

# Improving services and keeping your authority moving



## The National Street Gazetteer (NSG) contains definitive information for streets in England and Wales.

Primarily it allows local authorities to manage all streetworks carried out by themselves and by statutory undertakers in an efficient manner on the national road network.

**It was created to coordinate the process of streetworks in England and Wales, helping to prevent streets being repeatedly dug up over a period of months by different utility companies and local authorities. It provides a unique referencing system, is embedded in legislation and is fundamental in the processes of managing all streetworks.**

The NSG is used for a variety of services within local authorities, not only to underpin streetworks but as the core dataset in activities that use street data. This makes the NSG a key strategic data source within local authority internal management systems.

Local Street Gazetteers (LSGs) are created and maintained under statute and are compiled at a national hub, managed by GeoPlace to create the NSG. All 174 highway authorities across England and Wales upload their LSG data to the NSG hub on a monthly basis, where the information is then verified and made available to licenced users via web downloads.

Consolidating this information at a national level means that there is improved consistency of data. It allows third party organisations such as utilities to go to a central place to obtain the data, and it allows all organisations to meet their statutory highway requirements to coordinate and provide the appropriate streetworks notifications.

In addition to underpinning streets information, the LSG also supports property information from the Local Land and Property Gazetteer (LLPG). Collaboration between counties and districts is facilitated if all parties communicate about the same properties on the same street using the same unique information. This becomes possible through utilisation of the Unique Street Reference Number (USRN) within the LSG and the Unique Street Property Number (UPRN) within the LLPG.

Effective use of the LSG offers the opportunity to make much more of the information beyond purely complying with statutory obligations.

Maintaining and using an up-to-date LGS enables an authority to:

- work more effectively with partners and neighbouring authorities
- coordinate streetworks and assets locally and nationally
- provide better and safer services for citizens
- meet statutory legislation
- create a national resource

Key to this is the LSG custodian, who is crucial to the delivery of data improvements as well as the onward management of LSGs.

## Work more effectively with partners and neighbouring authorities

**The LSG, once combined into the NSG, is a tool designed to facilitate partnership working with utility providers and other statutory undertakers across England and Wales using unambiguous definitive referencing of streets.**

The NSG enables utility providers to plan and execute their street works in a coordinated, streamlined and efficient way. Having the correct information about who has responsibility for and the restrictions about that road is essential for speed of notification and speed of works to be undertaken.

Things change, so having up-to-date information on any Special Engineering Difficulties, which are contained in the NSG, allows the appropriate amount of time and resources to be budgeted for at the very beginning, enabling continuous work from start to finish without unexpected breaks.

Utility providers use the NSG as an important decision making dataset in respect of all maintenance and repair issues. Knowing the most current state of the road and all its associated data allows informed and efficient decisions to be made, ultimately remembering that the main purpose is to give the public a fast and efficient service with the minimal possible disruption.

It is vital therefore that the LSG continues to be a complete and accurate record of street information across your authority.



## Coordinate streetworks and assets locally and nationally

**Keeping traffic moving is a crucial aspect of good service delivery for residents and businesses. The LSG is designed to meet this need, to enable authorities to manage streetworks and coordinate all street related activity within the local area.**

Streets are part of the country's infrastructure through which many citizen centred services are provided. Consequently there are a range of street related issues such as congestion, capacity planning, streetworks, accidents, incidents and maintenance which affect them. A core dataset which records all of these issues, and their attributes is essential.

A modern day solution to the problem comes in the form of permit schemes which helps the coordination of streetworks. Several pioneering organisations have already introduced the scheme with positive results to date, all of which are underpinned by a reliable street information database in the form of the NSG.



### Streetworks Sign posting Service

GeoPlace has launched a new service, designed to assist the Department for Transport (DfT) to fulfil a requirement to make streetworks information more accessible for the general public and other interested parties.

The new Streetworks Signposting Service is available through the NSG website, it enables users to search for streetworks via a map or free text search function and then directly link to the relevant highway authority streetworks register. Under the New Roads and Streetworks Act 1991, English local authorities are required to make their streetworks register available to the general public.

However, for people wanting to access streetworks information across the country from a number of different highway authorities, visiting numerous websites is a time consuming and unwieldy exercise. The new GeoPlace service provides a portal to access this information from one place.

Government is committed to making it easier to access public data, easier for data publishers to release data in standardised, open formats; and engraining a 'presumption to publish' unless specific reasons, such as privacy or national security, can be clearly articulated.

In line with this desire to enable the potential of Open Data, the Streetworks Signposting Service was created in response to the Department for Transport's Open Data Strategy. This stated that the DfT will work with others to deliver a range of highways and traffic data, including streetworks, to help reduce congestion and enable businesses to make more predictable travel and logistics decisions.

Local Transport Minister Norman Baker said: "Streetworks are necessary but understandably can be incredibly frustrating for motorists. This new online checking service will allow drivers to see where streetworks are taking place throughout England before they set off, helping to reduce congestion and improve journey times."

The Streetworks Signposting Service is freely available to all parties and the general public.



## Case study

### Transport for London works with GeoPlace to reduce traffic congestion

Road congestion is a major issue for London's transport system, causing significant frustration for road users and affecting Londoners' quality of Life. With around half a million holes dug in London's roads every year, it is not surprising that streetworks account for about a third of the Capital's most serious traffic disruption.

It is estimated that disruption from streetworks costs London's economy around £750 million a year. Around £300 million of this is on London's busiest roads – the Transport for London Road Network (TLRN) or Red Routes – which, although only comprising around 5% of London's road network, carry over 30% of the traffic.

The vast majority of streetwork disruption on the TLRN is in fact concentrated on around half of its length. It is in these areas – identified as Congestion Management Areas (CMAs) – that TfL is keen to target additional measures and stronger incentives to deliver a real change in the industry so that works are planned and undertaken more efficiently.

Following approval from the Department of Transport, from 11th June 2012, TfL has operated a Lane Rental Scheme giving notice to works promoters and stakeholders of its intention to operate the Scheme. The introduction of a targeted 'lane rental' scheme has allowed TfL to charge companies a daily fee for digging up London's busiest roads at the busiest times to incentivise more efficient working practices.

The scheme aims to minimise the amount of time that works disrupt traffic, either by ensuring works are carried out as speedily as possible, or that more works are carried out outside of peak traffic hours and that roads are fully open at the busiest times. In the areas where lane rental charges apply, the scheme provides adequate time for works to be carried out without charge, therefore minimising the opportunity for costs to be passed onto the consumer.

Details on the TfL Lane Rental Scheme have been included in the TfL Additional Street Data (ASD) file which can be downloaded from the NSG website, this incorporates the locations subject to Lane Rental charges as special designations.

## Provide better and safer services for citizens

**The LSG is important to the delivery of a wide range of public services. Geographically located data are reckoned to comprise 80% of all local government data and the LSG, with its road identifiers, is essential to the recording and use of these data as well as providing a host of information important to proper conduct of streetworks and transport management.**

Although the NSG is the dataset that underpins the ability of each local highway authority to meet their statutory obligations, the NSG also enables authorities to perform;

- network management duties
- introduce fixed penalty noticing and permit schemes
- coordinate activities on the highway network.

These duties enable local authorities to maintain safety, minimise inconvenience to people using the street, protect the structure of the street and the integrity of apparatus in it.

The information contained within the NSG can be used for applications involving mobilisation, routing and scenario-based risk assessments. The Additional Street Data contained in the NSG provides essential information for the emergency services, such as traffic sensitivity, bridges and other structures. The NSG is also valuable for data management and recording of incidents. It is also possible to use the NSG for flagging environmental information so that the impact can be assessed on an incident by incident case.

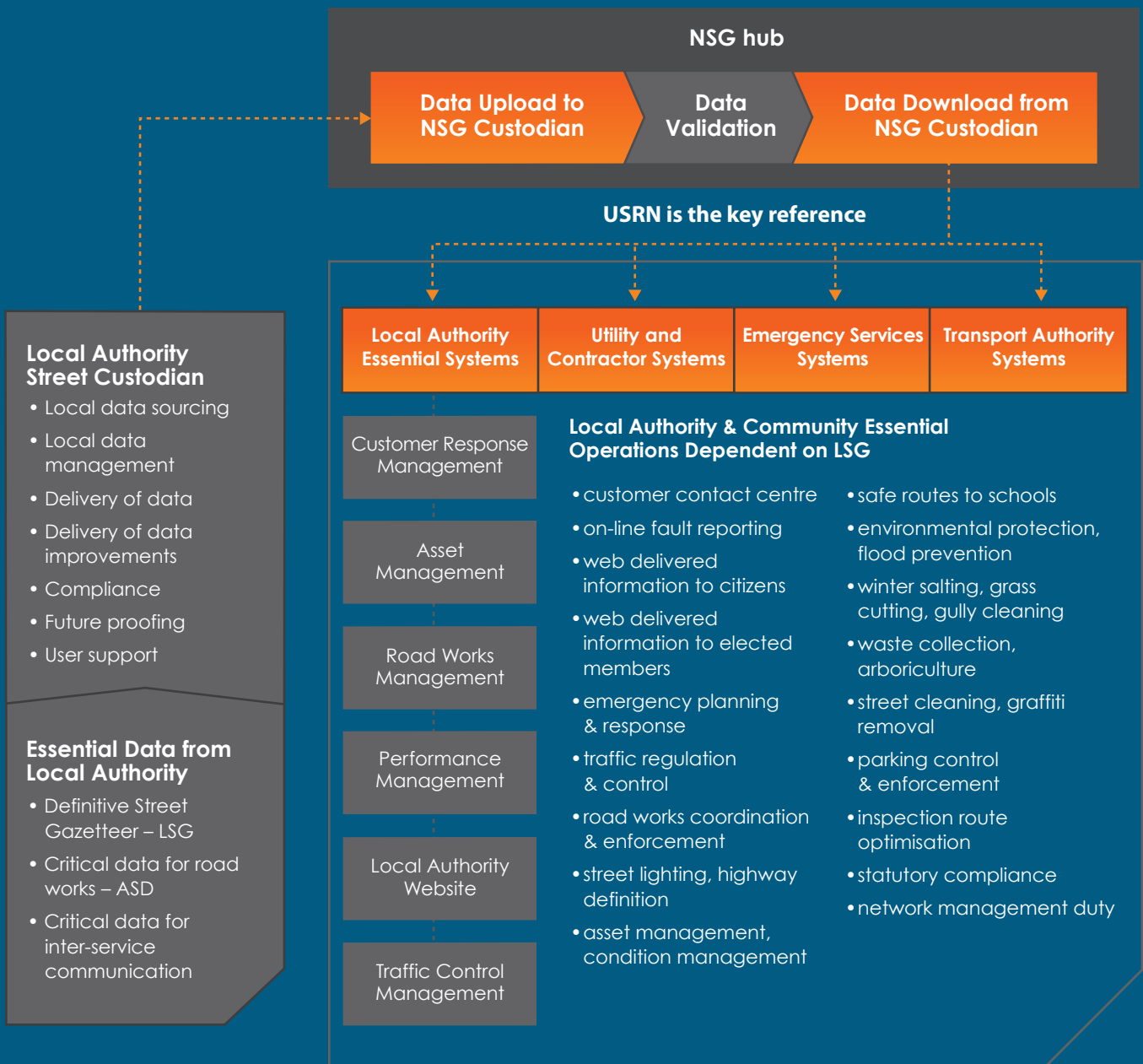
**Many highway authorities have implemented the NSG corporately to underpin other areas of their business such as:**

- highways asset management
- gritting and salting routes
- route optimization
- waste collection
- emergency planning and response
- safe routes for schools
- CRMs leading to improved council services
- flood prevention and alleviation
- management of footpaths
- management of public rights of way
- traffic calming schemes
- online fault reporting
- identification and management of roadside nature reserves
- management of street name plates
- street lighting repair and maintenance
- risk management services to deal with highway related claims
- management of highway drainage components such as drainage gullies
- management of contracts for sponsored street signs
- management of vehicular crossings on the public highway
- management of highway structures such as bridges
- management of traffic signal installations, illuminated signs and bollards.



## Using your LSG

- 80% of your local authority data is geographically located
- your LSG is essential for service delivery and efficiency
- your Authority Street Custodian is mission critical





## Case study

### Kent County Council

Potholes are a blight to many road and footpath users. Kent County Council has embarked on a comprehensive overhaul of its highway safety inspection process to improve service delivery in repair of road defects.

The council has developed a system to reduce the occurrence of potholes and footway defects, to find and fix swiftly those which do occur, with fewer Road Safety Inspectors and lower compensation claims.

Kent inspects and maintains over 8,500 km of highway and 6,000 km of footway. Efficiencies of route optimisation, speedy communication using mobile technology, and integrated data have paid big dividends, with the added benefit to the safety, wellbeing and satisfaction of citizens. As a result of the overhaul;

- compensation claims are down around 35%
- repair orders are down 36%
- the number of Road Safety Inspectors reduced from 44 to 12
- the estimated cost savings exceed £5 million by end of next fiscal year

Early detection of road and footpath defects is an expert job undertaken by Road Safety Inspectors. The challenge for Kent was to enable fewer Inspectors to carry out more inspections, to react quickly to reports of problems, and to administer works orders more swiftly so that repairs are completed sooner. By integrating databases of information held by the council it was possible to construct a completely new inspection structure.

Inspectors have the means and authority to generate works orders in the field, which are transmitted directly to Kent's road works contractors so that repairs can be completed as soon as possible, removing actual and potential hazards to citizens with maximum speed. This has resulted in a system which continuously maintains the network to its best possible standard, whilst also saving money.



## Meet statutory legislation

**The NSG was designed to improve the synchronisation of streetworks that have in the past been undertaken with little or no coordination.**

It aims to prevent streets being repeatedly dug up over a period of months, by numerous different utility companies as well as local authorities.

The LSG enables your authority to meet a variety of statutory legislation:

- Highways Act 1980
- New Roads and Street Works Act 1991
- Traffic Management Act 2004

### Traffic Management Act (TMA)

The aim of the Traffic Management Act (TMA) is to reduce road congestion, improve journey times and coordinate streetworks for the benefit of road users.

Information contained in the NSG helps provide the basis for highway authorities to manage all TMA related processes and allows statutory undertakers to be aware of protected or traffic sensitive streets, and streets with special engineering difficulties.

In effect, the NSG reduces the impact of streetworks to the citizen as the new legislation empowers the highway authority to have more control over their own street network.



## Create a national resource

On a monthly basis, all 174 local highway authorities across England and Wales upload their LSGs, along with Additional Street Data (ASD), to the NSG hub. This enables third party organisations such as utility providers to meet their statutory highway requirements to provide the appropriate street works notifications.

The following types of streets are included in the NSG:

- motorways and trunk roads
- classified numbered streets
- publicly maintained streets
- prospective publicly maintained streets
- private streets known to the highway or roads authority
- footpaths.

As well as containing details about streets, the NSG also contains ASD including:

- details of ownership
- reinstatement categories
- details of protected streets
- special designations such as
  - traffic sensitive streets
  - streets with special engineering difficulties
  - speed limit data
  - level crossing safety zones
  - environmentally sensitive areas
  - streets with special surfaces
  - streets with priority lanes
  - streets with special construction needs
  - height, weight and width restrictions.

By pooling this information at a national level, local government is investing in a rich and mature dataset which helps keep the nations traffic moving.

### DfT hands over street classification designation repository to GeoPlace

From April 2012, the Department for Transport (DfT) handed greater responsibility to English local highway authorities for the management of the roads classification system.

Roads are organised through the roads classification system, along with the dedication of a primary route network to advise people to the recommended route to use. This network then provides easily identifiable routes to access the whole of the country.

While authorities previously undertook the majority of the work involved in reclassifying a road, there was always the need to secure the agreement of the DfT for each new classification. Under the new approach, local highway authorities are now responsible for classifying roads which gives them the power to title 'A', 'B', 'C' and 'U' roads without the need for central government approval.

Additionally, local highways authorities are now responsible for defining the primary route network (PRN) within their authority. The PRN is the most satisfactory route for through traffic between places of traffic importance and is comprised of 'A' roads.

The reasoning behind this change is that local knowledge and local control of roads should help to reduce traffic jams and enable easier flow of people and vehicles through the road system.

In order to carry out these functions, local authorities need to fill in a single form for each change in road classification, submit the form to the central repository at GeoPlace LLP, along with any associated documental evidence, and then enter it into the National Street Gazetteer (NSG). It then automatically becomes live, without the need to wait for approval.

This process is limited to English Authorities. Welsh and Scottish authorities will continue to operate separate processes through Welsh government and Scottish government.

## The importance of your Authority Street Custodian and the LSG

### Key facts about this national resource created by local government:

- the NSG is the definitive source of street information for England and Wales collected at source from the originators of street change intelligence
- it is current. The NSG is continually updated by highways authorities with changes incorporated into the NSG every month at the national hub
- the NSG is the only dataset built to British Standard 7666:2006 that incorporates all public, prospectively adopted and private streets in England and Wales including dual language where appropriate
- the Unique Street Reference Numbers (USRNs) provide a national unique identifier that allows users of the NSG to tie their data together across applications making sharing of information corporately and across industry seamless and efficient
- it has community wide commitment to continued data improvement.

Each authority has a statutory and contractual to continue to maintain updates to the hub. However there are many other reasons why every authority should to maintain and use its accurate LSG as outlined on page 6.





## GeoPlace LLP

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

GeoPlace's role is to create and maintain the National Address Gazetteer and the National Street Gazetteer for England and Wales, providing definitive sources of publicly-owned spatial address and street data. Through agreement with Scotland's Improvement Service Company, working on behalf of Scottish Government, address coverage now includes Scotland.

The National Address Gazetteer managed by GeoPlace, is the data storage and internal set of processes bringing together the existing local authority sourced Addressing Datasets together with Ordnance Survey, Valuation Office Agency and Royal Mail data. Ordnance Survey develops the AddressBase range of products based on data provided by GeoPlace. As a separate process, the National Street Gazetteer is made available through GeoPlace.

As the Custodian of the NSG, GeoPlace has a responsibility to manage access and maintain services related to the NSG.

GeoPlace runs the NSG hub at [www.thensg.org.uk](http://www.thensg.org.uk) which enables contributors to supply their own data to the hub and download the data that they require to manage streetworks. The NSG hub also allows access to the data for contractors who are carrying out works for to register for an organisation licensed to access the NSG.

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