

An aerial photograph of a suburban town at sunset. The sky is filled with soft, orange and pink clouds. The town below is a mix of residential houses, green lawns, and trees. A semi-transparent white box is overlaid on the upper half of the image, containing the main title and speaker information.

Powering Digital Public Services – infrastructure needs and responses to national emergencies

Nick Chapallaz, Managing Director, GeoPlace

Overview

- Discuss scope of infrastructure
- Make the case for investment in data quality
- A bit about why what we do and our experiences is relevant
- Open UPRN, USRN and announcement
- COVID responses
- Relate our knowledge of managing data and improving quality

Defining (organisational) infrastructure

Systems, protocols, and processes that give an organisation structure, support its key functions, embed consistent practices and enable it to deliver its aims and objectives.

Aims and objectives

- Clarity - Contractual, legislative, stakeholders inc. community
- Scale – Task – project - organisation

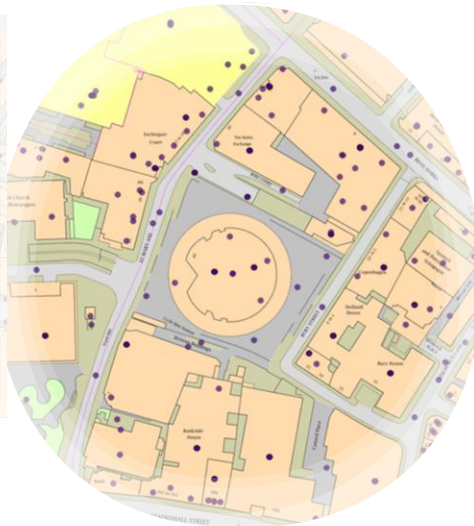


Context of objectives

Everything happens somewhere

Local government is defined by geography - the populations, services, networks, economy, environment and processes within it.

Details	
NLPG BLPlus (533006,181108,533276,181380) 99x95511116	
UPRN	95011116
AUTH_NAME	CITY OF LONDON
AUTH_CODE	9000
ORGANISATION	NOTES
POSTCODE	EC3A 8BF
LIVE_LPIIS	"RETAIL UNIT 1, 30, ST MARY AVE, LONDON, LONDON, EC3A 8BF (LEVINE, L8-1, LANG ENG, KEY:5030,000017305, LLD:20100217)"
PROVISIONAL_LPIIS	
HISTORIC_LPIIS	
LPI_COUNT	1
BLPU_LOGICAL_STATUS	1
CLASS_CODE	CR07
CLASS_DESCRIPTION	Restaurants and cafes
RPC	1
USRN	8100503
PARENT_UPRN	95009974
HUB_START_DATE	2010-03-09T00:00:00Z
bbox	533300,181269,533300,181269



Streets and addresses are foundation infrastructure.

Infrastructure – Digital scope

- **Processes** – operations to deliver objectives / outcomes
- **Data** – to match processes and arguably our most valuable asset
- **Software** – to most effectively operate processes and manage data
- **Technology infrastructure** – to reliably run and scale operations to meet changing needs
- **People** – skills, capacity and commitment / attitudes

“In God we trust; all others must bring data.” - Prof. Williams Edward Denning 1900-93

The origins of GeoPlace – a Joint Venture partnership Regarded as national infrastructure

Parliamentary Under-Secretary of State for
Communities and Local Government (Robert Neill)

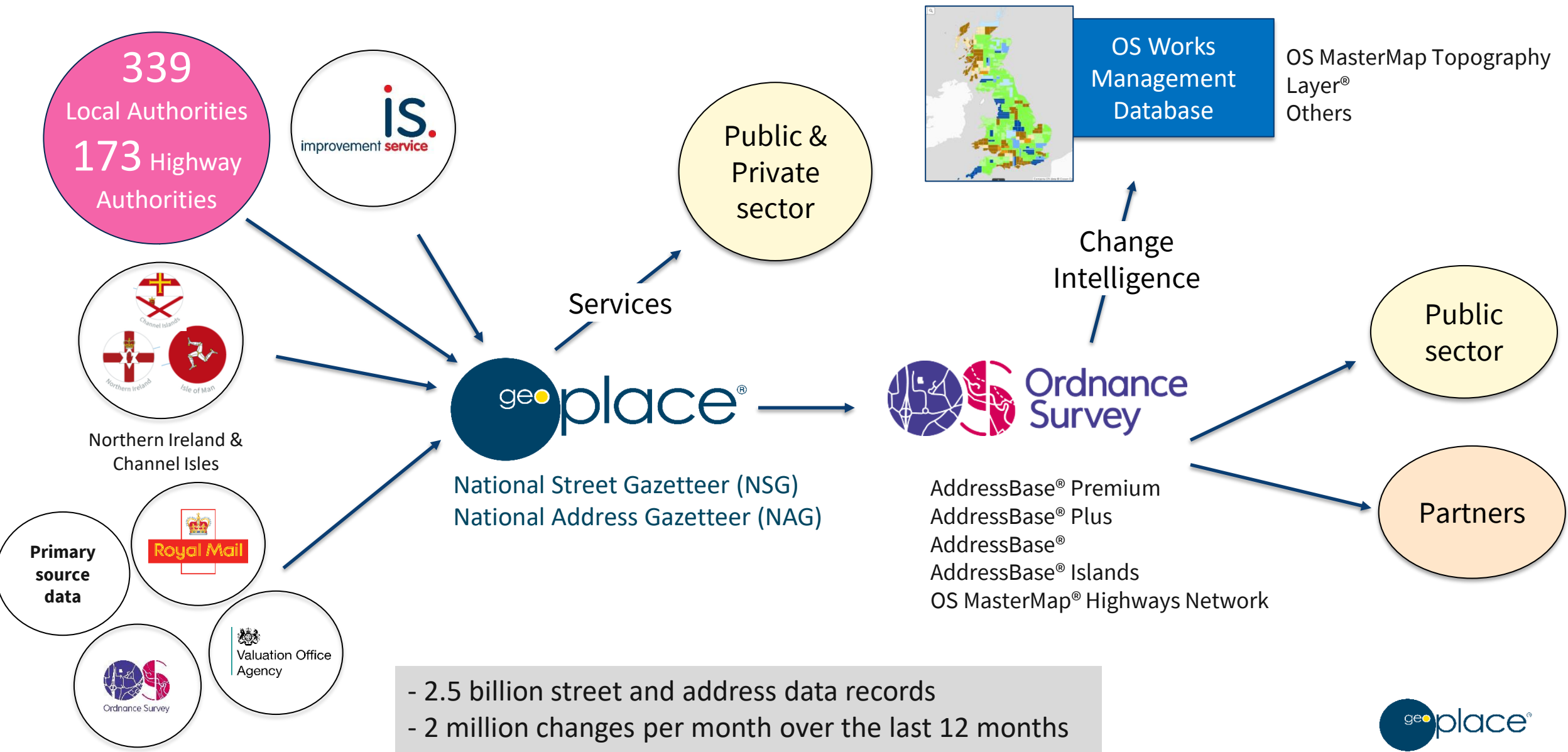
...Government are today announcing they will **bring together publicly owned address information for England and Wales from Ordnance Survey and local authorities** to create a “**national address gazetteer database**”, providing one definitive source of accurate spatial address data.

To deliver this, an agreement has been reached to set up a joint venture between Ordnance Survey and the local government group to create a single source of address data. Having just **one database will remove duplication and inefficient processes** in the public sector and will provide a **better quality of information for all users**.

2nd December 2010



Trusted, established and successful street and address data flow



- 2.5 billion street and address data records
- 2 million changes per month over the last 12 months

Unique referencing provides a 'golden thread' to connect organisations, decisions and processes

The **Unique Property Reference Number (UPRN)** is the unique identifier for every location with an address in the UK

The **Unique Street Reference Number (USRN)** is the unique identifier for every street in the UK

- Unambiguous and persistent
- The means to link, share and locate streets, land and property with accuracy and confidence
- Compare Bank Account number, National Insurance Number, Telephone number
- Machine readable

Streets, addresses, identifiers and geometry – are fundamental enablers of strong business, government and society



Value	Common Uses
• Accuracy	• Improve
• Consistency	• Validate
• Certainty	• Link
• Coverage	• Reference
• Efficiency	• Index

Enhanced Internal / external processes

Streets / USRN

Street Name	Country	Town	Status
ABEY LANE	WYOMBSLEY	NORWICH	NORWICH
ABEY ROAD	TOWN CLOSE	NORWICH	NORWICH
ABERFARRE COURT		NORWICH	NORWICH
ABERFARRE WAY	ELTON	NORWICH	NORWICH
ABERFARRE WAY FOOTPATH BETWEEN AND BY TO JARVIS HOUSE		NORWICH	NORWICH
ABERFARRE WAY FOOTPATH BETWEEN AND BY TO EAST OF 76		NORWICH	NORWICH

Address / UPRN

UPRN	Language	Address	Status	Local Authority
100000176	ENGL	CLARENCE TERRACE 10-12 CLARENCE ROAD NORWICH	Residential	NORWICH
100000176	ENGL	CLARENCE TERRACE 2-12 CLARENCE ROAD NORWICH	Residential	NORWICH
100000180	ENGL	8 CLARENCE ROAD NORWICH	Residential	NORWICH

Enhanced Internal / external processes

Geocode



Internal / external geospatial processes



UPRN and USRN and geometry become open from 1st July 2020

[Coronavirus \(COVID-19\): what you need to do](#)

[Home](#)

Press release

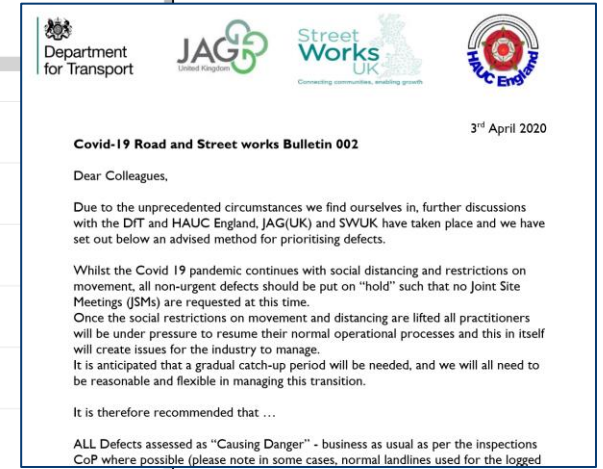
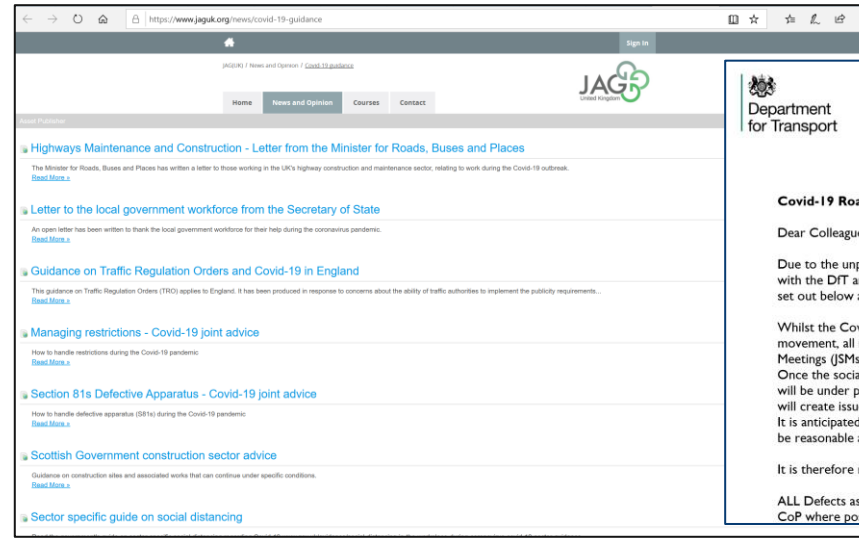
Geospatial Commission to release core identifiers under Open Government Licence

Unique Property and Street Reference Numbers to become the standard way of referencing and sharing address information about properties and streets across government, helping to transform public services and boost our economy

- UPRN, USRN with X,Y coordinates datasets under Open Government License (OGL)
- Government Digital Service (GDS) mandate for use of the UPRN and USRN by government



&



Street Manager

Permit Schemes

TROs

PROW

Street works
Management

NSG

TROs

Permit Schemes

PROW

Street works
Underground
Assets

OS MM
Highways

Open policies

Underground assets

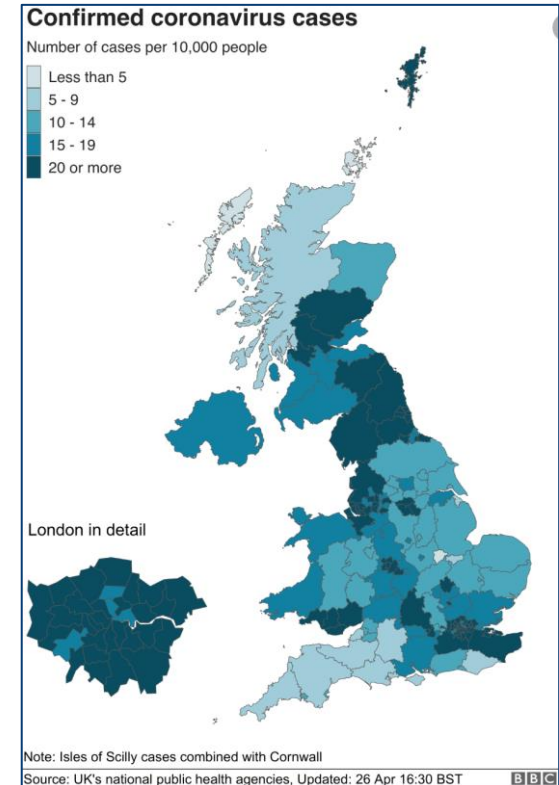
Asset management

Fibre to the premise (DCMS)



COVID 19 – local services, vulnerable people, essential supplies, business rates relief

Councils we have heard from:



COVID 19 – vulnerable person register, address data management and data quality

GOV.UK

Coronavirus (COVID-19): guidance and support

Home

Get coronavirus support as a clinically extremely vulnerable person

Register with this service if either:

- you have a medical condition which means you're classed as being clinically extremely vulnerable to coronavirus
- you've been told by your GP or hospital clinician that you're clinically extremely vulnerable and need to 'shield'

'Shielding' means not leaving your home and minimising contact with other members of your household.

If you need it, you'll be able to:

- get a weekly box of basic supplies
- get priority for supermarket deliveries
- ask for help meeting your basic care needs

You can register yourself, or on behalf of someone else.

[Start now >](#)

Related content
[Coronavirus \(COVID-19\): guidance and support](#)

GOV.UK

[Back](#)

What is the address where you need support?

If you're applying for someone else, enter the address of the person who needs support.

Building and street

Town or city

County

Postcode

[Continue](#)

COVID 19 – GeoPlace direct engagements

Working hard to ensure UPRNs and USRNs are applied across government



Cabinet Office



Office for
National Statistics



Government
Digital Service



**The Scottish
Government**
Riaghaltas na h-Alba



Public Health
England



Department
for Transport



Geospatial
Commission



Department
for Environment
Food & Rural Affairs



Llywodraeth Cymru
Welsh Government



England



Ministry of Housing,
Communities &
Local Government

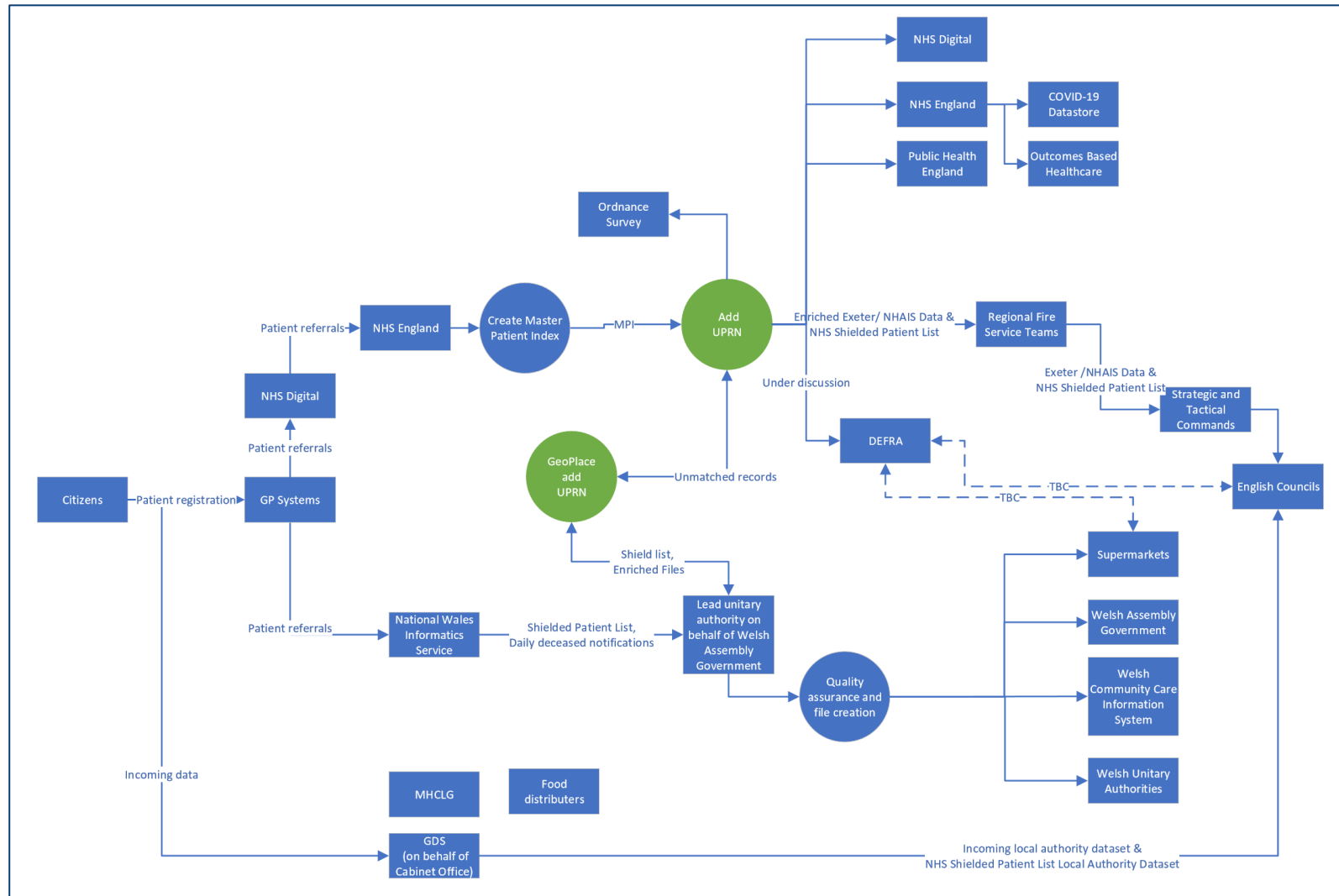
Example street and address data requests

Definitive lists from originating sources, addresses, UPRNs and coordinates

Purpose: Quality improvement through matching for accuracy, completeness, validation, linking/sharing,

- GP surgeries
- Pharmacies
- Hospitals
- Care Homes
- Hospices
- Supermarkets
- Emergency Services
- Utility infrastructure assets
- Mortuaries / Funeral Directors
- Schools

COVID 19 - Observed data flows and dependencies



Emerging lessons learned

- Single actions from central government
- Data management practises
- Inconsistent adoption of definitive data
- Local government the lead role
- Data sharing – contracts and technical infrastructure

Trusted data powers successful digital public services

Consequences of poor quality data



INEFFICIENCIES



POOR OR WRONG
DECISIONS



MISTRUST AND LOW
CONFIDENCE

Foundations of data quality



Our lessons for success

- Invest and continue to invest
- Cooperation and commitment
- Trust, openness, listening
- Standards
- Guidelines

In summary – infrastructure needs and emergency responses

- Scope of infrastructure – objectives, processes, data, software, technology infrastructure, people
- Data quality a fundamental in building trust for data sharing and use – brought into focus at a time of crisis
- UPRN, USRN open and mandate from 1st July – ubiquitous take-up
- COVID 19 has brought data quality, data management and sharing into focus – particularly connectivity between central and local government