Local Government Association

geoplace®

Street data integration report

Example Local Authority

2025/2026

Contents

Did you know…

It's your data, you already have it

- Every local authority in England and Wales helps to maintain the national address and street databases.
- Local authorities are the first to know about local changes. That's because you have the statutory responsibility to manage the highways network and coordinate street works and road works in your area.
- Every local authority uses this information to create and maintain its Local Street Gazetteer (LSG), a database containing the official information known about your streets. This information is fundamental in supporting the use and maintenance of the street network.
- Each local authority's LSG combine to form the National Street Gazetteer (NSG). The NSG is a comprehensive, authoritative database of all streets in England and Wales. It provides detailed information about all public roads, private streets, and other highways including footpaths, cycleways, and byways.
- You have a Custodian who manages that data every day. It's your data so you already have it, along with access to experts who can show you how to use it.

It's more than just a line on a map

- Every street in your authority contains a Unique Street Reference Number (USRN) which is embedded in legislation. Unique and authoritative, the USRN is like a National Insurance number for physical objects. Every street in Great Britain whether official or unofficial can be identified with a USRN.
- This authoritative 'code' can be used to create trusted connections between disparate sources of information providing absolute certainty that the street being referred to is one and the same.
- The NSG is used by local authorities as the critical data underpinning street works and road works, highways asset management, gritting and salting routes, traffic calming schemes, waste collection, emergency planning and response and many more.
- Highway authorities also use the NSG to meets several of their other statutory requirements including the list of streets (Highways Act 1980 Section 36(6)), public rights of way (CROW act 2000 - Definitive Map) and the local highway authority road length consultation (R199b).
- The NSG is also essential for organisations like utility providers – helping them to work efficiently with contractors all accessing the same, authoritative, single source of data.

Utilising street data can lead to a Return On Investment (ROI) of 6:1

- A recent independent cost benefit analysis showed that wide adoption and use of street data will generate £384m savings for local authorities in England and Wales over the period 2022-2026.
- Investment may be needed in some service areas to integrate this resource across your authority's systems, but those savings represent a ROI of approximately 6:1.

So, how well are you using street data and its USRN?

- This document walks you through how well your authority is utilising street data and its USRN.
- The term "integration" refers to how well street data and its USRN are being used (relied upon, updated and handled).
- Street data is typically used by software systems to deliver your authority's services to its residents, but any department using a street has the potential to use the USRN.
- The information is based upon your authority's responses to the GeoPlace annual improvement schedule survey 2025/26 and previous years, completed by your designated Authority Street Custodian or other authorised individual.
- For further information, queries or advice on any part of this report, please contact support@geoplace.co.uk

A testimonial from the Department for Transport (DfT)

"The Department for Transport recognises the critical role that local street data and the work of Street Custodians play in underpinning our national highways infrastructure. The Unique Street Reference Number (USRN) is fundamental to the operation of Street Manager, providing a consistent and authoritative identifier that connects every street works notice to the right location. This accuracy supports better planning, coordination, and transparency across utilities and highway authorities. Without the dedication of local Custodians maintaining these datasets, the integrity and efficiency of the UK's street works management would simply not be possible.

Paul Chandler, Head of Traffic Management Digital Services,
Traffic & Technology Division, Department for Transport

Summary of progress

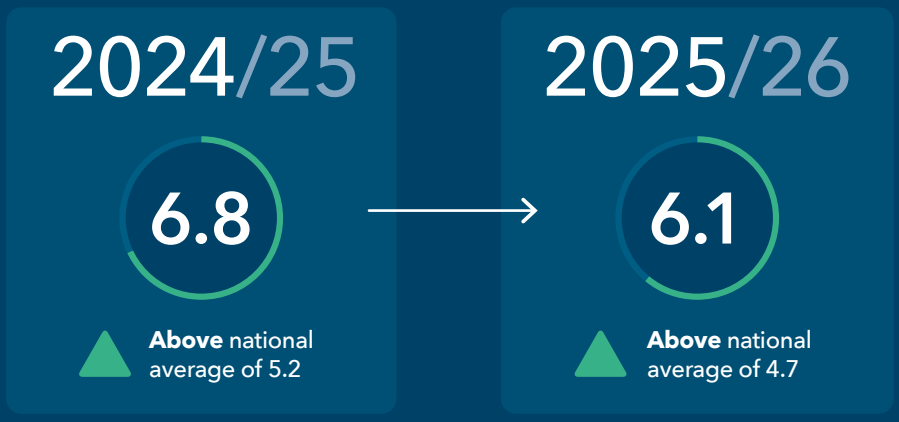
Your overall integration score:

This is **above** the national average of **4.7/10** which reflects how well your authority is utilising street data and its USRN.

In comparison to other **London boroughs**, the integration average for these types of authorities is **5.2/10**, which your authority is currently **above**.

Your progress over the past two years indicates:

[*Example Local Authority*] is maintaining a consistent, **above-average** level of street data utilisation and USRN integration across the organisation. For more information on how to improve and the benefits of doing so, please see page 13.



In 2024/25, your Local Street Gazetteer (LSG) contained:

As well as being crucial to your own authority, your data is relied upon by:

- The entire public sector
- Emergency services
- Logistics & transportation sector
- Utilities & Telecommunications sector
- Conveyancing & Legal services
- Road users & Members of the public

Your maturity level

Based on your authority's overall integration score of **6.1/10**, your level of USRN maturity is categorised below.

Your level of USRN integration maturity is:

Level 3 of 5: Established

LEVEL 3 ESTABLISHED CHARACTERISTICS

20% of local authorities fall within the "Established" category. Your authority is progressing well on its integration journey but further work is required to realise the benefits street data can offer (page 13). Some service areas may be experiencing these already.

A number of systems are utilising street data and its USRN, but not all. The quality of these integrations need further refinement in order to achieve effective integration.

PRIORITY

Automate processes where possible and ensure street data is updated as frequently as can be in order to support the services consuming it (page 11).

Reliance on the USRN

The ability for the software system to use the USRN

Systems typically fall into two main categories; those capable of handling street data and the USRN effectively, mandating its usage and those which permit manually entered streets. Processes may well be in place to subsequently link manually entered streets to a USRN to ensure ongoing integrity.

Currency of street data

How frequently street data is updated and kept current

The majority of systems utilising street data and the USRN are updated on either a monthly or ad-hoc basis, however there may be a small number being updated daily or in real-time through the use of an API.

Method of update

How automated the mechanism is to update street data and the USRN

The majority of systems use file based updates and system utilities which are manual in nature. A handful of systems may utilise automated processes to update street data not requiring intervention. Some may even use an API to deliver street data directly to the system.

Example Local Authority

USRN integration 2025/26

Integration scores vs national averages

OVERALL INTEGRATION SCORE

6.1 out of 10

National average: 4.7
2024/25 score:

SYSTEM RELIANCE ON THE USRN

7.3 out of 10

National average: 5.1
2024/25 score:

STREET DATA CURRENCY

4.4 out of 10

National average: 4.5
2024/25 score:

METHOD OF UPDATE

6.6 out of 10

National average: 4.5
2024/25 score:

How are the scores calculated?

Please note, other authority systems may be integrated but are not captured in the questionnaire.

Data source:
GeoPlace Improvement Schedule questionnaire response 2025/26.

KEY

Reliance on the USRN

- **Yes** (System fully reliant on the USRN)
- **Partly** (System utilises the USRN, but manually entered streets permitted)
- **No** (USRN not used, manually entered streets permitted)
- Service not provided / Unknown

Street data currency

- Real-time/daily/weekly
- Fortnightly/Monthly/6-weekly/ Ad-hoc
- Quarterly/Bi-annually/Annually/ Not updated
- Service or system not provided/ Unknown/Other

Method of update

- DB link/API
- Systems import utility/Custom processes
- Manual entry/Not updated
- Not linked/Service or system not provided/Unknown/Other

Your service scorecard: Performance

Looking at each service area individually

- **3** services are **below** the national average and are not utilising street data in an effective way. The below services require attention to ensure you are obtaining the full benefits as listed on page 13.
  - Planning / building control, council website, CRM

SERVICE AREA	INTEGRATION MEASURES			INTEGRATION SCORE (MAX 10)	COMPARED TO SERVICE'S NATIONAL AVERAGE
	RELIANCE ON THE USRN	CURRENCY OF STREET DATA	METHOD OF UPDATE		
Planning / Building control	0	0	0	0/10	▽ Below (5.3)
Council website	0	0	0	0/10	▽ Below (5.1)
CRM	0	0	9	3/10	▽ Below (4.1)
Emergency planning	10	6	0	5.3/10	△ Above (4.6)
Highways maintenance	10	6	9	8.3/10	△ Above (6.8)
Asset management	10	6	9	8.3/10	△ Above (6)
Street lighting	10	6	9	8.3/10	△ Above (5.9)
UKPMS / Inspections	10	6	9	8.3/10	△ Above (5.8)
Refuse collection / Street cleansing	10	6	9	8.3/10	△ Above (5.6)
Highway searches	10	6	9	8.3/10	△ Above (5)
TROs	10	6	9	8.3/10	△ Above (4.2)
PRoW	--	--	--	--/10	⊘ Not provided (4.6)

Your service scorecard: Current state

Converting scores into values:

SERVICE AREA	INTEGRATION MEASURES			INTEGRATION SCORE (MAX 10)
	RELIANCE ON THE USRN	CURRENCY OF STREET DATA	METHOD OF UPDATE	
Planning / Building control	No	Not updated	USRN not utilised	0/10
Council website	No	Not updated	USRN not utilised	0/10
CRM	No	Not updated	System utility	3/10
Emergency planning	Yes	Monthly	USRN not utilised	5.3/10
Highways maintenance	Yes	Monthly	System utility	8.3/10
Asset management	Yes	Monthly	System utility	8.3/10
Street lighting	Yes	Monthly	System utility	8.3/10
UKPMS / Inspections	Yes	Monthly	System utility	8.3/10
Refuse collection / Street cleansing	Yes	Monthly	System utility	8.3/10
Highway searches	Yes	Monthly	System utility	8.3/10
TROs	Yes	Monthly	System utility	8.3/10
PRoW	Service not provided	Service not provided	Service not provided	--/10

KEY

Requires improvement · Requires review · Ideal situation · Service not provided/unknown

For context on how these values compare and the levels above/below, please see the values and scores document

Your service scorecard: Progress

Since last year (2024/25) there have been:

- ▲ **3 improvements** made to integration.
- ● **9** areas of integration which have **stayed the same**.
- ▼ **5** areas of integration which have **declined**.
- ● Denotes service not provided / comparison to last year not possible.

SERVICE AREA	INTEGRATION MEASURES: RELIANCE ON THE USRN	INTEGRATION MEASURES: CURRENCY OF STREET DATA	INTEGRATION MEASURES: METHOD OF UPDATE	INTEGRATION SCORE (MAX 10)
Planning / Building control	● --	● --	● --	● -- 0/10
Council website	● --	● --	● --	● -- 0/10
CRM	▼ -10	▼ -10	▼ -1	▼ -7 3/10
Emergency planning	● --	● --	● --	● -- 5.3/10
Highways maintenance	● 0	▼ -4	● 0	▼ -1.4 8.3/10
Asset management	● 0	▲ +2	● 0	▲ +0.6 8.3/10
Street lighting	● 0	▼ -4	● 0	▼ -1.4 8.3/10
UKPMS / Inspections	● 0	● --	● 0	● -- 8.3/10
Refuse collection / Street cleansing	● --	● --	● --	● -- 8.3/10
Highway searches	● --	● --	▲ +9	● -- 8.3/10
TROs	● 0	● --	▲ +7	● -- 8.3/10
PRoW	● --	● --	● --	● -- --/10

Integration measures and how to improve

The overall integration score is comprised up of 3 individual measures. Their importance and how to improve in each area is explained below.

MEASURE 1: RELIANCE ON THE USRN

What do we mean:

The ability of the software system to solely rely on street data and the USRN rather than permitting unverified, manually entered street information.

What to aim for:

Software systems which mandate the usage of the USRN and definitive street information.

Why it's important:

Software not mandating the use of the USRN or definitive street information allows users to manually create and edit streets without validation or verification. This leads to errors in capture, confusion in communication, duplication of effort and is a barrier to data-linking and generating insights. It is therefore important to ensure software systems mandate the usage of the USRN, otherwise street data needs to be constantly maintained, cleaned and audited to ensure it is current, accurate and trustworthy.

How you can improve:

1. Determine if the software system can utilise street data and the USRN and mandate its use. You may need to ask your I.T department or system supplier directly. A list of key questions can be found here.
2. Ensure manually entered streets are periodically matched to a USRN and retrospectively updated and corrected if required. This is key to ensuring street data remains trustworthy and accurate.

MEASURE 2: CURRENCY OF STREET DATA

What do we mean:

How frequently street data is updated and kept current in the system

What to aim for:

As frequently as possible to support the service area's function. This can be daily or weekly in some cases but also real-time for others. It all depends how critical up to date street information is for the service area consuming it.

Why it's important:

Effective service delivery requires up-to-date street data. Old, stale data may not contain new streets or reflect changes that should be present. This can lead to confusion, delay and services not being delivered if relied upon.

How you can improve:

1. Determine how frequently the software system loads street data. You may need to ask your I.T dept or system supplier directly. A list of key questions can be found here.
2. Implement the most frequent option possible to support your various service's needs.

MEASURE 3: METHOD OF UPDATE

What do we mean:

How automated the mechanism is to update street data and the USRN.

What to aim for:

As automated and "hands off" as possible, utilising APIs where possible such as GeoPlace's DataVia.

Why it's important:

Manual, file-based update methods take time, effort and resources to operate. They are prone to errors and have multiple points of potential failure. In contrast, fully automated, dynamic mechanisms such as APIs enable street data to be updated seamlessly with zero or minimal effort and only needs to be configured once.

How you can improve:

1. Determine how the software system loads street data. You may need to ask your I.T. dept or system supplier directly. A list of key questions can be found here.
2. Aim to implement the most automated option possible to meet the needs of the service area.

DataVia
National Street Gazetteer via API

geoplace

Definitive street data delivered through an API

What is it?

- DataVia is an API service developed by GeoPlace and provided free of charge to all local authorities, funded by the Local Government Association (LGA).
- It provides real-time access to the National Street Gazetteer (NSG) with the purpose of providing definitive street data along with USRNs directly into software applications which support street works, asset management, highways maintenance, spatial analysis, plus many more.

Integration benefits of an API

- APIs represent the most efficient, robust and error-free methods of integrating street data compared to file-based integrations for example systems which use .csv files.
- APIs such as DataVia allow street data to be directly accessed and integrated within the software system and need only to be configured once in a truly "set-and-forget" approach.
- Updates to the street data are automatically reflected in the data delivered by the API, meaning there is no need for additional process to carry out updates and refreshes. This saves considerable staff time in administration, plus removes potential errors typically caused by manual processing.

DataVia features

- **Daily updates** – Access the latest NSG data the day after a local highway authority submission
- **RESTful API** – Supports OAuth2, OpenID Connect, and Basic Auth
- **Flexible formats** – GeoJSON, OGR GML, Shape.zip, .csv, SpatiaLite.zip
- **Rich schema** – Includes street lines, special designations, construction, interests, and ESU layers
- **Built for interoperability** – Built to OGC WMS and WFS standards meaning compatibility with common GIS platforms e.g. QGIS, ArcGIS Pro, ArcGIS Online and many other web and mobile platforms.

How to get access

- You can find out more about DataVia and how to gain access on the GeoPlace website.
- A key factor in being able to use DataVia is whether or not your software system can consume it. In theory, if your software can make a HTTP request, i.e. can access the internet, then DataVia API can be consumed. Please check with your respective supplier to find out what is technically possible.
- For more support, please contact support@geoplace.co.uk.

Further information

- Case study: DataVia – unlocking hidden benefits for Monmouthshire residents
- Case study: Freedom Fibre supercharges connectivity with DataVia
- DataVia has its own Khub user group which contains further use cases and technical discussions from the local authority community.

Integration benefits for your authority

GeoPlace has gathered over 400 real-world case studies showing how councils are using street data and USRNs to deliver more efficient services. Below are just some of the benefits local authorities have achieved, both within specific service areas and across their organisations, by integrating street data and the USRN. Click on each benefit to explore the examples on the GeoPlace website.

SERVICE AREA	BENEFITS OF INTEGRATING FOR THE SERVICE
Asset management	1. Highways asset management - street lighting portal 2. Taking it to the streets 3. Using location to create understandable, shareable insights from complex raw information 4. Kent Highway Services: using GIS for environmental protection
Council website	1. AI and geospatial intelligence transform public reporting in Westminster City Council 2. Northumberland makes online reporting easy
Customer Relationship Management (CRM)	1. Improving council services in Oxfordshire by integrating the Street Gazetteer including FixMyStreet 2. Northumberland makes online reporting easy
Highway searches	1. Village greens in Northumberland County Council
Highways maintenance	1. NSG helps to tackle cold snap pothole danger 2. Nottingham leads the way for smart city technology and renewable energy 3. Bath and North East Somerset use National Street Gazetteer in new low emission zone
Permit schemes & traffic sensitivity	1. Traffic Sensitive Streets Review in Durham 2. Protecting traffic sensitive streets in East Sussex 3. Improvements in data quality deliver efficiency in Durham 4. A council's approach to utilising Additional Street Data
Planning / building control	1. Leicestershire County Council use FindMyStreet to aid with the Classification of Streets
Public Rights of Way (PROW)	1. Entering PRoW and its subsequent benefits for street works coordination 2. Analysing the footpath network for Bracknell Forest Council 3. Entering PRoW and its subsequent benefits for street works coordination 4. Huntingdon's use of Cambridgeshire County Council's Public Right of Way Data 5. Northumberland PRoWdly presents 6. Northumberland Council - joining up intelligence for improved service delivery
Refuse collection / street cleansing	1. Evidence based procurement returns £800,000 per annum in Bromley 2. Managing Waste in Colchester
Street lighting	1. Brighton & Hove City Council – using the USRN to light up the city
Transformation	1. Using the Local Street Gazetteer to develop a 'smart city' 2. DataVia – unlocking hidden benefits for Monmouthshire residents 3. Environment Roads and Facilities (ERF) digital transformation project
Traffic Regulation Orders (TROs)	1. Traffic Regulation Orders (TRO) – supporting active travel
UKPMS / inspections	1. Anglesey County Council - The right tools for the job 2. Pothole repairs up, compensation claims down

Key action points

1

ACTION: DISCOVER THE POTENTIAL

Street data is much more than "just a road" – it's the backbone for: operational efficiency; the foundation for accurate mapping and routing; the key to network management duties; coordinating activities on the highway network and asset planning.

Watch this video to understand how street data and the USRN can help you realise these benefits.

2

ACTION: ENGAGE WITH YOUR SERVICE AREAS

Speak to those responsible for the services indicated on page 8 that are falling below or achieving their respective national integration average.

Ask them the following questions:

1. What is preventing street data and its USRN being used effectively by the system?
2. What is needed to overcome this?

3

ACTION: UTILISE DATAVIA WHERE POSSIBLE

Use the GeoPlace DataVia API to seamlessly integrate authoritative street data and the USRN into departmental systems which handle or refers to street information.

This service is available to local authorities at no cost and supports consistent, high-quality street data use across all systems.

4

ACTION: SUPPORT YOUR CUSTODIAN

Street data is one of your most valuable assets. You have a designated officer within your authority who creates and maintains this data called an "Authority Street Custodian."

Supporting them is key to ensuring your data is kept accurate and current. Use the LGAs tool to find out who your Custodian is.

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

GeoPlace LLP
Fourth Floor North · 65 Goswell Road · London · EC1V 7EN
T. 020 7630 4600 𝕏 @GeoPlaceLLP s.geo.place/linkedin **www.geoplace.co.uk**