

# How open data is redefining and reaffirming the roles of the journalist, audience and publisher

**Andrew Leimdorfer, BBC News Interactive and Graphics - @leimdorfer**

**Olivier Thereaux, BBC R&D - @olivierthereaux**

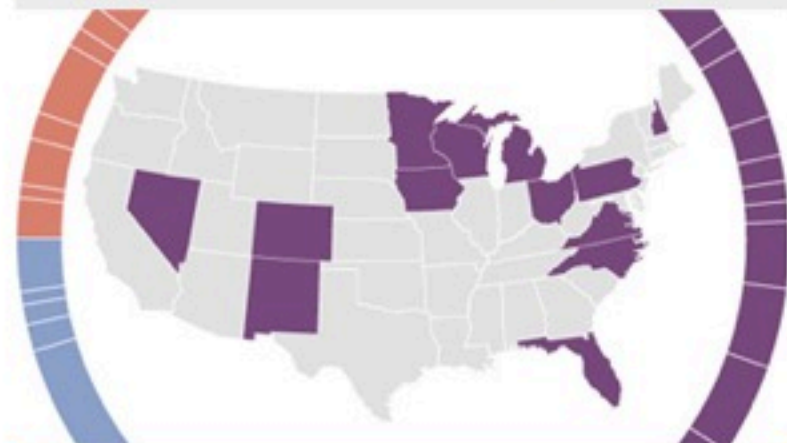
18 April 2012 Last updated at 12:08



**Titanic: Faces of the crew**  
Find out more about the workers on board

This interactive feature consists of a large grid of small, black and white portrait photographs of the crew members of the Titanic. A semi-transparent image of the Titanic ship is overlaid on the grid, showing its position relative to the faces.


### Infographics and data



**US election: Battleground states**  
Which states will decide the Presidential election?

 **Olympics people**  
Cast of thousands behind sporting event of the year

 **Where are you on the global pay scale?**  
Type in your salary and find out

 **Budget calculator 2012**  
How will the chancellor's Budget affect you?

### Interactive Features



@bbcnewsgraphics @leimdorfer

# RQIV

## Reach, Quality, Impact , Value

<b>Reach</b>		<b>Impact</b>	
Page Views		Shares	Interactions
Very High	> 4 Million	50k	100%
High	> 1 Million	5k	50%
Medium	> 250k	1k	25%
Low	< 250k	<1k	<25%

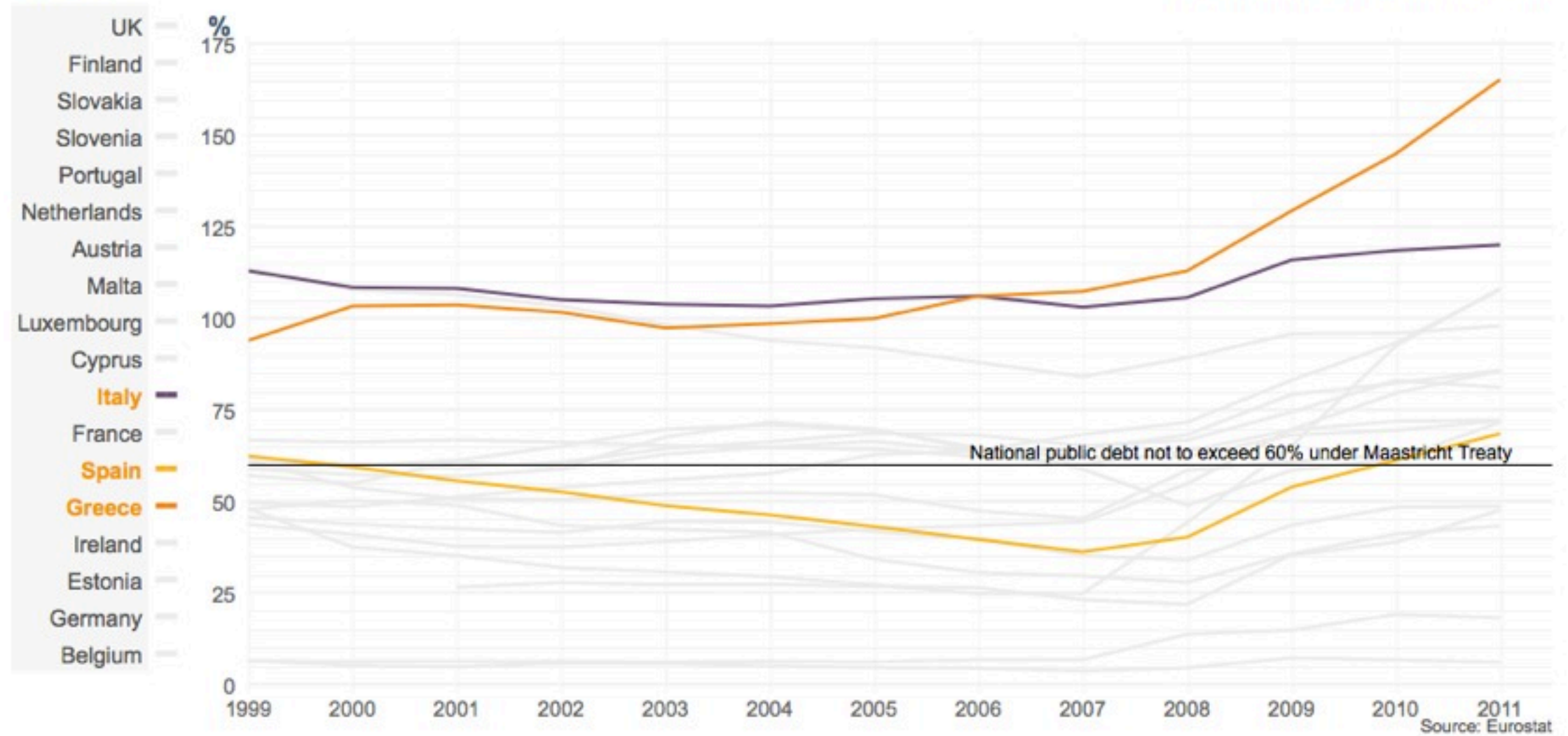
## In graphics: Eurozone crisis

Deficit | GDP | Unemployment | **Debt**

### Government debt as a proportion of GDP

Select country to highlight data

Click and drag in the chart to zoom in



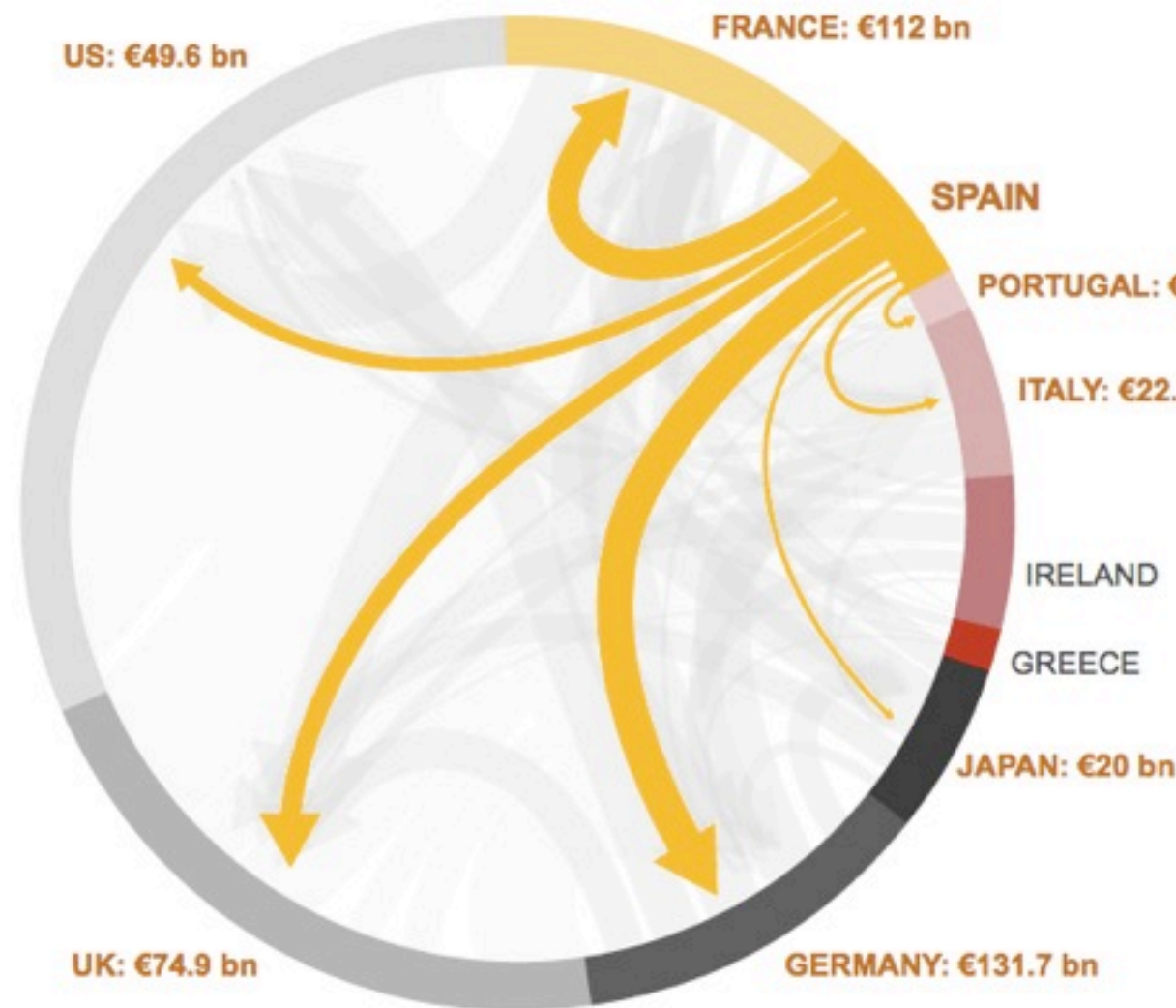


*“I was no good at Maths at school so I don’t want to be reminded of that in my free time”*

Heavy user of news websites

## Eurozone debt web: Who owes what to whom?

The circle below shows the gross external, or foreign, debt of some of the main players in the eurozone as well as other big world economies. The arrows show how much money is owed by each country to banks in other nations. The arrows point from the debtor to the creditor and are proportional to the money owed as of the end of June 2011. The colours attributed to countries are a rough guide to how much trouble each economy is in.



### SPAIN

GDP: €0.7 tn

Foreign debt: €1.9 tn

€41,366

Foreign debt per person



284%

67%

Foreign debt to GDP Govt debt to GDP

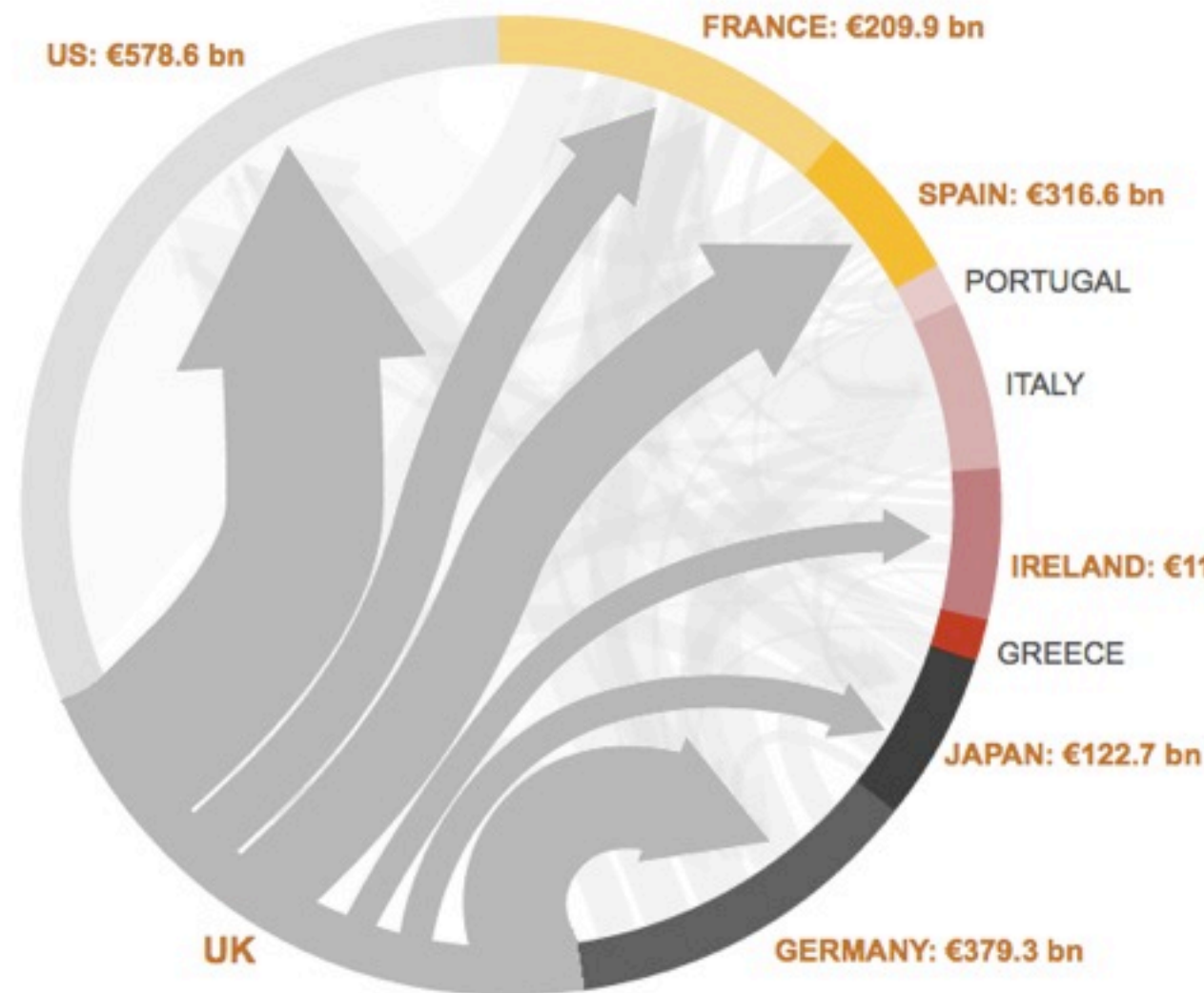
Risk Status: ■ MEDIUM

Spain owes large amounts to Germany and France. However, its number one worry is bailed-out Portugal, which is indebted to it by billions of euros. As the country attempts to get its own debts under control, there are fears the country could be thrown back into recession after November's parliamentary elections. The bursting of a housing and construction boom in 2008 had plunged Spain's economy into a recession deeper than in many other European countries.

[Back to introduction](#)

## Eurozone debt web: Who owes what to whom?

The circle below shows the gross external, or foreign, debt of some of the main players in the eurozone as well as other big world economies. The arrows show how much money is owed by each country to banks in other nations. The arrows point from the debtor to the creditor and are proportional to the money owed as of the end of June 2011. The colours attributed to countries are a rough guide to how much trouble each economy is in.



### UK

GDP: €1.7 tn

Foreign debt: €7.3 tn

€117,580  
Foreign debt per person

436% 81%  
Foreign debt to GDP Govt debt to GDP

Risk Status: LOW

The UK has very large amounts of overseas debt, of which the biggest component is the banking industry. The high debt to GDP ratio is explained by the UK's active financial sector, where there is a great deal of capital movement. This level of overall external debt is generally not seen as a problem because the UK also holds high-value assets. Having said this, the UK economy remains in the doldrums and the country is highly exposed to Irish as well as Italian and Portuguese debt. The UK in turn owes hundreds of billions to Germany and Spain.

[Back to introduction](#)





Home Archives Subscribe Book Blog

« What went wrong and how? | Main | Statistical adjustment in charts »

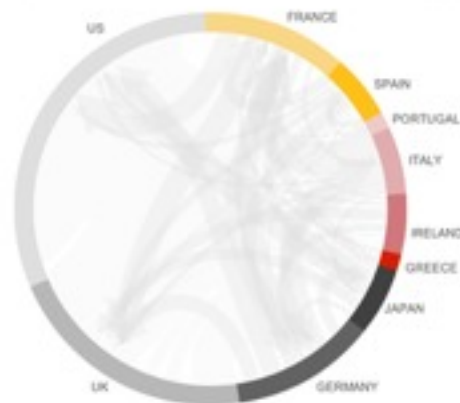
### Lost in complexity

Felix Salmon (link) and others linked to this BBC News graphic about European debt recently.

18 November 2011 Last updated at 04:20 ET

#### Eurozone debt web: Who owes what to whom?

The circle below shows the gross external, or foreign, debt of some of the main players in the eurozone as well as other big world economies. The arrows show how much money is owed by each country to banks in other nations. The arrows point from the debtor to the creditor and are proportional to the money owed as of the end of June 2011. The colours attributed to countries are a rough guide to how much trouble each economy is in.



#### ABOUT

Click on a country name to see who they owe

Europe is struggling to find a way out of the eurozone crisis and mounting debts, slowing growth and widespread market gloom. After Greece, Ireland, and Portugal were forced to seek bail-outs, Italy - approaching an unaffordable cost of borrowing - has been the latest focus of concern.

But, with global financial systems so interconnected, this is not just a eurozone problem and the repercussions extend beyond its borders.

While lending between nations prevents this problem during boom years, when a country can no longer handle its debts, those overseas banks and financial institutions that lend it money are exposed to losses. This could not only unsettle the home country of those banks, but could, in turn, spread the troubles across the world.

So, in the tangled web of inter-country lending, who owes what to whom? Click on a country in the circle to find out what they owe to banks in other countries, as well to find out their total foreign debt, including that owed by governments, monetary authorities, banks and companies.

Source: Bank for International Settlements, IMF, World Bank, UN Population Division

Notes on the data: The Bank for International Settlements data, represented by the proportional arrows, shows what banks in one country are owed by debtors - both government and private - in another country. It does not include non-bank debts. Only key eurozone debtors and their top creditors are shown. Although China is known to hold European debt, no comprehensive figures are available.

GDP figures are the latest complete 2010 figures from the IMF. The percentage of gross government debt to GDP is also the latest IMF calculation.

Overall gross external (or foreign) debt is taken from the latest 2011 World Bank/IMF figures and includes all debt owed overseas, including that owed by governments, monetary authorities, banks and companies. Gross external debt per head of population is calculated using the latest medium variant population figures from the UN Population Division.

## Web of debt: FAQs

The BBC News website's interactive feature, Eurozone debt web: Who owes what to whom?, has been extremely popular.

As a result, we have received hundreds of emails asking a range of questions. Here are the answers to some of the most popular.

Why does the graphic show the gross debt owed to foreign banks by each country, rather than the balance of debt between countries?



The visualisation was intended to show the complicated picture of external, or foreign, debt in Europe and beyond, and how much lending goes on between countries. A net figure would not have shown this full picture, although it would have told a different and equally interesting story.

Why don't the debt figures shown in the circle add up to the total gross external debt for a country shown above the text on the right?

Not all countries that are owed money are featured in the graphic. Only the key eurozone countries and some major world economies are included. We wanted to provide a snapshot of the complicated world of inter-country lending.

The figures from the Bank for International Settlements, represented by the arrows, show what is owed to overseas banks by a select number of countries. The overall gross external, or foreign, debt figures featured above the text are from the latest IMF/World Bank quarterly report and represent all foreign debt, including that owed by governments, monetary authorities, banks and companies.

Why isn't China included?

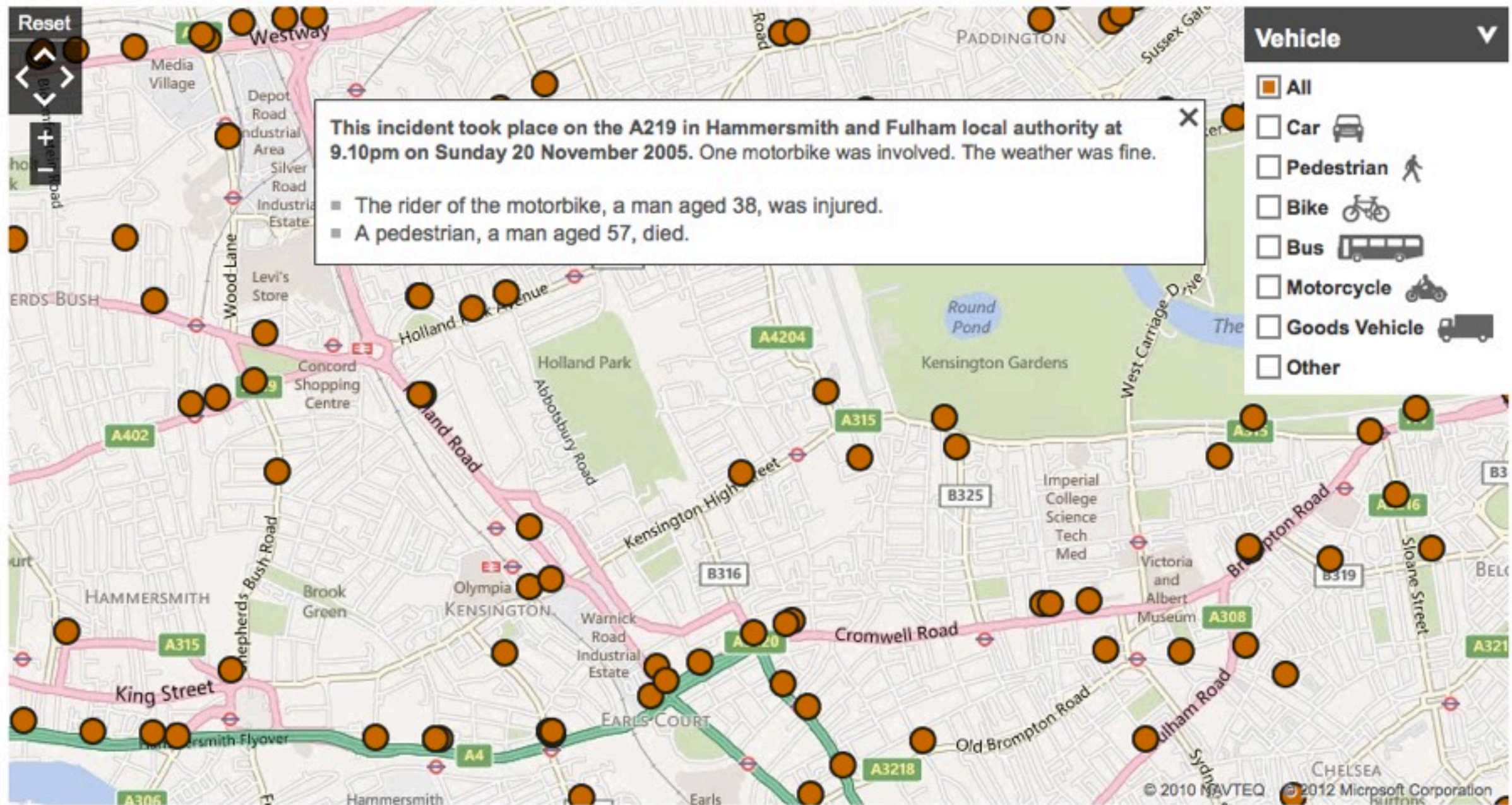
<http://bit.ly/JdLGPK>

<http://bbc.in/rwcnoL>



Enter your postcode  Search by Local Authority

**From 1999-2010 69 people died on the roads in Kensington and Chelsea local authority**









*“The distinctive aspect of what you do, central to your audience’s goals, that differentiates you and makes your product valuable”*

What is your core domain?



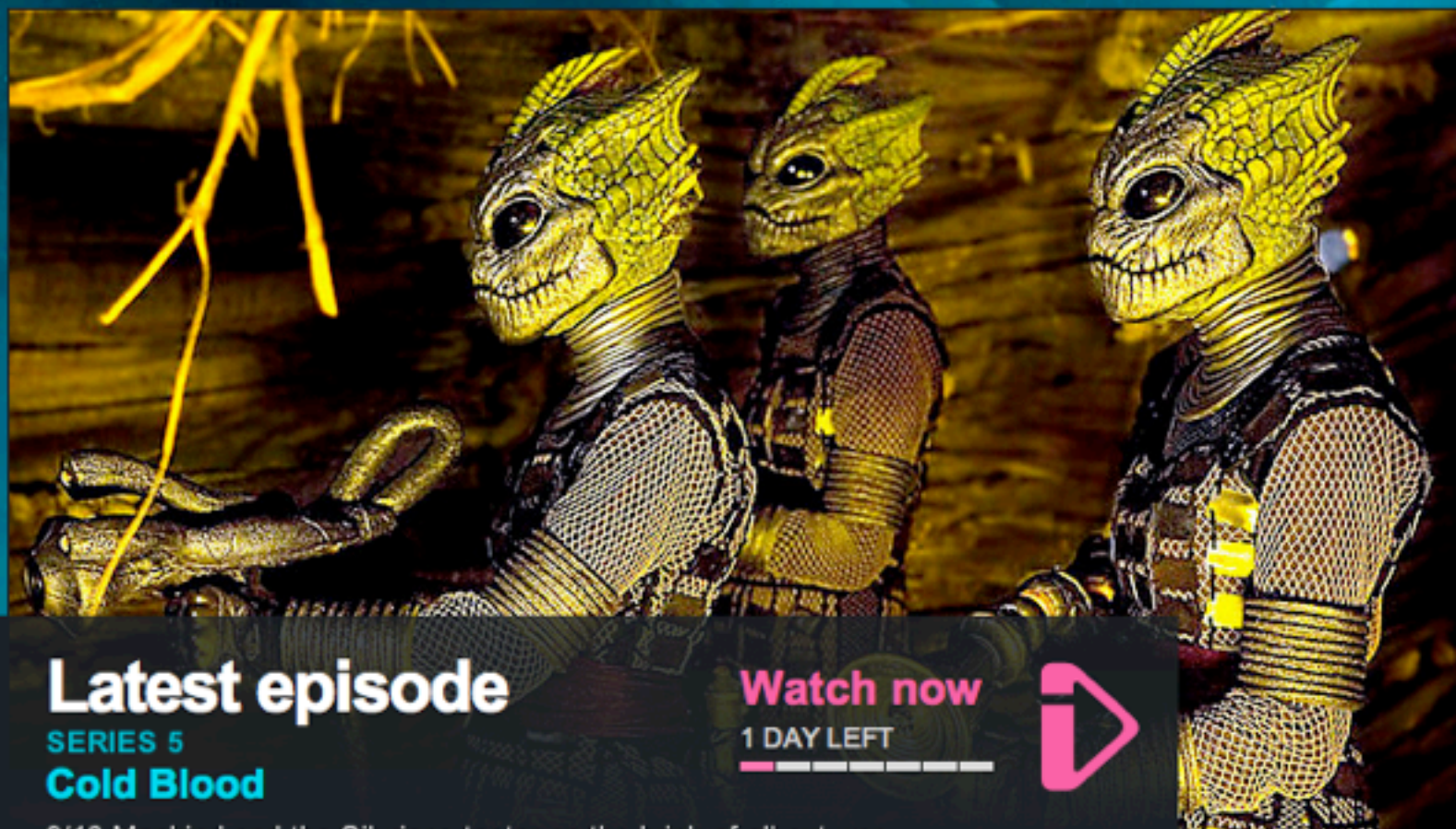
Data as first-class citizen

one

# DOCTOR WHO

[Home](#) [Episodes](#) [Clips](#) [Galleries](#) [Latest News](#) [Characters](#) [Monsters](#) [Fun and Games](#)

Adventures in Time and Space.



## Latest episode

SERIES 5  
**Cold Blood**

9/13 Mankind and the Silurians teeter on the brink of all-out war.

Watch now  
1 DAY LEFT



## Next on

SERIES 5  
**Vincent and the Doctor**

10/13 The Doctor and Amy Pond meet Vincent van Gogh... And an ancient, terrifying monster.



Today  
19:00  
BBC Three

See all (4) upcoming broadcasts of Doctor Who

On BBC iPlayer



**Matt Smith and Jenna-Louise Coleman**

## The Adventure Games





## Red panda

Red pandas were once thought to be closely related to the giant panda, but genetics has shown they are more closely allied with the raccoon and weasel families. They are secretive and gentle creatures, spending most of the day sleeping curled up with their tail wrapped around their head.

Scientific name: *Ailurus fulgens*

Rank: **Species**

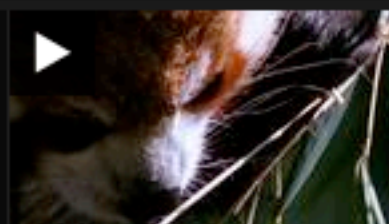
Common names: Firefox, Lesser panda



Anup Shah / naturepl.com

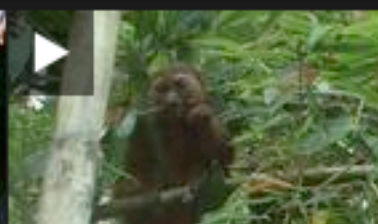


### Introduction



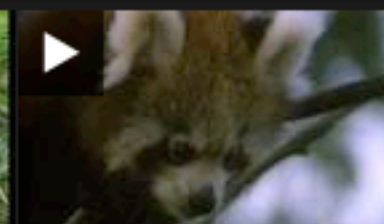
#### Himalayan corridor

Land of the Tiger  
Red pandas have ranged westward from China along the mountain range.



#### Bamboo eaters

Trials of Life  
Red pandas and golden bamboo lemurs survive on indigestible bamboo.



#### The high life

Living Planet  
The forested valleys of the Himalayas require special adaptations.



- <rdf:RDF>

- <rdf:Description rdf:about="/nature/species/Red\_Panda">

<foaf:primaryTopic rdf:resource="/nature/species/Red\_Panda#species"/>

<rdfs:seeAlso rdf:resource="/nature/species"/>

</rdf:Description>

- <wo:Species rdf:about="/nature/life/Red\_Panda#species">

<rdfs:label>Red panda</rdfs:label>

<wo:name rdf:resource="http://www.bbc.co.uk/nature/species/Red\_Panda#name"/>

<foaf:depiction rdf:resource="http://open.live.bbc.co.uk/dynamic\_images/naturelibrary\_640\_credits/downloads.bbc.co.uk/earth/naturelibrary/assets/r/red\_panda\_1.jpg"/>

- <dc:description>

Red pandas were once thought to be closely related to the giant panda, but genetics has shown they are more closely allied with the raccoon and weasel.

They are secretive and gentle creatures, spending most of the day sleeping curled up with their tail wrapped around their head.

</dc:description>

<owl:sameAs rdf:resource="http://dbpedia.org/resource/Red\_Panda"/>

<wo:adaptation rdf:resource="/nature/adaptations/Altricial#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Arboreal\_locomotion#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Climbing#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Hearing\_(sense)#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Herbivore#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/High\_altitude#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Maternal\_effect#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Nocturnality#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Semiochemical#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Territory\_(animal)#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Visual\_perception#adaptation"/>

<wo:adaptation rdf:resource="/nature/adaptations/Vivipary#adaptation"/>

<wo:livesIn rdf:resource="/nature/habitats/Temperate\_broadleaf\_and\_mixed\_forests#habitat"/>

<wo:livesIn rdf:resource="/nature/habitats/Temperate\_coniferous\_forest#habitat"/>

<wo:family rdf:resource="/nature/life/Ailuridae#family"/>

<wo:order rdf:resource="/nature/life/Carnivora#order"/>

<wo:class rdf:resource="/nature/life/Mammal#class"/>

<wo:phylum rdf:resource="/nature/life/Chordate#phylum"/>

<wo:kingdom rdf:resource="/nature/life/Animal#kingdom"/>

</wo:Species>

- <wo:TaxonName rdf:about="/nature/species/Red\_Panda#name">



# MUSIC

HOME | SHOWCASE | REVIEWS | GENRES

Search By Artist...



# Tom Waits

Born 7 December 1949.

PLAYED MOST ON **BBC RADIO**



## Share This Page 3 so far

- Share
- facebook
- twitter

## BBC Music Showcase

**BBC MUSIC SHOWCASE**  
Watch and listen to exclusive music clips

## Latest Tracks Played On The BBC

- Back In The Crowd**  
BBC 6 MUSIC | [LAUREN LAVERNE](#) 13/10/2011
- The Heart Of Saturday Night**  
BBC 6 MUSIC | [LAUREN LAVERNE](#) 11/10/2011
- Crazy About My Baby**  
BBC 6 MUSIC | [GIDEON COE](#) 06/10/2011
- Drunk On The Moon**  
BBC 6 MUSIC | [THE HUEY SHOW](#) 25/09/2011
- Jersey Girl**  
BBC RADIO 2 | [JANICE LONG](#) 20/09/2011

## Biography

Thomas Alan "Tom" Waits (born December 7, 1949) is an American singer-songwriter, composer, and actor. Waits has a distinctive voice, described by critic Daniel Durchholz as sounding "like it was soaked in a vat of bourbon, left hanging in the smokehouse for a few months, and then taken outside and run over with a car." With this trademark growl, his incorporation of pre-rock music styles such as blues, jazz, and vaudeville, and experimental tendencies verging on industrial music, Waits has built up a distinctive musical persona. He has worked as a composer for movies and musical plays and as a supporting actor in films, including *Down By Law* and *Bram Stoker's Dracula*. He was nominated for an Academy Award for his soundtrack work on *One from the Heart*.

Lyricaly, Waits' songs frequently present atmospheric portrayals of grotesque, often seedy characters and places – although he has also shown a penchant for more conventional ballads. He has a cult following and has influenced subsequent songwriters despite having little radio or music video support. His songs are best-known through cover versions by more commercial artists: *Jersey Girl* performed

## Played By

Since December 2008



[Read more at Wikipedia...](#)

**WIKIPEDIA** This entry is from [Wikipedia](#), the user-contributed encyclopedia. It may not have been reviewed by professional editors and is licensed under the [GNU Free Documentation License](#). If you find the biography content factually incorrect, defamatory or highly offensive you can [edit this article at Wikipedia](#). Find out more about our use of this data.

## Links & Information

### LINKS

Official homepage at [tomwaits.com](#)

Biography at [anti.com/artists/view/1](#)

Fanpage at [eyeballkid.blogspot.com](#), [tomwaitsfan.com](#) and [tomwaitslibrary.com](#)

Twitter at [twitter.com/tomwaits](#)

MySpace at [myspace.com/tomwaits](#)

Wikipedia article on Tom Waits

IMDb at [imdb.com/name/nm0001823](#)

Last.fm page on Tom Waits

Discogs at [discogs.com/artist/Tom Waits](#)

MusicBrainz entry on Tom Waits

### PERSONAL RELATIONSHIPS

Parent of [Casey Waits](#)

Married to [Kathleen Brennan](#)

Links & information come from [MusicBrainz](#). You can add or edit information about [Tom Waits](#) at [musicbrainz.org](#). Find out more about our use of this data. The BBC is not responsible for the content of external sites.

## Latest News Stories

### NEWS FROM THE BBC

#### Neil Diamond Joins Hall of Fame

**Tue 15 Mar 2011 10:36** Neil Diamond, Tom Waits and Alice Cooper become the latest music stars to be inducted...

## BBC Reviews



BBC 6 Music



**Mark Lamarr**  
BBC Radio 2



**Lauren Laverne**  
BBC 6 Music



**The Huey Show**  
BBC 6 Music



**Iain Anderson**  
BBC Radio Scotland



**The Late Show with Cherrie McIlwaine**  
BBC Radio Ulster

Information displayed about artists played on BBC programmes is incomplete at present. Find out more about this artist play count [information](#).

## Similar Artists



**Nick Cave & The Bad Seeds**



**Rickie Lee Jones**



**Captain Beefheart**



**Nick Cave**

We use data provided by [The Echo Nest](#) to recommend similar artists.



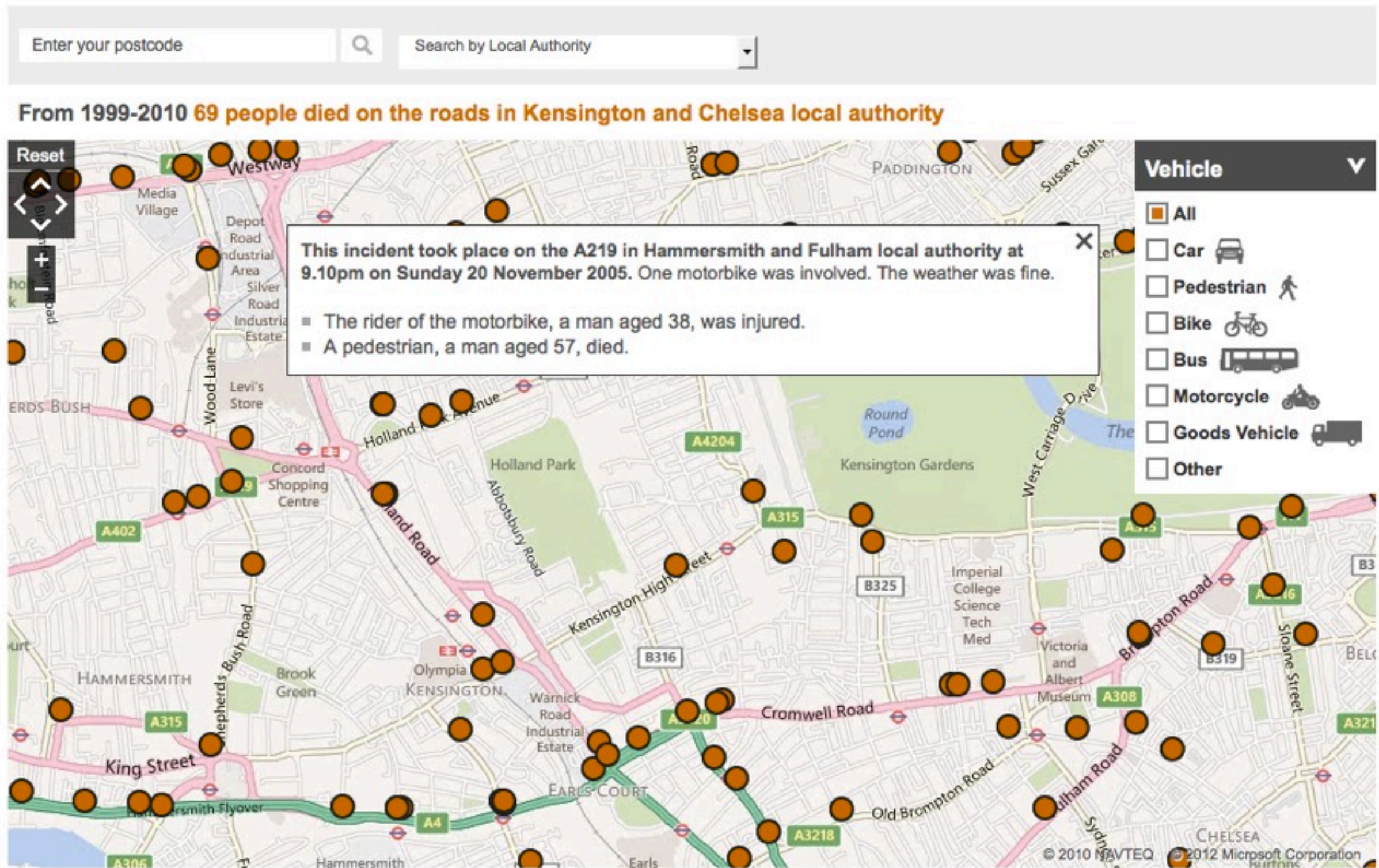
“News is what somebody  
somewhere wants to suppress;  
all the rest is advertising.”

— Attributed to Alfred Harmsworth, 1st Viscount Northcliffe

Journalism:

A profession whose business is to  
explain to others what it personally  
does not understand

— Attributed to Alfred Harmsworth, 1st Viscount Northcliffe





5 December 2011 Last updated at 17:27



## Road casualties: FAQs

The BBC News website's road casualties map, which shows all recorded deaths on Britain's roads between 1999 and 2010, has been enormously popular.

As a result, we have received hundreds of emails asking a range of questions. Here are the answers to some of the most frequent about the map and related features.



### Where does the data come from?

Every time a road traffic collision is reported to the police in which someone is either injured or dies, the police record details of the incident on a special form, known as STATS19. The police record many details including when and exactly where the crash took place, in what weather, on what class of road and whether it was close to a junction, a school and so on. All of this data is collated every year. The Department for Transport releases quarterly headline figures based on this data and once a year, a full annual report. [The latest report for 2010 is here.](#)

### Why do you say the data covers Great Britain when it includes Northern Ireland?

The complete data over the time period - 1999-2010 - is for Great Britain. However, we have also included some partial data for Northern Ireland, for 2004-2009. The Northern Ireland data comes from a different source and was in a different format and so isn't directly comparable. Some of it

## Top Stories



[Hunt: I did not lie to Parliament](#)

[Firms are to lift hosepipe bans](#)

[Domain name applications unveiled](#) **NEW**

[Rebekah Brooks remanded on bail](#)

[Undercover officer 'bombed shop'](#)

## Features & Analysis



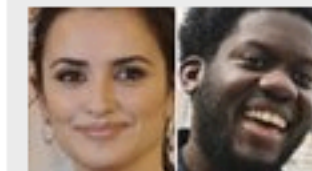
### Green and pleasant

Is the Olympic opening ceremony anything like the UK?



### Great fish swap

Why does most British fish end up abroad?



### Spain v Uganda

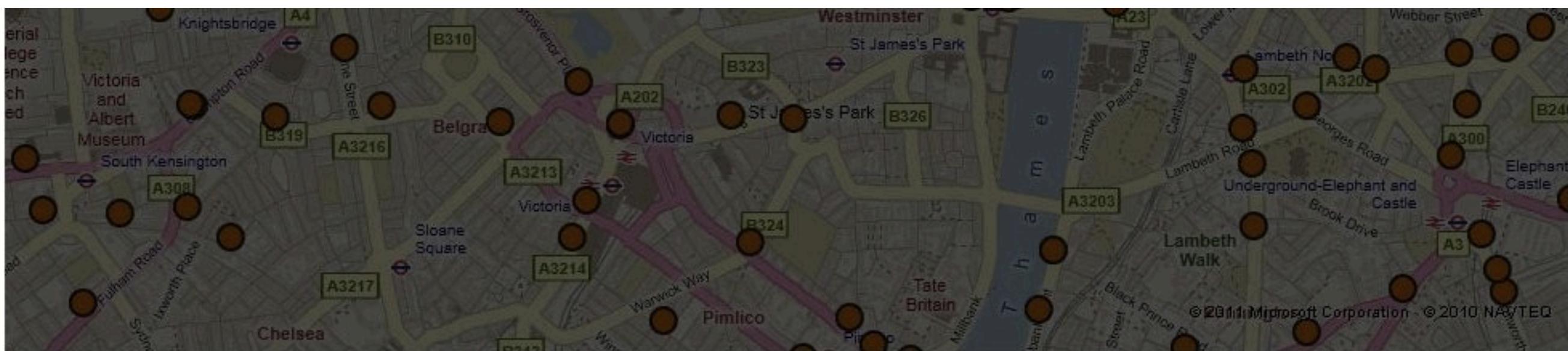
How different are they really?



### Sputnik enterprises

What happened to the British communist party's millions?





Britain has one of the best records in the world for road casualties. However, hundreds still die on the roads every year. In 2010, the police recorded 1,850 deaths, 22,660 people seriously injured and 184,138 who received light injuries.

**About the map:** Using official data recorded by police in Great Britain between 1999 and 2010, we have plotted every road collision in which someone died. In all, 36,371 fatalities are marked on this interactive map. You will also find partial data for Northern Ireland, for 2004-2009.

**How the data is gathered:** Detailed information about each crash is recorded by the police at the scene. It is subsequently transferred onto a computer database. This is available to researchers from the **Economic and Social Data Service**.

**Missing data:** As with any large collection of data, there will be errors and omissions. The BBC apologises for any distress or offence that may be caused by the inclusion of these errors. If you find any errors, please use the **feedback form** and let us know. We will endeavour to correct them where possible.

Here are answers to some of your **frequently asked questions** are **here..**

### Share this page

6.5K

### Top Stories



**Hunt: I did not lie to Parliament**

**Firms are to lift hosepipe bans**

**Domain name applications unveiled** **NEW**

**Rebekah Brooks remanded on bail**

**Undercover officer 'bombed shop'**

### Features & Analysis



**Green and pleasant**  
Is the Olympic opening ceremony anything like the UK?



**Great fish swap**  
Why does most British fish end up abroad?



**Spain v Uganda**  
How different are they really?



**Sputnik enterprises**



20 September 2010 Last updated at 19:43



# Public Sector pay: The numbers

[Top public pay revealed](#) | 
 [The figures](#) | 
 [Explore the data](#) | 
 [Analysis: NHS](#) | 
 [Analysis: Education](#) | 
 [Methodology](#) | 
 [Your comments](#)

Explore the full database by clicking on the lists in the left handside box to drill down into the data.

All categories

- Police
- Judiciary
- Education
- NHS
- Local Government
- BBC
- Fire and Rescue
- Central Government
- Quango
- Armed Forces

	Organisation	Name	Location	Job description	Remuneration
1	BBC	Mark Thompson		Director-General	£838,000
2	BBC	Jana Bennett		Director, Vision	£517,000
3	BBC	Mark Byford		Deputy Director-General	£488,000
4	Hillingdon PCT	No Name Supplied		GP	£475,500 *
5	Heart of Birmingham Teaching PCT	No Name Supplied		GP	£475,000 *
6	BBC	Tim Davie		Director, Audio & Music	£452,000
7	BBC	Zarin Patel		Chief Financial Officer	£434,000
8	BBC	Caroline Thomson		Chief Operating Officer	£419,000
9	BBC	Erik Huggers		Director, Future Media & Technology	£407,000
10	Westminster PCT	No Name Supplied		GP	£406,060

Results 1 to 10 ... >

\* pay band average

## Public Sector Pay: Full Data

[Download the full data here:](#) [7.7 MB]

## Share this page





20 September 2010 Last updated at 15:48



# Public Sector pay: The numbers

[Analysis: NHS](#) | [Analysis: Education](#) | [Methodology](#) | [Your comments](#)

More than 9,000 public sector employees earn more than Prime Minister David Cameron, who took a 5% pay cut when he took office - he now earns £142,500.

New research for BBC Panorama found that there were more than 38,000 public employees earning above £100,000, and 1,000 people on more than £200,000.



BBC News website readers have been sending us their reaction.

I am an administrative officer working for the Prison Service. My starting salary doesn't even break the £15,000 mark. I'd like to know what these people do that entitles them to earn more money than I'll see in 10 years! My department is under-staffed and over-worked, and it's because people are being paid these ridiculous salaries. I think it's incredibly unfair, and if something isn't done, and soon, many people are going to strike.

**Jen, UK**

These numbers are evidently supposed to be shocking, but I was actually quite impressed by how reserved the top salaries are. Any sizeable private company will pay its top earners far more than this, and personally I'd like to think the chief executives of such important national

## Top Stories



[Bank shares jump on stimulus move](#)

[Final pitches for votes in Greece](#)

[School dinner blogger 'banned'](#)

[Argentina demands Falklands talks](#)

[Second Legionnaires' victim dies](#)

## Features & Analysis



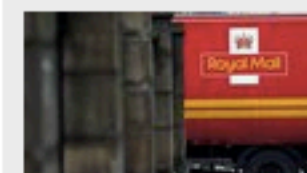
[Reaching skywards](#)

Take a look inside London's 95-storey Shard



[Mascot legacy](#)

Whatever happened to the boy behind World Cup Willie?



[7 days quiz](#)

What reason did Royal Mail give for not delivering post?



[Moment of truth](#)

Europe on edge ahead of crucial Greek election

## Most Popular

Jen, UK

These numbers are evidently supposed to be shocking, but I was actually quite impressed by how reserved the top salaries are. Any sizeable private company will pay its top earners far more than this, and personally I'd like to think the chief executives of such important national institutions are the pick of the bunch, so salary reduction would be a very bad idea.

**Micheal, Newbury**

I think it's perfectly acceptable that there are public servants paid more than the prime minister - he has a substantial coterie of aides and assistants to help him with his job whereas the same most likely can't be said of the people on your list. These people aren't making cups of tea for a living - they're professionals working in the public sector who could probably earn a lot more in the private sector. High-level positions require high-level wages to get the best people.

**Chris Harker, Durham**

Absolutely astounded! University Hospitals of Leicester NHS Trust has 349 of the supposedly most intelligent people in the UK earning more than the prime minister, a man who determines whether or not the country goes to war. That's a lot of people discussing who buys the bandages. Privatise the NHS, kick them to the kerb, reduce debt as they can't get it right.

**Paul Gibbons, Coventry**

I have been working in local government as an admin assistant for the past 18 months after taking a drop of 50% in salary following redundancy from a London job. I earn less than I was getting when I worked for central government from 1990 to 1993. Try telling me public sector workers get more money than the private sector.

**Pamela, Kent**

This is an absolute disgrace, as a low level civil servant I earn a pittance compared to these executives but my colleagues and I are constantly told that we are overpaid, underworked and a drain on the economy, but it's our bosses that deserve to be made redundant in the upcoming public sector cuts, not the low-level employees who earn less in 15 years than most of these executives do in one year.



Greek election

## Most Popular

Shared Read Video/Audio

- School dinner blogger 'banned' 1
- Woman athlete arrested for 'rape' 2
- What's it like to live near a skyscraper? 3
- HBO sorry over cut off head 4
- Bank shares jump on stimulus move 5
- Gale-force wind and rain forecast 6
- Argentina demands Falklands talks 7
- Tourist's car blown up by police 8
- Man attacked with Samurai sword 9
- Quiz of the week's news 10



Thank You

**@leimdorfer – @olivierthereaux**