



UK Government

The Value of Location Data guidance

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Geospatial Commission, UK

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UN World Geospatial Information Congress - Hyderabad, India



UK Government

About the Geospatial Commission

The UK's Geospatial Commission delivers the national geospatial strategy. This sets out how, together, we can enable the UK to unlock the power of location.

We are an expert committee that is part of the UK's central government department, the Cabinet Office.

We have four key missions:

- 1. Promoting and safeguarding the use of location data**
2. Improving access to better location data
3. Enhancing skills, capabilities and awareness
4. Enabling innovation



Geospatial Commission



Outline

1. Key challenges involved in valuing location data
2. Value of Location Data guidance addressing some of these challenges



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Making the value case for investment



Why is location data important?

1. Fundamentally underpins key operations of existing services that we use everyday:



2. Plays an important role in meeting key national priorities such as **Economic Growth** and **Net Zero**.

Location data is unique because of the unique insights it offers when combined with other subject-specific datasets.

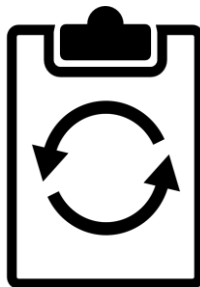
These help answer key policy questions and provides decision makers with a richer picture of the problems and constraints through a geographical lens



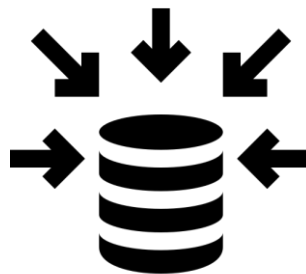
Challenges with valuing geospatial data



Wide range of applications



Experience good



One of multiple inputs



Benefits spillover

All of this means that it is difficult for decision makers to understand and compare the benefits and assess its value, leading to underinvestment in the geospatial data ecosystem.



Value of Location Data guidance

*Providing a consistent and practical framework that empowers public sector organisations to more **effectively drive the case for the public sector making location data investments***

7 Step Framework. Includes Case Studies.

Principals primarily focus on public sector investment decisions, but we know there are relevant overlaps with the private sector, particularly when framing the importance and value-add of a particular geospatial solution.

MEASURING THE ECONOMIC,
SOCIAL AND
ENVIRONMENTAL VALUE OF
PUBLIC SECTOR LOCATION
DATA

Benefit Appraisal Guidance

4th AUGUST 2022



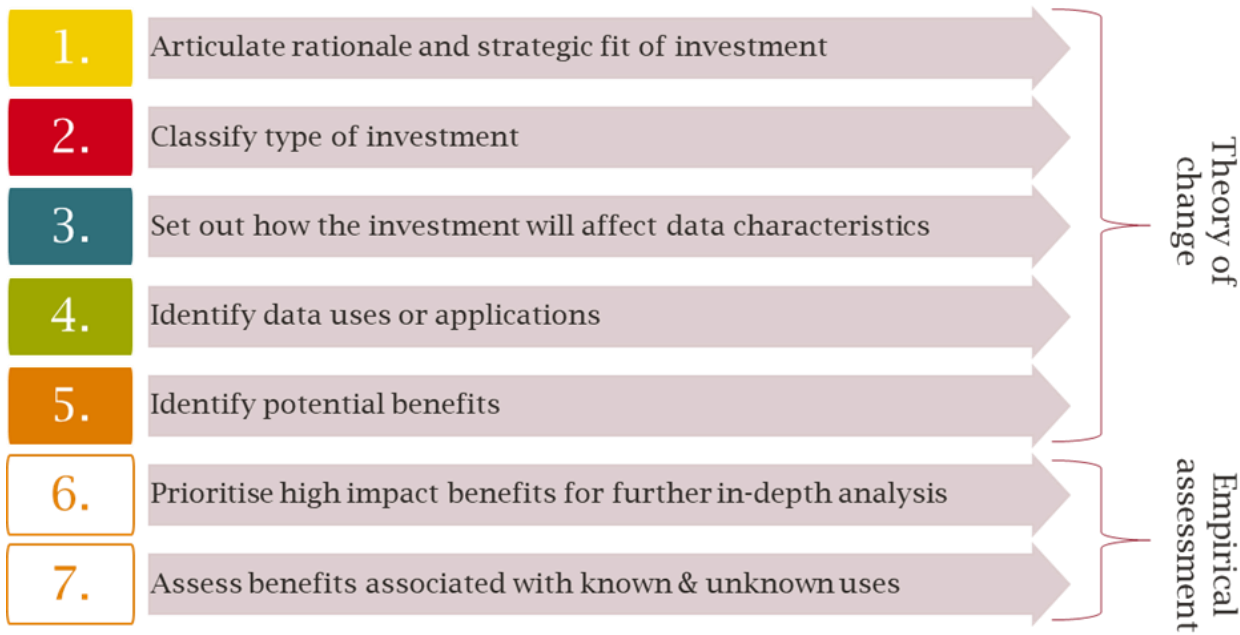
Geospatial
Commission





Value of Location Data: the framework

Informed by experience of the UK Geospatial Commission, public and private sector stakeholders.





Step 1: Articulate Rationale



GAPS OR
OPPORTUNITIES



WIDER
POLICY LINK



Step 2: Classify Investment

IMPROVE OR
MAINTAIN DATA

CREATE NEW
DATA

SHARE
DATA

BUY
DATA

OTHER ECOSYSTEM
INVESTMENTS





Step 3: Effect on Data Characteristics

Q



QUALITY

OBJECTIVE QUALITY

"More always better"

- Completeness
- Consistent / Coherent
- Representativeness / Generality
- Interpretable / Good metadata
- Accuracy

SUBJECTIVE QUALITY

"More not always better"

- Timeliness
- Time series
- Granularity / Precision / Resolution

- Relevant subject matter

F



FINDABILITY

- Where is the data saved / published?
- Is the data easily searchable?
- Discovery metadata
- From an authoritative / reputable source
- Have an audit trail / lineage

A



ACCESSIBILITY

- Ownership of the dataset
- Licensing arrangements for the user:
 - Open / Excludable
 - Price / Cost
- Liabilities and risks (for the user)
- API / ability to query location data
- Size

I



INTEROPERABILITY

- Processing requirements
 - Support
 - Format / Structure
- Joinability / Linkability
 - Unique identifiers
 - Standardised
 - Coordinates

R



(RE)USABILITY

- Anonymised
- Ability to (re)share (open source)
- Confidentiality
- Administrative costs associated with:
 - Usage restrictions
 - Permissions





Step 4: Identify Use Cases



Step 5: Identify Benefits



ECONOMIC
VALUE



SOCIAL
VALUE

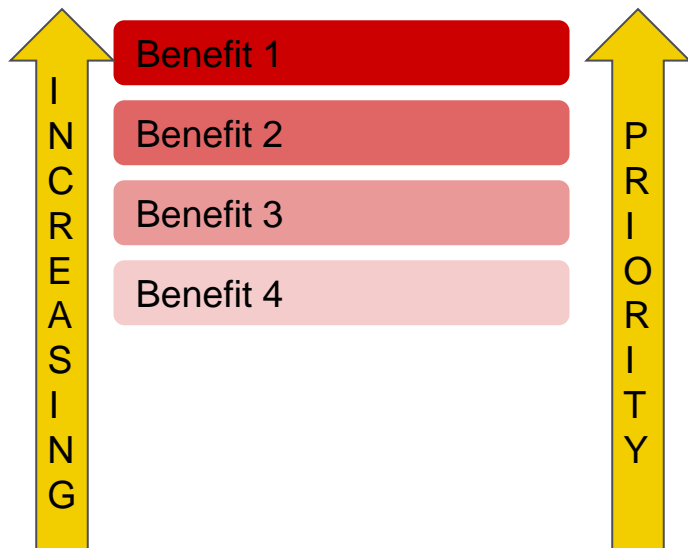


ENVIRONMENTAL
VALUE

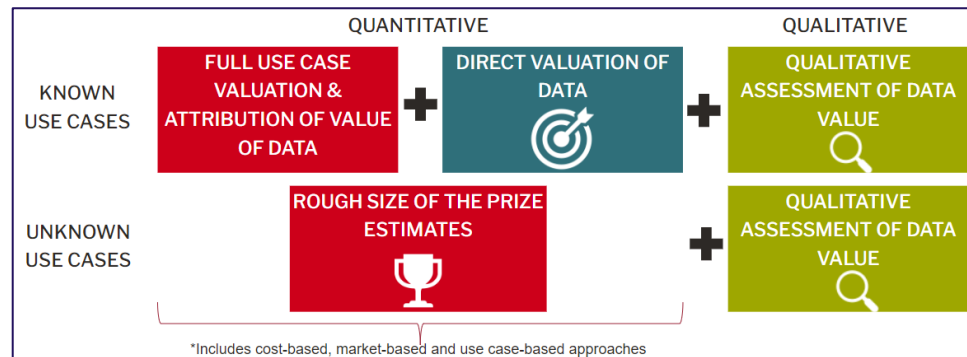




Step 6: Prioritise potential benefits for further assessment



Step 7: Assess benefits (quantitative & qualitative)



Full details are available in the published guidance



Please read our guidance:

<https://www.gov.uk/government/publications/measuring-the-economic-social-and-environmental-value-of-public-sector-location-data>

Guidance


Measuring the Economic, Social and Environmental value of public sector location data


Benefit appraisal guidance on how to assess the economic, social and environmental value of investments in location data

From: [Cabinet Office](#) and [Geospatial Commission](#)
Published 4 August 2022

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Documents

 [Measuring the Economic, Social and Environmental value of public sector location data - Executive Summary](#)
HTML

 [Measuring the Economic, Social and Environmental value of public sector location data](#)
PDF, 3.41 MB, 58 pages

 [Measuring the Economic, Social and Environmental value of public sector location data - One Page Summary](#)
PDF, 1.19 MB, 1 page

 [Measuring the Economic, Social and Environmental value of public sector location data - Case Studies](#)
PDF, 1.14 MB, 20 pages

Details

Location data has clear importance as a strategic national asset, delivering significant value for people, organisations and wider society. Public sector investments have struggled to understand, assess and articulate the economic, social and environmental value of location data - which is a necessity to unlock funding.

Assessing the value of location data is hard because:

- Value is often realised only when location data is combined with other datasets
- Value varies depending on the intended use
- Value can be difficult to foresee

The Geospatial Commission worked with Frontier Economics to develop practical guidance for public sector organisations to more effectively drive the investment case for location data, based on best-practice methods, existing research and experiences of stakeholders, in-line with a commitment made in the UK's Geospatial Strategy.



Case Studies: Applying the Framework

National Underground Asset Register (NUAR)

Quality

Findability

Accessibility

Interoperability

Reusability

Transport for London

Quality

Findability

Accessibility

Interoperability

Reusability

Public Sector Geospatial Agreement (PSGA)

Quality

Findability

Accessibility

Interoperability

Reusability

His Majesty's Land Registry

Quality

Findability

Accessibility

Interoperability

Reusability



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You can find out more about our work at:



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