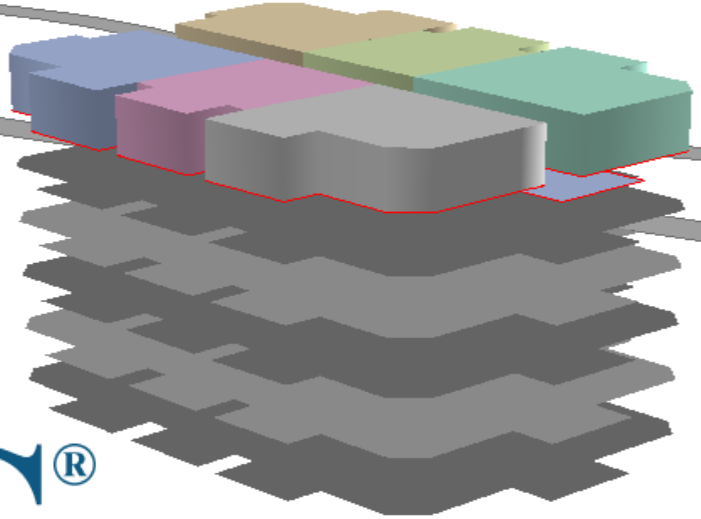






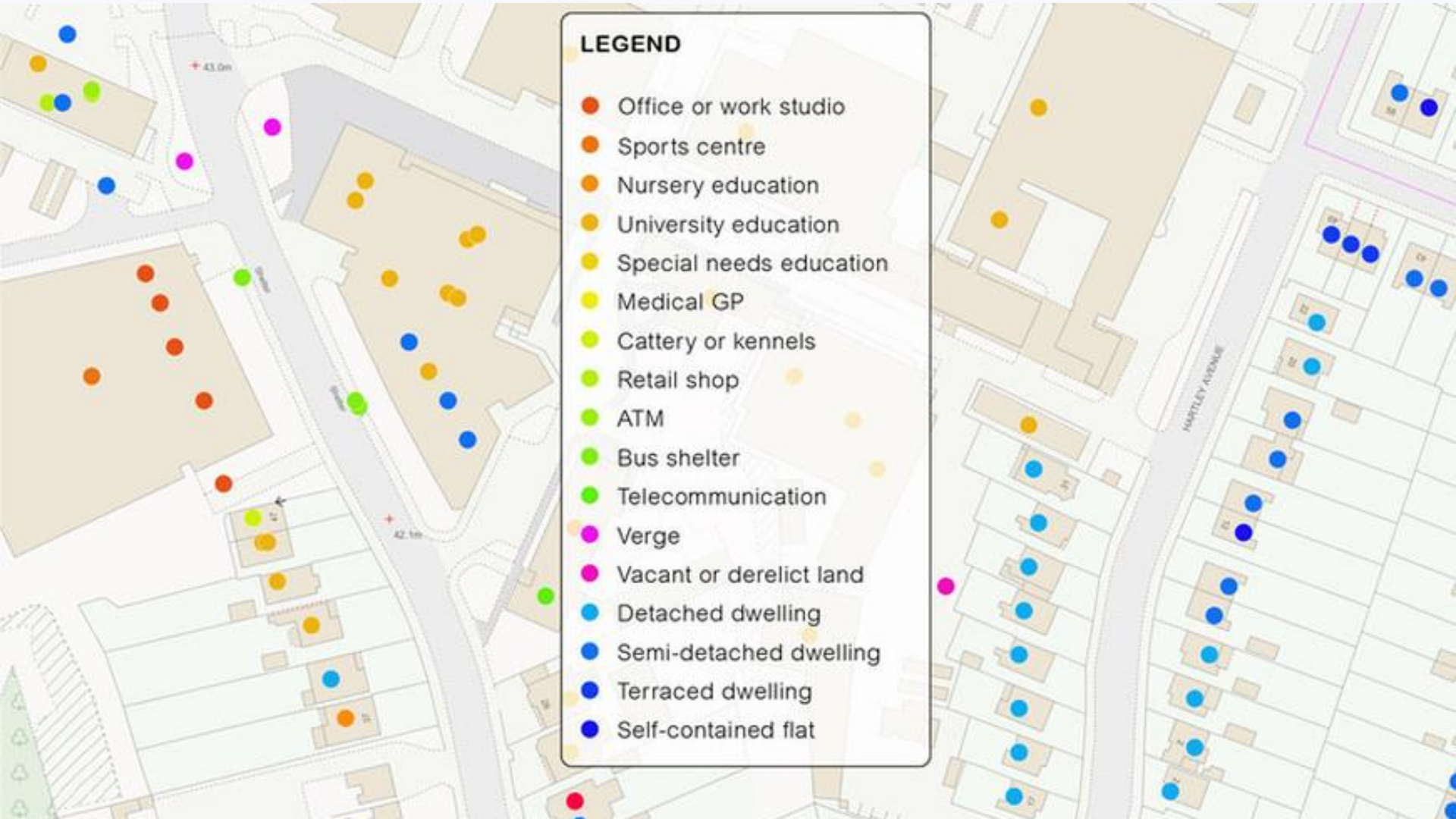
OGC smart cities pilot





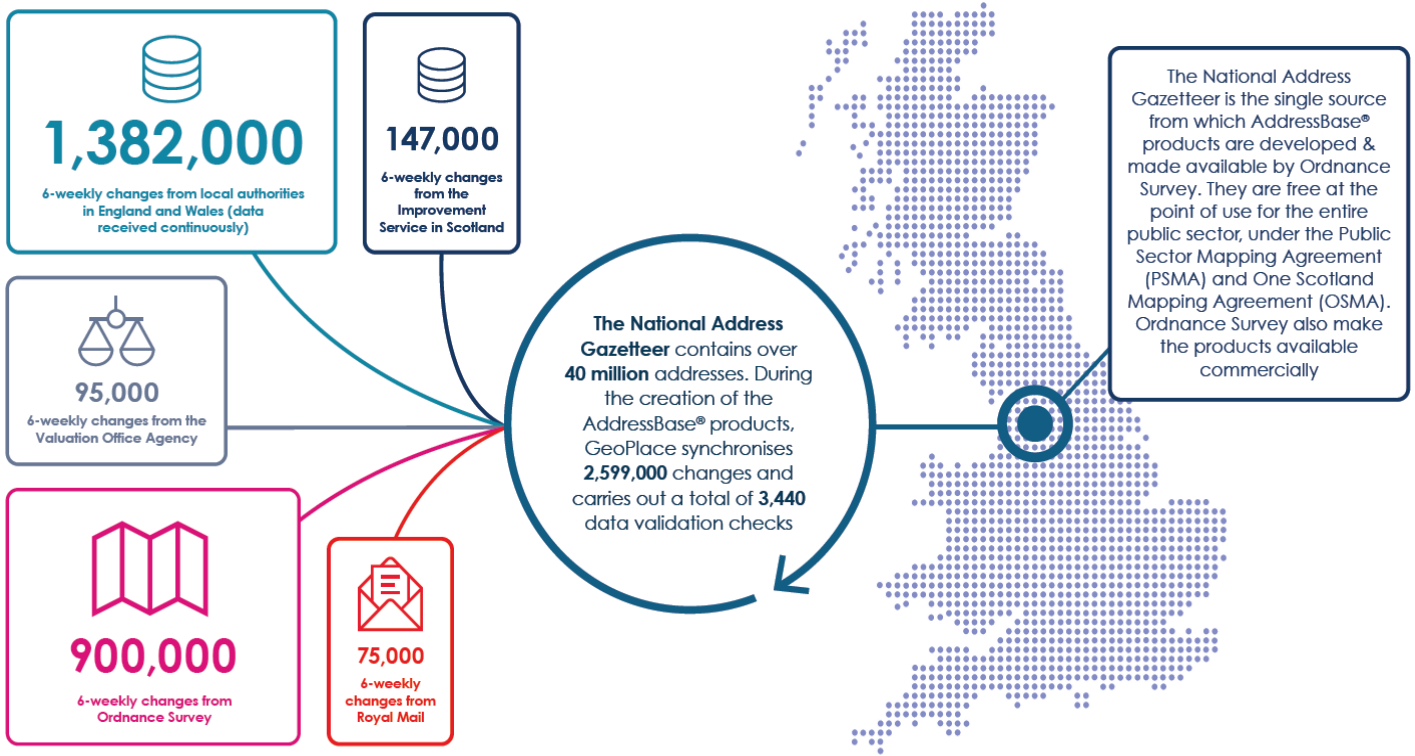
OGC®

Making location count.


LEGEND
Office or work studio
Sports centre
Nursery education
University education
Special needs education
Medical GP
Cattery or kennels
Retail shop
ATM
Bus shelter
Telecommunication
Verge
Vacant or derelict land
Detached dwelling
Semi-detached dwelling
Terraced dwelling
Self-contained flat

Data sources and change intelligence for the National Address Gazetteer infastructure

GeoPlace: managing the definitive index of addresses and streets for Great Britain



Ordnance Survey

GeoPlace is a public sector® limited liability partnership
between the Local Government Association (LGA) and Ordnance Survey

Ordnance Survey www.ordnancesurvey.co.uk

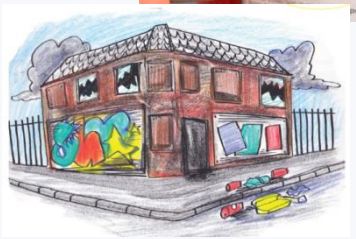
Local Government Association

geoplace®

UPR

Ordnance Survey

HOW LOCAL AUTHORITIES USE THE UPRN



SERVICE DELIVERY

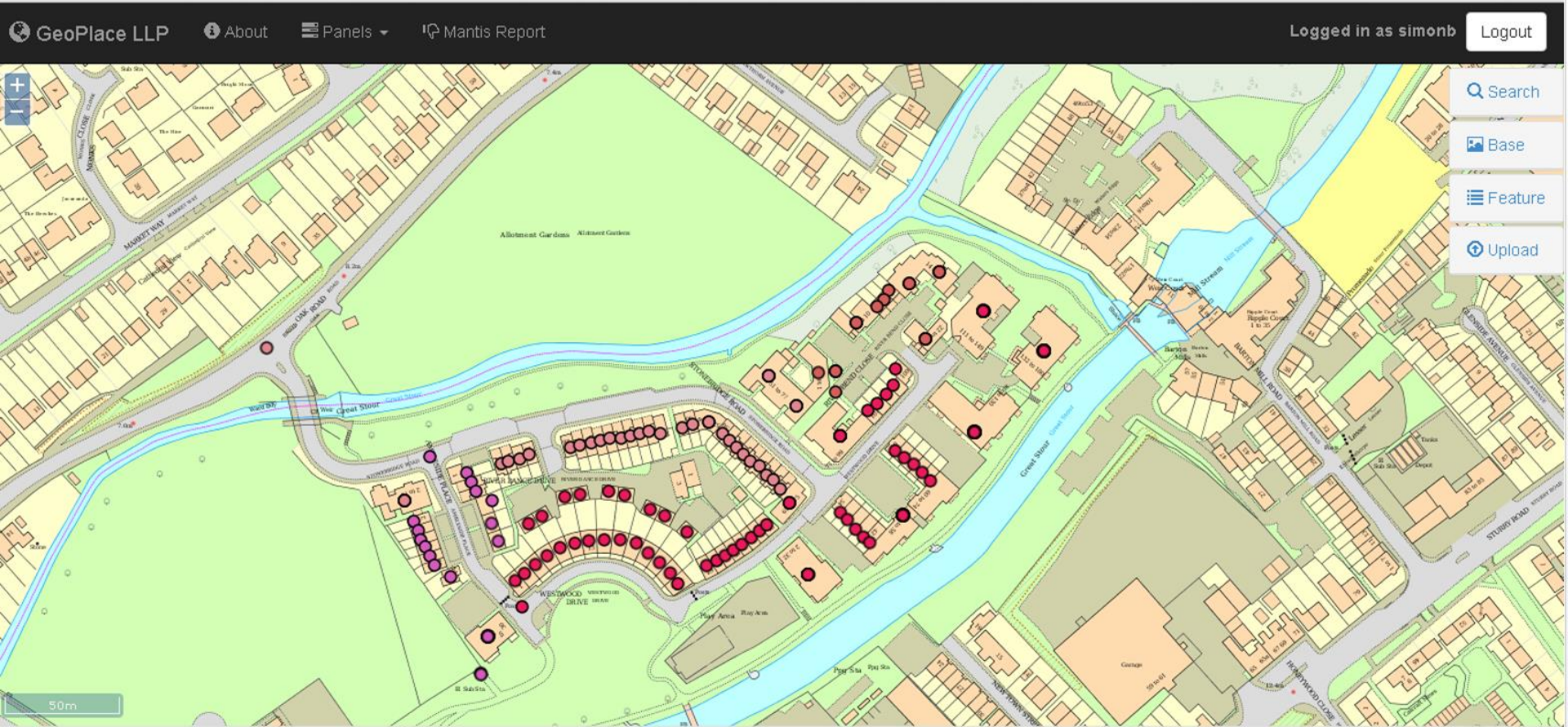
Public Sector:

- Blue light services
- Environmental health
- Planning
- Voting
- Taxation
- Conveyancing

Private Sector:

- E-commerce fulfilment
- Insurance & banking
- Utility connections
- Asset management

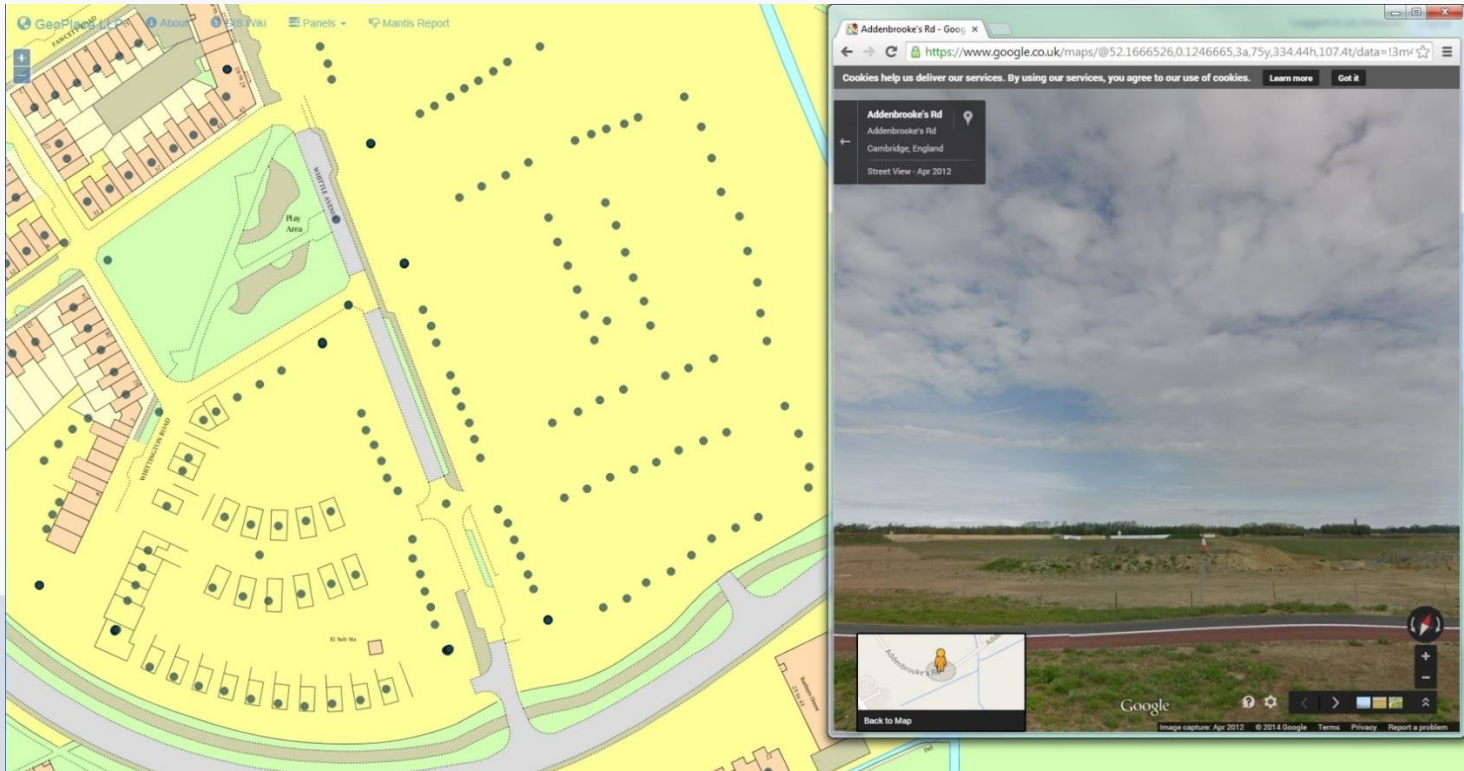
DATA ANALYSIS – SIMPLE VISUALISATION (COUNCIL TAX BAND)



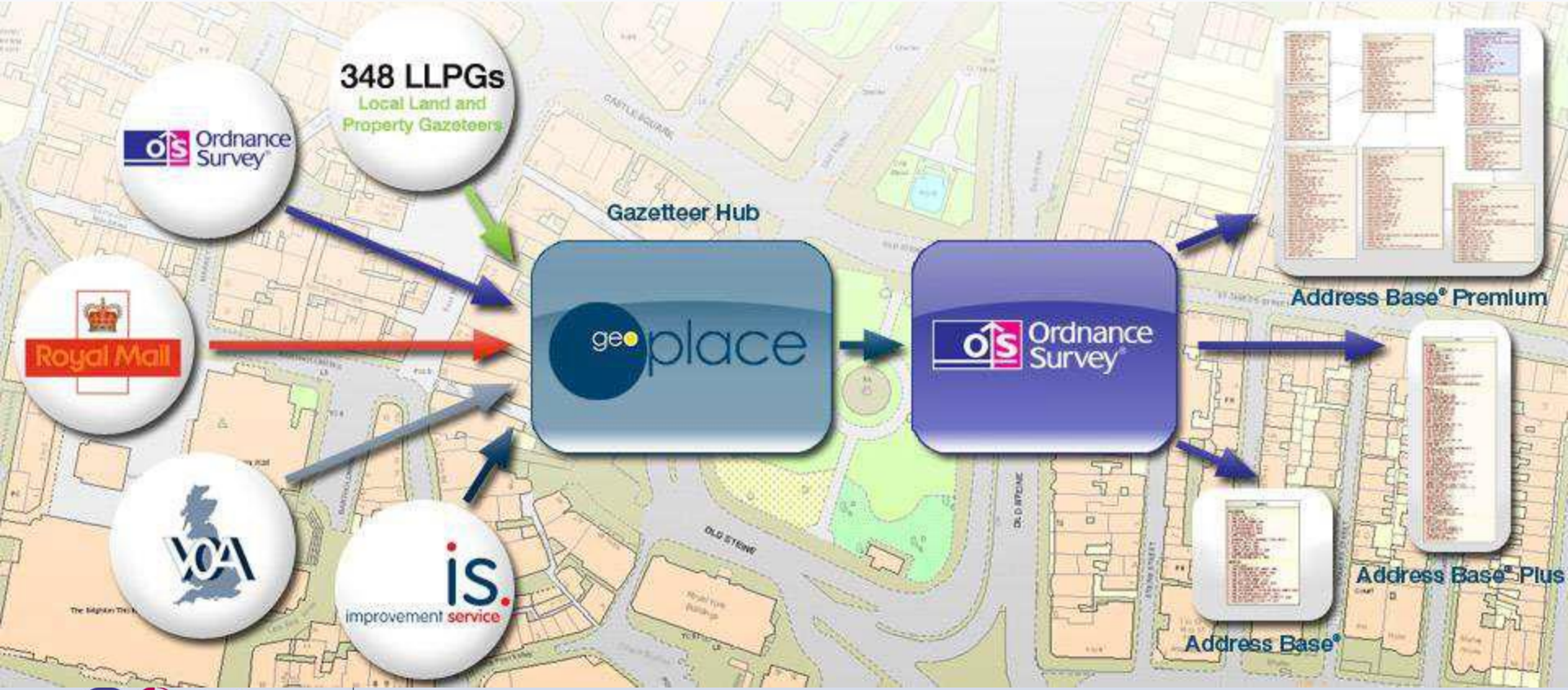
SYNCHRONISE DATA FROM DIFFERENT PROVIDERS

51, SOUTHWELL DRIVE, CAMBRIDGE, CB2 9AS (LS:6, LANG:ENG, KEY:0505L999994373, CF:N, LUD:2013-12-06)

PARCEL 18 PLOT 272, CLAY FARM DEVELOPMENT SITE, LONG ROAD, CAMBRIDGE, CB2 9AS (LS:8, LANG:ENG, KEY
CF:N, LUD:2013-12-06)



Ordnance Survey


348 LLPGs
Local Land and Property Gazeteers
Ordnance Survey
Royal Mail
VOA
improvement service
Gazetteer Hub
geoplace
Ordnance Survey
Address Base® Premium
Address Base® Plus
Address Base®

Savings obtained	Type of improvement	Source
£150,000pa	Using NLPG for back-office linkage and corporate IT applications.	Plymouth City Council
£250,000	Using UPRN to verify address data on green waste collection service	Shepway District Council
£155,000pa	Using NLPG matched to the VOA list to collect more property tax	Huntingdonshire District Council
£20,000pa	Using the NLPG to optimise refuse collection routes (plus subsequently £110,000pa saving of one vehicle)	Teignbridge Borough Council
£350,000pa	Using the NLPG and NSG to rationalise school transport over 4,500kms of roads	East Riding of Yorkshire Council
£250,000pa	Improved public information handling and notifications using elements of the NLPG	Blackpool Council

Savings made by using Ordnance Survey PSMA data…

East Riding of Yorkshire saves **£1,000,000** on school transport.

Harrow Council's waste project saves **£3,200,000** over 10 years.

Automated bus pass allocation project saves Liverpool **£50,000.**

Gloucestershire County Council saves **£2,000,000** on tendered bus services.

The Suffolk Waste Partnership saves St. Edmundsbury District Council **£180,000.**

North Somerset District Council saves **£690,000** on school transport.

Lee Valley Regional Park Authority saves **£100,000** on grounds maintenance.

From 2002, London Borough of Sutton saves **£30,000** yearly on SEN transport.

HOW WE CAN HELP

1. Strategy and policy
2. Technical capacity and capability
3. Organisational efficiency
4. NMCA/CMA lifecycle development

Ordnance Survey

Geospatial enables better solutions for

Opportunities for geospatial data and technology

Sharing data,
Having high quality geospatial data,
Including a maintained Address database

Can power a modern nation

and geo-enable

Oman

Carsten.Roensdorf@osi.os.uk