

The UPRN – Your golden thread



What is the UPRN?

The Unique Property Reference Number (UPRN) is the unique identifier for every addressable location in Great Britain. It is created by local authorities who have the statutory authority to name and number every street and property and Ordnance Survey who identify objects on the landscape which may otherwise not attract an address. It provides a comprehensive, complete and consistent identifier throughout a property's life cycle – from planning permission or street naming through to demolition.

As we instinctively use addresses to communicate information about ourselves and the world around us, the UPRN performs the same role in digital data sharing. The UPRN, found within the AddressBase® products from Ordnance Survey, can help you to link internal datasets together and share information with other organisations who use the UPRN; groups already using the UPRN include local and central government bodies, emergency services, insurance and utility companies. The UPRN is an underpinning linking mechanism that removes error in data exchange and communication, and delivers efficiency gains in operational processes.

In the same way that every citizen has a National Insurance number, every Internet-enabled device has an IP address and every book features an ISBN number, every addressable location has a UPRN.



Examples of benefits from using the UPRN

Improving service delivery by creating a single customer view

'We firmly believe the UPRN to be a key element in driving forward effective and targeted service delivery. By placing the UPRN at the core of every service delivery system, not only can we continue to improve the services we offer, but also make savings through effective data-sharing and joined-up working. The immediate benefits internally range from fraud detection to enhanced routes for waste collection, as well as a much better understanding of each and every resident who consumes our services. As a result, the resident benefits from better services, as well as the convenience of being able to transact and gain access to a wealth of public information online. All of this has been facilitated by the UPRN.'

Luke Studden, London Borough of Harrow

Linking data together

The UPRN allows organisations to more effectively collate and share information based on a common reference, even if there are issues with other reference text associated with a record. Many technologies can be used to link and share data, including spreadsheets, databases, XML/GML schema and linked data – all of which can be underpinned by use of the UPRN for spatial address information in Great Britain by following a few key principles.

For example, with appropriate agreement, information can be shared on residents that may need additional support. Without the UPRN this information would be locked away in different organisations, weakening the common operational picture used by these agencies and impairing their ability to provide this support. This is illustrated in diagram 1.

Using the UPRN means that organisations can continue to hold their address information in their existing formats but, by adding a single field containing the UPRN, it becomes possible to link matching records in different databases together. Diagram 2 below shows how this can be done.

	Local authority	Police	Fire & Rescue	Ambulance
Prop ID	200001025758	200001025758	200001025758	200001025758
First	Mike	Micheal	Michael	Mick
Last	Witfield	Whitfield	Whittfield	Whit-Field
DoB	04.01.44	04.10.44	04.01.54	04.01.44
Notes	Vulnerable person	Requires additional support	Located next to paint factory	3 call out since 1.1.14
Address	1 Beech Road	1 Beech Road	1 Beech Road	1 Beech Road

Diagram 1

Your data (containing address information)					
Branch	95 Rev	Employees	Productivity	96 Target	Address
Reading	£20,250	45	450	£22,275	King St
Ascot	£8,800	11	800	£9,680	19 High Street
Sunningdale	£9,000	12	750	£9,900	Station Parade
Bracknell	£17,500	25	700	£19,250	1 High Street
Gerrads Cross	£1,800	6	300	£1,980	Chiltern House, 12

Matched and verified against

Ordnance Survey AddressBase® data						
PAO	Street Description	Locality	Town	Postcode	Coordinates	UPRN
1	HIGH STREET		ASCOT	SL5 7JF	(492213.41, 168842.97)	10012330060
19	HIGH STREET		ASCOT	SL5 7JG	(492232.00, 168831.00)	100081043509
21	HIGH STREET		ASCOT	SL5 7JE	(492257.00, 168823.00)	100081272377
23	HIGH STREET		ASCOT	SL5 7HG	(492267.00, 168817.00)	10012304763
23A	HIGH STREET		ASCOT	SL5 7HG	(492270.00, 168835.00)	100081043510
25	HIGH STREET		ASCOT	SL5 7HG	(492275.00, 168816.00)	100081272892
27	HIGH STREET		ASCOT	SL5 7HG	(492278.00, 168815.00)	100081272863
29	HIGH STREET		ASCOT	SL5 7HG	(492282.00, 168813.00)	100081272855
29A	HIGH STREET		ASCOT	SL5 7HG	(492286.00, 168824.00)	10012304818

Stored and linked

Your data with a UPRN			
Customer name	Policy number	Customer name	Asset ID
Customer ref no.	Value of custom	Services provided	Asset Address UPRN
Customer address UPRN	Risk Score	Complaints history	Maintenance History
Telephone number	Payment type	Customer address UPRN	Asset Longevity
Email address	Customer address UPRN	Customer rating	Connected Asset
		Telephone number	
		Email address	
CRM	BI	SaaS	Asset

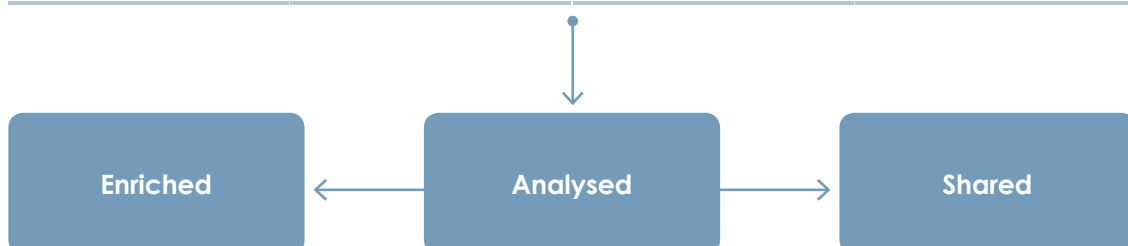


Diagram 2

Public-private sector data sharing to protect the citizen

Valuation Office Agency (VOA) (in conjunction with HM Revenue & Customs (HMRC)) and Ordnance Survey have been working together to provide data to Flood Re and the Insurance industry to enable them to help protect an estimated 357,000 policies at high risk of flooding. The data includes the address, Council Tax band, whether the property was built before or after 2009 and for England and Wales, the unique property reference number (UPRN).

Flood Re will address the availability and affordability of insurance for those households at high flood risk. As part of the Flood Re scheme reinsurance premium thresholds will be fixed against Council Tax bands. The data provided will be used by the insurance industry to help match home insurance policies against the appropriate Council Tax band when ceding a policy to Flood Re. See more at <http://www.ordnancesurvey.co.uk/business-and-government/commercial/financial-services/news/1410/flood-re-uprn.html>

Enabling real-time multi-agency emergency response

The Joint Emergency Services Group in Wales, supported by Welsh Government, UK Cabinet Office and Welsh unitary authorities, have developed a mechanism to electronically transfer information between public service organisations using the UPRN as the common identifier.

This collaborative approach has underpinned core operational systems with the UPRN and developed a proven, long-term and scalable solution to secure multi-agency electronic information exchange, setting the connectivity and data standards for wider integration and becoming the vanguard for public service improvement demonstrating clear benefits to service providers and citizens.

This innovative approach not only delivers tangible benefits to unitary authorities, but reduces emergency response times, improves quality and timeliness of incident data and has reduced the time for mobilising multiple emergency responders from over 4 minutes

to 16 seconds. Faster incident response times reduce the impact on those involved in an emergency and increases confidence in the incident location. The approach also reduces the risk of widespread failure and improves resilience, efficiency and safety. The project is delivering financial benefits across public service organisations in Wales and is reducing emergency service call handling time across Wales by nearly 18,000 hours per annum.

Generating £500,000 of additional revenue via improved analytics

A collaborative pilot project, facilitated by Welsh Government and led by Newport City Council and Cardiff City Council, has improved the management of addresses by using the UPRN to links electoral registration, revenue and benefits and other systems. It has delivered significant additional revenue by making the process more efficient, reducing errors, detecting potential avoidance and fraud. It has now been extended across Wales.

This has resulted in:

- increased revenue from identification of missing properties – over £100 000 from Newport and Cardiff alone, with a further £160 000 from the nine additional participating local authorities
- future improvements, based on the evidence projected benefits, are likely to be over £500 000 across Wales – potentially in excess of £7 million when extended throughout England and Wales
- reduction in errors through use of the UPRN to avoid confusion
- efficient processing through system synchronisation, leads to faster debt collection and reduces duplication of effort between departments
- reduced fraud – the project can be extended to investigate potential fraud in council tax single occupancy discounts and housing benefit
- wider intelligence gathering and sharing by other public sector organisations (for example, emergency services), who are now underpinning their systems with the UPRN.
- See more at <http://www.ordnancesurvey.co.uk/business-and-government/case-studies/newport-and-cardiff-effective-address-management.html>

Further information

For more information, please visit the AddressBase pages on the Ordnance Survey website:

<http://www.ordnancesurvey.co.uk/business-and-government/products/addressbase-products.html>

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