





# Spatially Connected Government in Great Britain

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## Mapping is everywhere

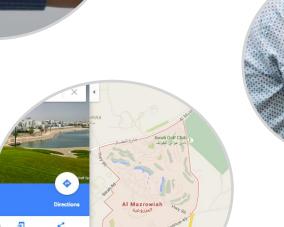




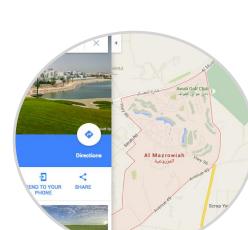














## Location - a vital component!































## Location – a meeting point for information?







#### Same location but known very differently





Planning Dept-Flat 1, 21 Ash Grove London NW2 3LN
Police-Ground Floor Flat, 21 Ash Grove London
Utility-21A Ash Grove London NW2
Land tax-Flat 1, 21 Ash Gr. London NW2 3LM
Fire-21A Ash Grove, Cricklewood
Local Municipality-FL 1 21 Ash Grove







### "UPRN" - Unique spatial ID code for every real world object







Allocation of school places



Delivery of social care









Streetworks



"UPRN"



**Emergency** situations



Delivery of packages



Payment of taxes



Quotation for insurance

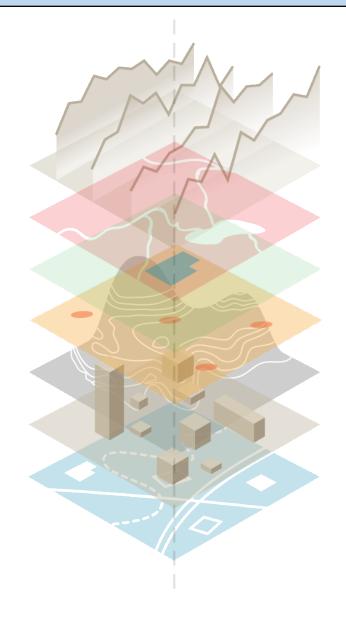


Collection of waste

#### Unique Consistent Reference -Linking all government information







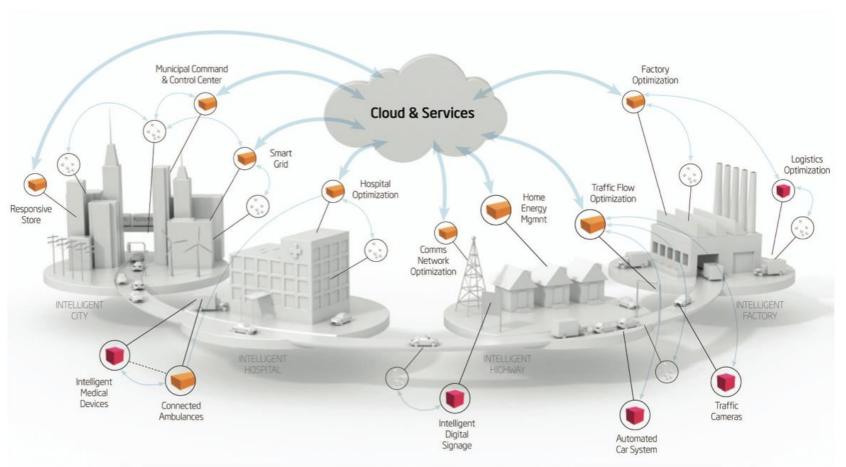
- Health records
- Flood plain
- Land ownership
- Utility supply/smart meters
- Topography
- Height of building? Floor levels?
- Crime, education, vulnerable persons







# Sensors Everywhere- (Things or Devices)



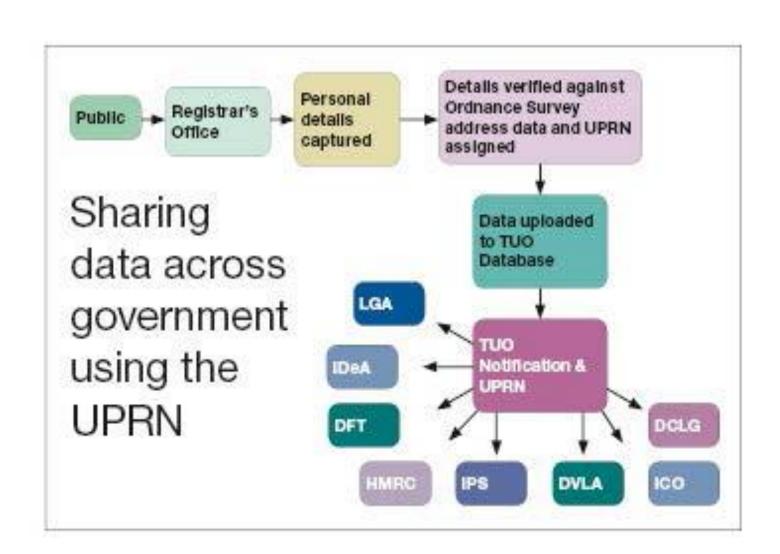
Slide source: Steve Liang, Univ. Calgary

#### Tell Us Once- UK Department for Works and Pensions





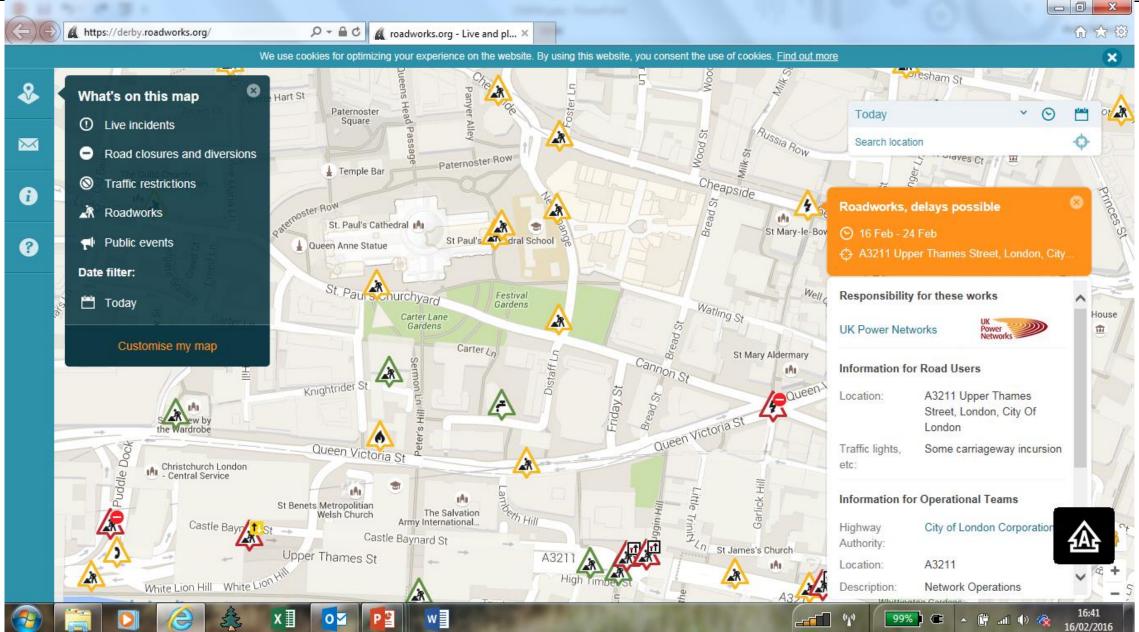
- Over 10 years, \$400 m in savings is predicted – based on evidencebased pathfinders and trials.
- \$100 m of savings for families over the next 10 years, resulting from the money saved on fuel or parking charges.



#### Coordination of utility roadworks







# Resilience Mapping Everyone seeing the same information at the same time







#### Savings made UK public sector using spatial data









Council's
waste
project
saves
\$4.8m
over 10
years



Automated bus pass allocation project saves Liverpool \$75k



The Suffolk
Waste
Partnership
saves St.
Edmundsbury
\$27k



North
Somerset
District
Council
saves \$1m
on school
transport



Harrowcouncil

Lee Valley
Regional
Park
Authority
saves \$150k
on grounds
maintenanc
e



From 2002, London Borough of Sutton saves \$70k yearly on SEN transport

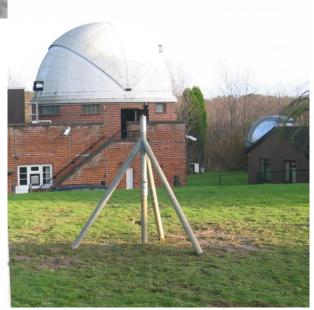
#### OS Net- National CORS Network for Great Britain













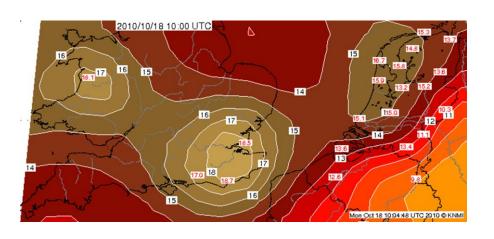
# OS NET data supports a wide range of business activity and academic research

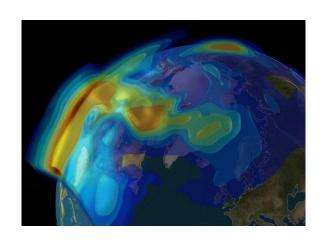


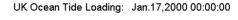


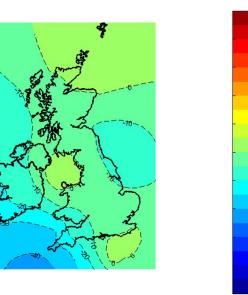


- Weather models
- Highways accident surveying
- Coastal monitoring & engineering
- Geology
- Integrated systems
- Long-term regional vertical land movement
- Meteorology & atmospheric studies
- Environmental monitoring, flood risk
- Wildlife & biodiversity
- Space studies (e.g. interferometry & altimetry)...





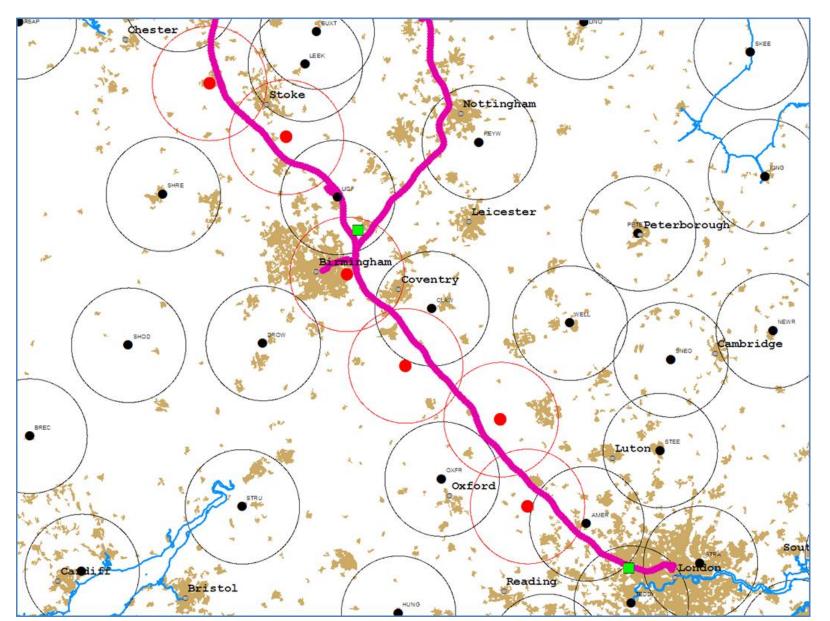




## Supporting key Infrastructure- High Speed 2 rail







#### **Economic Benefits of Spatially Connected Government**







- Ordnance Survey data underpins \$113bn of Great Britain's economy Source- OXERA
- For every \$1 spent on address and street spatial data \$4 is saved
   Source-Geoplace
- Across the 15 most commonly built applications using data from the UK single data framework, research shows that UK local authorities, police forces and fire services are already saving over \$187 million every year
- If a majority (75%+) of local authorities and emergency services were to implement just these 15 most popular applications, savings would rise to over **\$0.7 billion** each year.

Source- Mindmetre 2015



• 0.2 to 0.6 GDP growth in UK







- Easy exchange of information and open data between organisations and users through single location reference
- Underpins innovation
- Best evidence for best policy creation and optimised (smart) front line public services
- Easier interaction with citizens- better public services and happier citizens

Saves money, time and the environment







# Thank You

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