

Is authoritative data worth the price?

The case of addressing data in the UK

Prof Robert Barr OBE

Manchester Geomatics and The University of Liverpool

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Addressing the world – An address for everyone

The white paper




Address infrastructure as a global public good

Societies are formed to ensure their common welfare, and the basis of this welfare is the provision of certain essential elements, or public goods. Two key characteristics distinguish public goods from private goods: their non-rival and non-excludable properties. Once provided, goods with non-rival and non-excludable properties allow individuals to utilize the goods in question without reducing their availability for others and without impeding their use by others.

Since the link between types of usage, benefits and supply cannot be clearly identified, public goods have unclear property rights, which represents a fundamental difference between them and private goods. As a result, the free market cannot ensure the efficient supply of public goods, such as national peace and security. For example, a national security system is a “pure public good” as it protects all inhabitants of a nation, without exclusion, and cannot be exhausted by the addition of new inhabitants. Such is the case with address infrastructure.

Authoritative

au·thor·i·ta·tive

/əˈTHôri,tātiv/ 

Adjective

1. Able to be trusted as being accurate or true; reliable: "clear, authoritative information".
2. (of a text) Considered to be the best of its kind and unlikely to be improved upon.

Synonyms

imperious - magisterial - peremptory - imperative

Definitive

de·fin·i·tive

/di'finitiv/ 

Adjective

(of a conclusion or agreement) Done or reached decisively and with authority: "a definitive diagnosis".

Noun

A definitive postage stamp.

Synonyms

final - conclusive - ultimate - decisive - determinate



Towns Improvement Clauses Act 1847

1847 CHAPTER 34 10 and 11 Vict

An Act for consolidating in One Act certain Provisions usually contained in Acts for paving, draining, cleansing, lighting, and improving Towns.
[21st June 1847]

Naming streets

And with respect to naming the streets and numbering the houses, be it enacted as follows:

64 Houses to be numbered and streets named.

The commissioners shall from time to time cause the houses and buildings in all or any of the streets to be marked with numbers as they think fit, and shall cause to be put up or painted on a conspicuous part of some house, building, or place, at or near each end, corner, or entrance of every such street, the name by which such street is to be known; and every person who destroys, pulls down, or defaces any such number or name, or puts up any number or name different from the number or name put up by the commissioners, shall be liable to a penalty not exceeding [F17[F18£25]] [F17level 1 on the standard scale] for every such offence.

65 Numbers of houses to be renewed by occupiers.

The occupiers of houses and other buildings in the streets shall mark their houses with such numbers as the commissioners approve of, and shall renew such numbers as often as they become obliterated or defaced; and every such occupier who fails, within one week after notice for that purpose from the commissioners, to mark his house with a number approved of by the commissioners, or to renew such number when obliterated, shall be liable to a penalty not exceeding [F19[F20£20]] [F19level 1 on the standard scale], and the commissioners shall cause such numbers to be marked or to be renewed, as the case may require, and the expence thereof shall be repaid to them by such occupier, and shall be recoverable as damages.

Public Health Act, 1925.

[15 & 16 GEO. 5. CH. 71.]

ARRANGEMENT OF SECTIONS.

A.D. 1925.

PART I.

PRELIMINARY.

Section.

1. Short title, construction and commencement.
2. Extent of Act.
3. Adoption by urban authorities of Parts II. to V.
4. Application of Parts II. to V. in rural districts.
5. Mode of adoption by local authorities.
6. Amendment or adaptation of local Acts, &c.
7. Application of certain provisions of Part I. of 7 Edw. VII. c. 53, and interpretation.
8. Appeals to petty sessional court.
9. Repeals.
10. Crown rights.
11. Saving for culverts, &c. of railway companies, &c.
12. Saving for streams, &c. vested in London County Council.

PART II.

STREETS AND BUILDINGS.

Street Bins, Drinking Fountains, Fire Alarms, &c.

13. Street bins.
14. Public drinking fountains, seats, &c. in streets.
15. Fire alarms.
16. Main roads and premises of statutory undertakers.

Naming of Streets.

17. Notice to urban authority before street is named.
18. Alteration of name of street.
19. Indication of name of street.

Statutory Obligations...and guidance

Town improvement clauses act 1847

s.64 houses to be numbered and streets named.

s.65 numbers of houses to be renewed by occupiers

Public Health Act 1907: s. 21 power to alter names of streets

Public Health Act 1925

s.17 notice to urban authority before street is named

s.18 alteration of street name

s.19 indication of street name

Local Acts to consolidate or to modify above procedure

London Building Acts 1939 Greater Manchester Act 1981 etc

Government Guidance: DoT circular roads 3/93 15.12.1993

Postal Services Act 2000:

Power to compile postal address file (PAF) & Code of Practice

DEC- NLPG v.3.1 November 2010 – BS7666

s.4 street naming and numbering (appendix E and F)

s.11 managing and improving quality of land and property records

7 July 2010

/mli-ebst

The value of Danish address data:

*Social benefits from the 2002 agreement on procuring address data etc.
free of charge*

Summary

Addresses play a fundamental role in society. Addresses are used on an enormous scale each day and are an integral part of a large number of IT systems and products both in the public and private sectors.

Addresses are also geographic identifiers that express the location of places and events. Key facilities such as emergency, fire and ambulance services, the police, postal and transport services, GPS systems, etc. all depend entirely on the availability of reliable addresses. Erroneous or incomplete addresses lead to inefficiency and errors and could even, in a worst-case scenario, mean the loss of lives.

Free and unrestricted access to addresses of high quality is beneficial to the public and forms the basis for reaping substantial benefits in public administration and in industry and commerce. This is why, in 2002, the official Danish address data was made available free of charge.

Making public data “free of charge” means setting the price of data to zero, so that users can use the official address data without paying the authorities who create and maintain the data.

DANISH ENTERPRISE AND CONSTRUCTION AUTHORITY

Dahlerups Pakhus
Langelinie Allé 17
2100 Copenhagen
Denmark

Tel. +45 35 46 60 00
Fax +45 35 46 60 01
CVR-no. 48 46 41 14
ebst@ebst.dk
www.ebst.dk

Data Quality

Data Quality

- Validity
 - What does the data item represent?
- Completeness
 - Are all the records expected present
 - If not can the % completeness be assessed
- Attributes
- Timeliness
- Positional accuracy

Open Data White Paper

Unleashing the Potential

#opendata

@uktransparency

@cabinetofficeuk

2.59 There are also various datasets which are regulated to ensure access; one of these is the Postcode Address File (PAF) produced by the Royal Mail. It is an important input to many private sector products and services, and its value now goes far beyond its original purpose as a tool to enable delivery of the mail. It is also a critical part of the National Address Gazetteer (NAG), which is the definitive single address register and is part of considerations to develop plans for a rolling census.

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2.60 The PAF is regulated by Ofcom to ensure that it is maintained and made available to all

users on reasonable terms. Ofcom is currently reviewing this regulatory framework to ensure that it incentivises take-up of the PAF, that the data is made easily accessible on reasonable terms and that it also drives the efficient maintenance of the PAF. The review will consider the costs of maintaining the PAF and the associated licensing and pricing structures. Over the next six months, the Government will also look at options to ensure that the UK as a whole continues to get the best benefit from the PAF, and that the PAF continues to be a key part of the single definitive address register (the NAG).

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PAF

The Ofcom logo, featuring the word "Ofcom" in a bold, red, sans-serif font. Below the text is a horizontal bar composed of several colored segments: dark purple, purple, teal, light green, yellow, orange, pink, red, and dark purple.

Postcode Address File

Review

This is a non-confidential version
of the consultation. Redactions are
indicated by [X]

Figure 4.2: 2011/12 PAF cost stack

Costs allocated to PAF	£m
AMU direct costs	[X]
Customer services	[X]
Frontline costs	[X]
Delivery management	[X]
Legal, property, billing and IT	[X]
Total	24.5

Royal Mail Pinpoint®

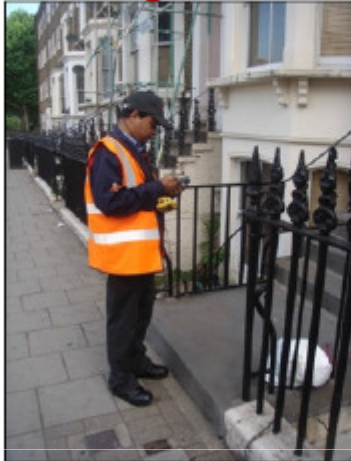
Gill Moore

Changing the market



Pinpoint Data Capture

- Delivery Point
- Access Point



Handheld
GPS receiver



Laser Range
Finder with
Digital
Compass



Handheld
computer
(PDA)



- Measuring the geographic position of the Access and Delivery Point of every UK UDPRN
- Uses handheld GPS receiver and laser range finder device linked to a hand held computer (PDA) to record the measurement
- Ongoing updates of additions and deletions



Royal Mail

AddressBase

AddressBase Premium



AddressBase® Premium provides the most comprehensive view of the world of addresses and properties at all stages of a property and address lifecycle – from planning permission to historic addresses.

COVERAGE

- ✓ Large scale - local

DATA USE

- ✓ Addressing

DATA FORMAT

- ✓ Vector

It includes PAF and Local Authority addresses, as well as:

Try it now

We distribute **free sample data** under the terms of our Discover Data Licence to give an indication of what the data will be like.

You may be interested in this licence if you are a private individual, new customer, social entrepreneur, or represent a social group or start up company.

Download it now

To find out about ordering this product, please visit our [pricing and ordering page](#).





Point X



- Home page
- Company information
- Products
- Downloads
- News
- FAQ
- Data suppliers
- Demonstrator
- Contact us
- Terms & Conditions

Our data takes you straight to the point



Comprehensive, up-to-date and accurate Points of Interest data for Great Britain

PointX's national Points of Interest database provides essential information for businesses delivering location based services as well as users in central government, local authorities, emergency services and the commercial sector.

PointX is committed to delivering the most comprehensive, consistent and current Points of Interest information for Great Britain. Our growing database of more than 4 million features is continuously maintained.

Containing both addressable and non-addressable information, the data is essential for "Where's my nearest...?" and "How do I get to...?" services as well as providing landmarks for applications involving navigation, logistics and spatial analysis.



PointX Classification Scheme

The PointX classification scheme has 3 levels of information. There are 9 groups at Level 1 and 52 categories at Level 2 as shown here. These are broken down into 620 classes of Points of Interest at Level 3.

Customers can select Points of Interest from Levels 1 and 2.

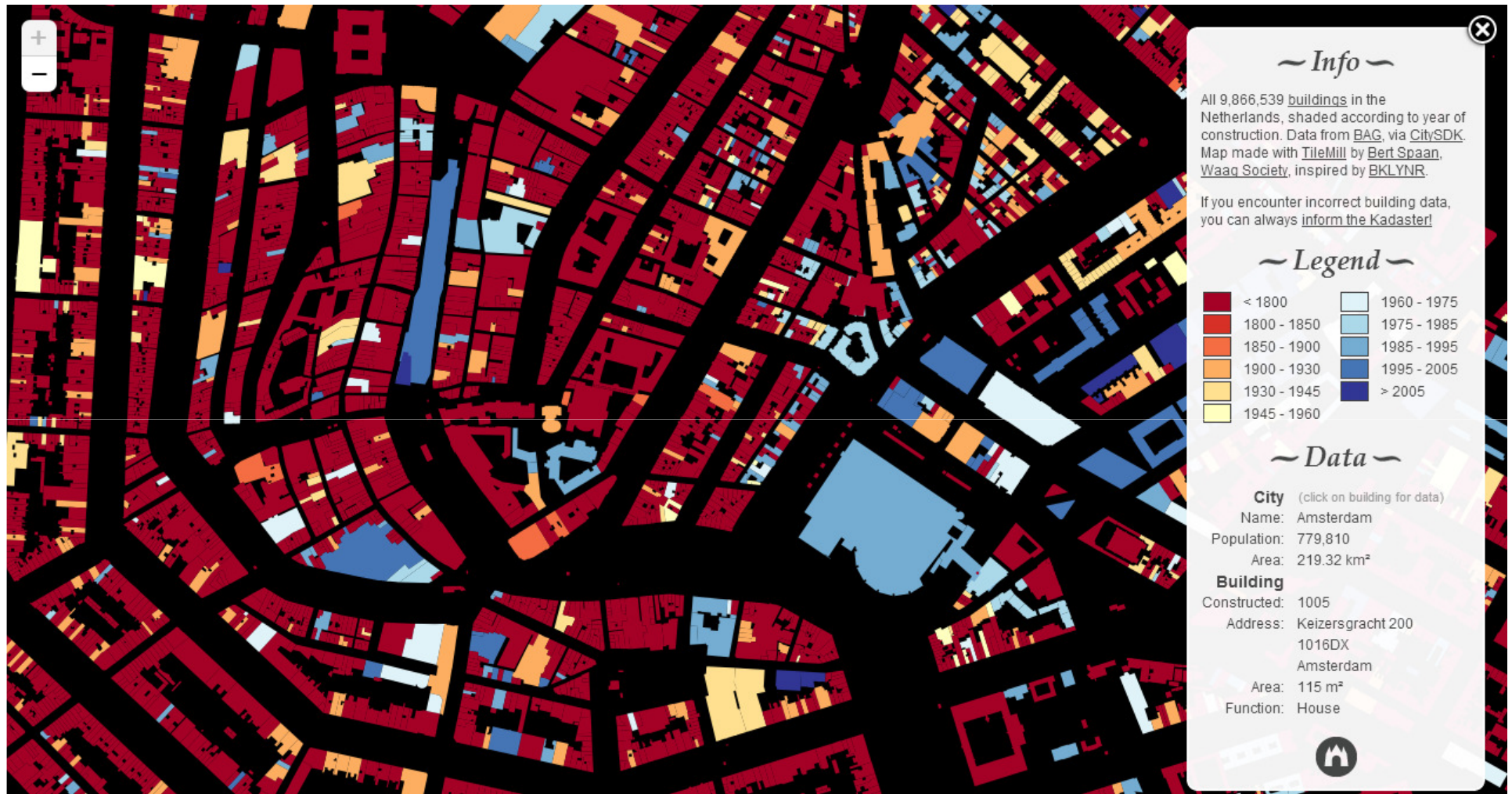
	Page		Page
01 Accommodation, Eating and Drinking	2	05 Education and Health	9
01 ACCOMMODATION		25 ANIMAL WELFARE	
02 EATING AND DRINKING		27 EDUCATION SUPPORT SERVICES	
02 Commercial Services	3	28 HEALTH PRACTITIONERS AND ESTABLISHMENTS	
03 CONSTRUCTION SERVICES		29 HEALTH SUPPORT SERVICES	
04 CONSULTANCIES		31 PRIMARY, SECONDARY AND TERTIARY EDUCATION	
05 EMPLOYMENT AND CAREER AGENCIES		32 RECREATIONAL AND VOCATIONAL EDUCATION	
06 ENGINEERING SERVICES		06 Public Infrastructure	10
07 CONTRACT SERVICES		33 CENTRAL AND LOCAL GOVERNMENT	
08 IT, ADVERTISING, MARKETING AND MEDIA SERVICES		34 INFRASTRUCTURE AND FACILITIES	
09 LEGAL AND FINANCIAL		35 ORGANISATIONS	
10 PERSONAL, CONSUMER AND OTHER SERVICES		07 Manufacturing and Production	11
11 PROPERTY AND DEVELOPMENT SERVICES		37 CONSUMER PRODUCTS	
12 RECYCLING SERVICES		38 EXTRACTIVE INDUSTRIES	
13 REPAIR AND SERVICING		39 FARMING	
14 RESEARCH AND DESIGN		40 FOODSTUFFS	
15 TRANSPORT, STORAGE AND DELIVERY		41 INDUSTRIAL FEATURES	
16 HIRE SERVICES		42 INDUSTRIAL PRODUCTS	
03 Attractions	7	09 Retail	13
16 BOTANICAL AND ZOOLOGICAL		46 CLOTHING AND ACCESSORIES	
17 HISTORICAL AND CULTURAL		47 FOOD, DRINK AND MULTI ITEM RETAIL	
18 RECREATIONAL		48 HOUSEHOLD, OFFICE, LEISURE AND GARDEN	
19 LANDSCAPE FEATURES		49 MOTORING	
20 TOURISM		10 Transport	14
50 BODIES OF WATER		53 AIR	
04 Sport and Entertainment	8	54 ROAD AND RAIL	
21 SPORT AND ENTERTAINMENT SUPPORT SERVICES		55 WALKING	
		56 WATER	
		57 PUBLIC TRANSPORT, STATIONS AND INFRASTRUCTURE	
		59 BUS TRANSPORT	

Address failures

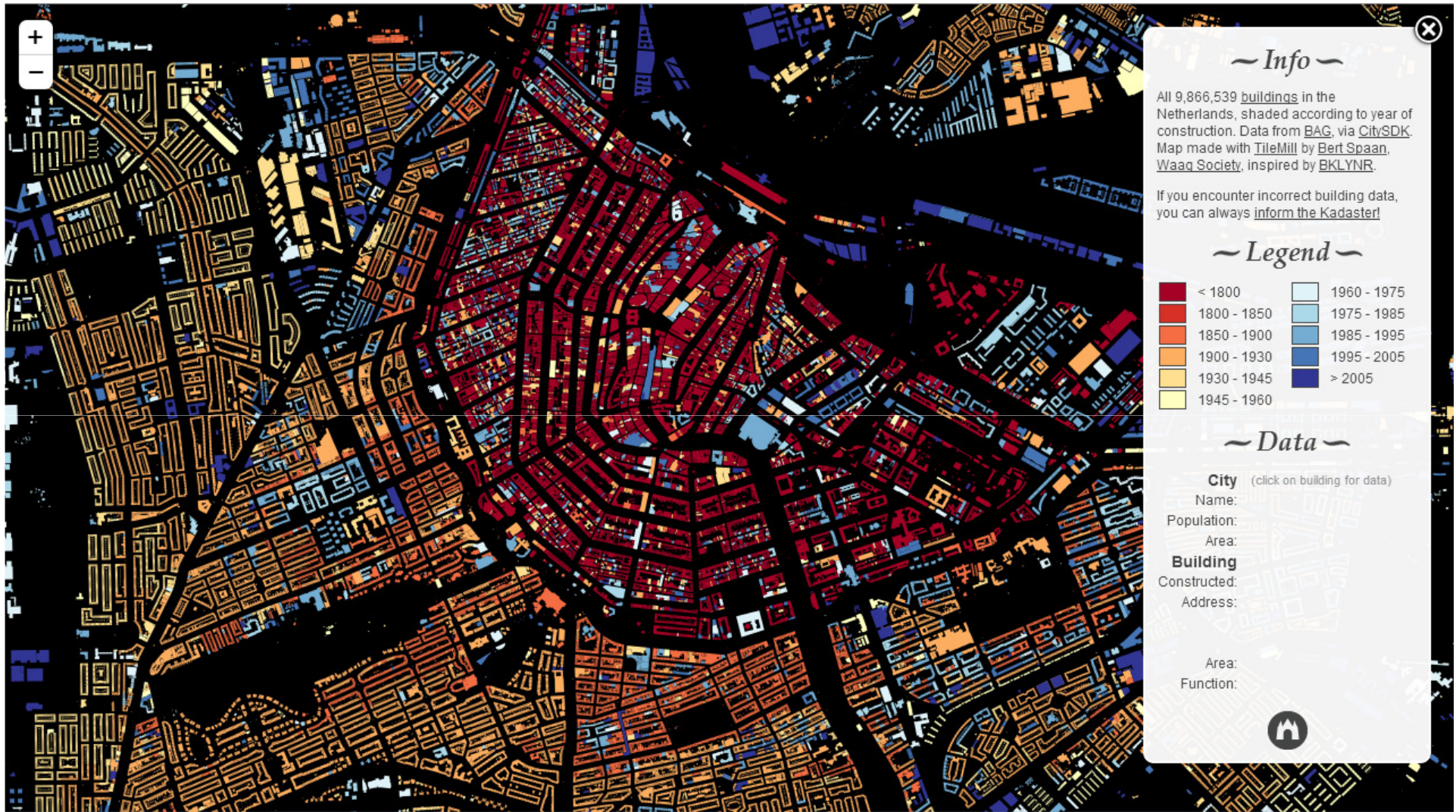
Address failures

- 2001 / 2011 Census
- National Address Register
- Energy meters – DECC Study
- Companies House
- Valuation Office Agency
- Land Registry
- Energy Performance Certificates
- Fire and Rescue Services
- NROSH (National Register of Social Housing)

It can be different



Source: <http://dev.citysdk.waag.org/buildings/#52.3689,4.8986,14>



~ Info ~

All 9,866,539 buildings in the Netherlands, shaded according to year of construction. Data from BAG, via CitySDK. Map made with TileMill by Bert Spaan, Waaq Society, inspired by BKLYNR.

If you encounter incorrect building data, you can always inform the Kadaster!

~ Legend ~

	< 1800		1960 - 1975
	1800 - 1850		1975 - 1985
	1850 - 1900		1985 - 1995
	1900 - 1930		1995 - 2005
	1930 - 1945		> 2005
	1945 - 1960		

~ Data ~

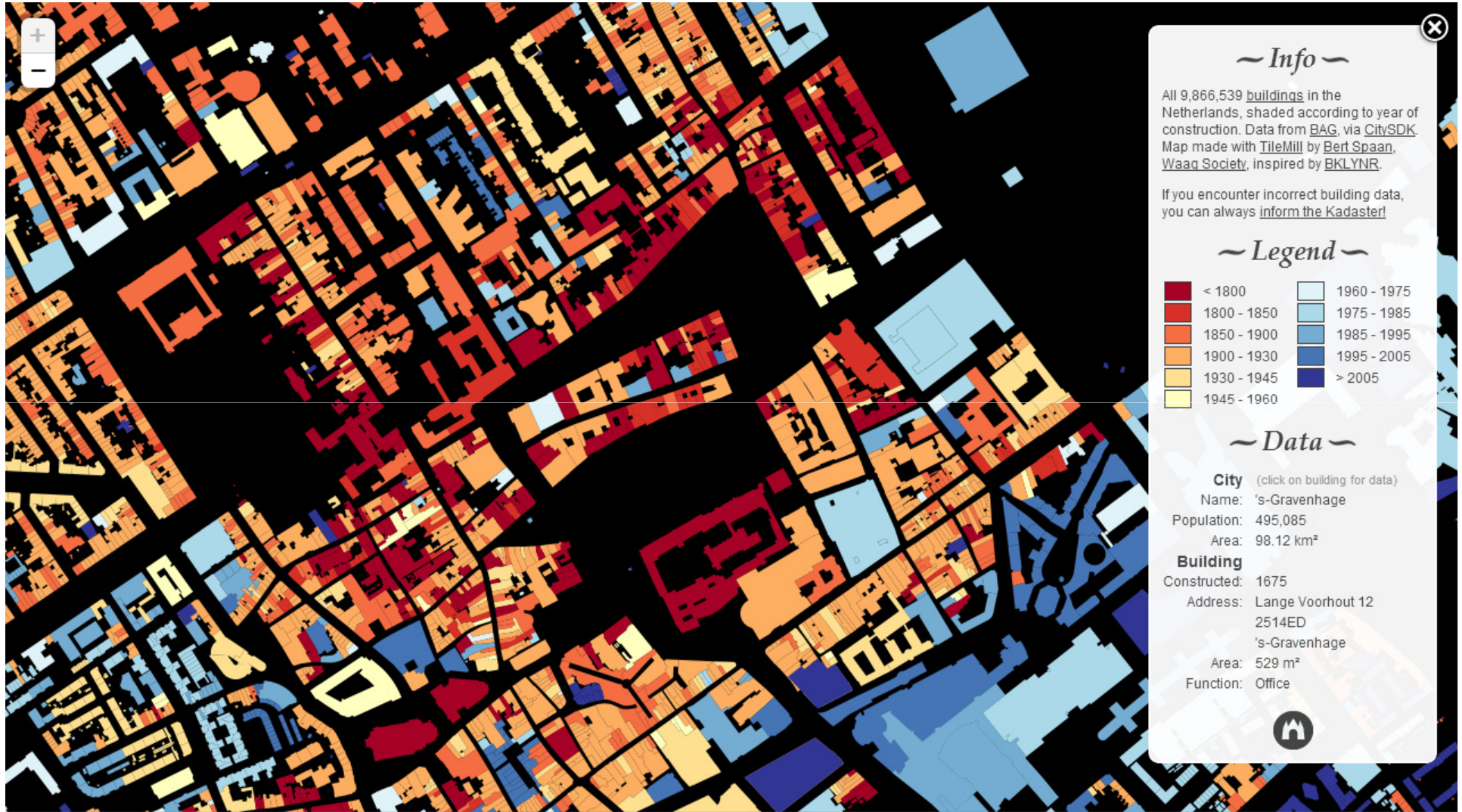
City (click on building for data)

Name:
Population:
Area:

Building
Constructed:
Address:

Area:
Function:

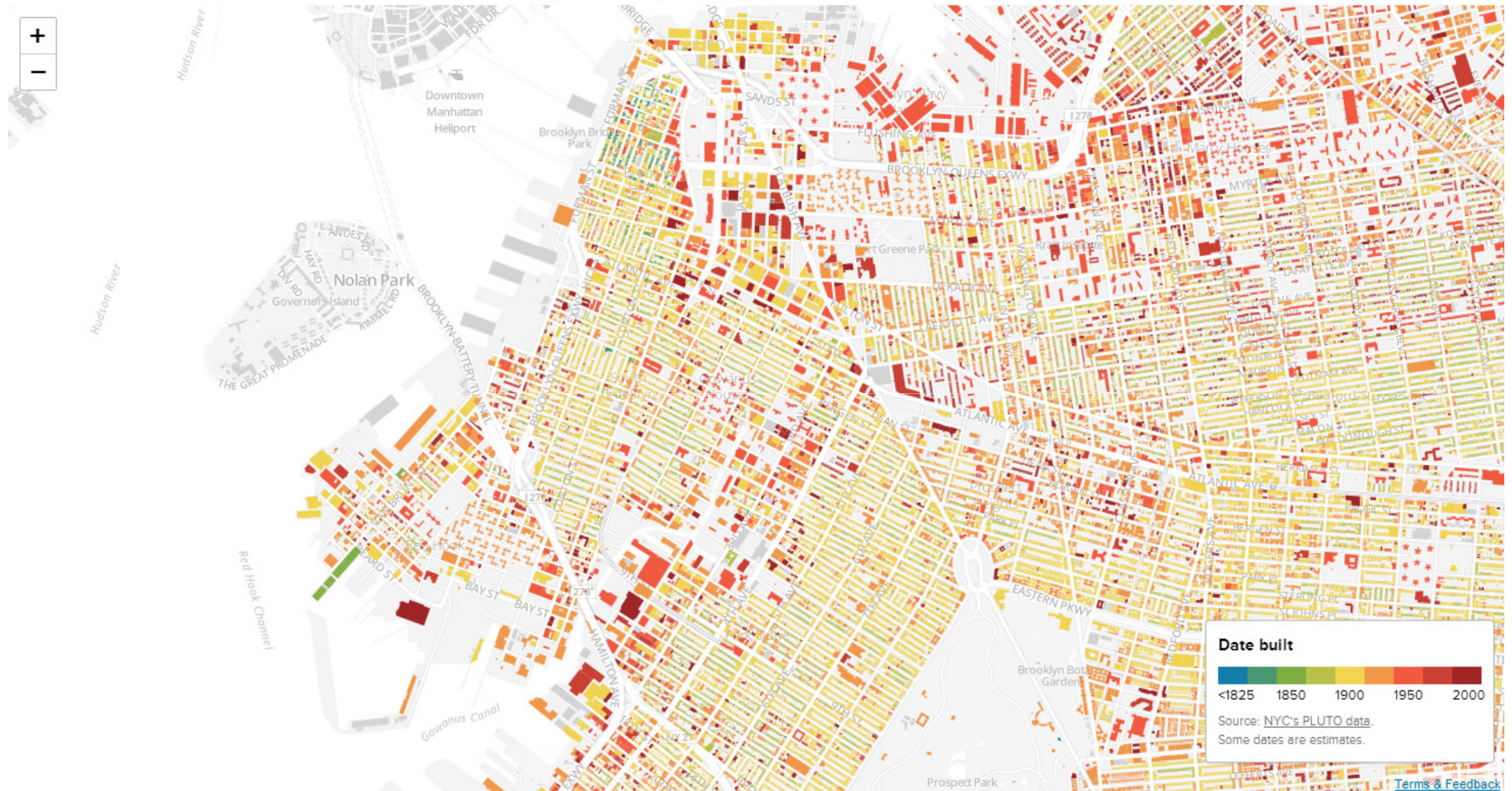




BKLYNR

Block by Block, Brooklyn's Past and Present

Poster



Source: <http://bklynr.com/block-by-block-brooklyns-past-and-present/>

Conclusions

Conclusions

- Addressing in the UK is NOT:
 - Definitive
 - Authoritative
 - A Public Good
 - Of measurable quality
 - Fit for many specific purposes
 - Used as widely as it could be
 - Maintained cost effectively

WHY?

Conclusions

BECAUSE:

- Since 1979 the primary motivation for maintaining national address files has been to make a profit or surplus through trading (often only loosely related to costs)
- BIS (parts), The Treasury, Royal Mail PLC and the Public Data Group appear to have won the argument in government.
- This is likely to be subject to a wide range of continuing challenges....

That's It!

Robert Barr

r.barr@peartrees.com