

GOOGLE RESPONSE (VIA E-MAIL)

Making Open Data Real: A Public Consultation

1. Google welcomes the opportunity to respond to this public consultation and applauds the Government and the data.gov.uk team for the commitment and energy that they have brought to making more data open.

About Google

2. Google's mission is to organize the world's information and make it universally accessible and useful.

3. Google is perhaps best known for our search engine, which is available to internet users throughout the world. Every day millions of people use Google to search for a wide range of services and information provided by Government.

4. We also make Android, an open source operating system for mobile devices that in a few short years has grown from powering one device to over 170 devices today, created by 27 manufacturers. We also offer dozens of other popular services, from YouTube to Gmail. Our products are generally offered for free for personal use, supported by revenue from advertising and sales to businesses

5. In addition, we provide several tools to help people make better use of public data.

- Google Maps is an online mapping service that helps users to find locally relevant information. It is free for anyone to use and it can help provide directions, search for a local store or service, or just explore the world. In order to help ensure our maps and the information they contain are relevant, fresh, accurate, and rich, we empower users to become citizen cartographers, adding their own data for others to see and enabling them to 'mashup' their own content on top of our base map data.
- Transit on Google Maps is a public transportation planning tool that combines transport data with the power of Google Maps. It integrates transit stop, route, schedule, and fare information to make trip planning quick and easy for everyone. For agencies around the world, Google Maps is a cost-effective solution targeted at transit novices and seasoned travellers alike. Google Maps is available in 12 different languages and is compatible with screen readers for the visually impaired.
- Google Trends allows people to map Google search trends on to public sector datasets. So, for example, Google Trends gave HM Treasury new insight into how fluctuations in certain terms relating to unemployment that people searched for on Google correlated with their own data on the rise and fall in job figures.
- The Google Public Data Explorer also helps those in the public sector and those who work with public sector to help make the data work harder for them.

The case for open data

6. The Government is right to put open data at the heart of the Growth Review. By opening

up public data in a way that is accessible to all, portable, and not restrictively-licensed, the Government are doing all the right things to help foster innovation and stimulate growth. Research has shown that the relatively low costs incurred in making data open are more than outweighed by the jobs and businesses that are created in the private sector on the back of open and accessible public data.

7. A useful study to examine in this regard is the influential Weiss report on weather data (http://www.weather.gov/sp/Borders_report.pdf). The report examined how many jobs and how much growth was created by open public data in the US compared to closed public data in Europe. Looking at the commercial meteorological market, it showed that while the US open data approach yielded EU750bn in economic value, the EU closed approach yielded just EU19bn. The US had 400 firms employing 4000 people, compared to just 30 EU firms with 300 employees making a living on the same data.

8. Making more data open will also help to create efficiencies in Government processes. A recent report by the McKinsey Global Institute showed how 'in the developed economies of Europe, government administrators could save more than €100 billion (\$149 billion) in operational efficiency improvements alone by using big data, not including using big data to reduce fraud and errors and boost the collection of tax revenues' (www.mckinsey.com/mgi/publications/big_data/).

9. Beyond the immediate economic benefits, there are further additional public benefits. Google Flu Trends is a good example of how smart use of public data could have significant additional benefits that are currently unrealized. Google have found a close relationship between how many people search for flu-related topics and how many people actually have flu symptoms. Of course, not every person who searches for "flu" is actually sick, but a pattern emerges when all the flu-related search queries are added together. We compared our query counts with traditional flu surveillance systems and found that many search queries tend to be popular exactly when flu season is happening. By counting how often we see these search queries, we can estimate how much flu is circulating in different countries and regions around the world. Our results have been published in the journal Nature. If more Government datasets were open to this kind of analysis then new insights will follow (www.google.com/url?q=http%3A%2F%2Fresearch.google.com%2Farchive%2Fpapers%2Fdetecting-influenza-epidemics.pdf; <http://www.google.com/url?q=http%3A%2F%2Fwww.nature.com%2Fnature%2Fjournal%2Fvaop%2Fcurrent%2Ffull%2Fnature07634.html>)

10. Google Transit offers another example of how public data can provide benefits. In the US, more than 200 transit agencies provide open data for developers in the US: the result is a much wider range of applications and higher satisfaction ratings among users of those services compared to the UK. Using some of this data, Google were able to create Transit on Google Maps. The experience of communities and businesses that have embraced Transit on Google Maps is overwhelmingly positive. When it was launched in New York in 2008, the then Governor of New York, David Paterson, said: 'Google Maps for Transit is a truly innovative marriage of information and infrastructure. It is a perfect example of how the public and private sectors can partner together to benefit us all - and it didn't cost New York taxpayers a penny. I applaud my colleagues at the MTA and Port Authority for making this a priority, and our friends at Google for continuing to make the world an easier place to navigate.'

Making the data open

11. Google welcomes the proposals in the consultation to:

- a) presume that public data should be open by default;

- b) introduce a new requirement that public bodies and providers of public services should proactively publish data about the services they provide;
- c) establish a right of challenge against decisions not to publish data.

12. We also support the Government's determination to move to a position where most data held by public bodies and about public services will be available for re-use under the Open Government Licence. It is important that data is not restrictively licensed, particularly in a commercial context, because doing so chokes innovation by removing incentives for start-ups and developers.

13. We also support the proposal for the data to be made available in open formats. When websites publish their data in formats that are open, citizens can aggregate, analyze and engage with the data and build the online tools necessary to make the information useful to them and others.

14. Where possible, the Government should publish data in a format that is easily accessible and open to all. However where this is not possible, the Government should put its effort into publishing data rather than attempting to 'clean it up'.

15. In many cases, Government data is actually 'overcooked'. The problem is that access to information, like public records, is provided through a database application, which "web crawlers" generally cannot access and therefore cannot index. Policy makers should require government agencies to make public sector information timely, easy-to-find, searchable, and not hidden behind database applications. As many as four out of five Internet users reach government and other public sector websites by using Google and other search engines, so it is important that the data they are seeking is not disguised behind complex, costly and unnecessary applications.

16. The Government should not divert too much of its energy into trying to order or prioritise the datasets that it holds. The most innovative developers will find growth opportunity in the least expected places. Datasets that Governments might think are low-value may turn out to be useful for some. For that reason, we would not want to say that any particular sort of data should be open or closed: we would hope that all data is made open by default, with exceptions made only for data that is secure or confidential.

17. However there are some areas where the UK Govt clearly lags behind international competitors, not just within Europe but in the US and Asia. In that regard, we would like to see:

- open access to a comprehensive geo-coded UK addressing database;
- mapping data - an extension of the 'open data' released by Ordnance Survey;
- improved public transport data - both static and real-time made available for all types of transport under an open government license.

18. We would caution the Government to guard against regarding its store of data as a direct revenue raiser for the Treasury or for Departmental budgets. The value to be gained from releasing data openly is much greater in economic and social terms than the revenue to be gained from charging for data. Google's experience of certain quasi non-Governmental organisations and non-departmental bodies who have introduced so-called 'value-for-money tests' for charging for data is that they can be deeply counter-productive, encouraging bodies to hoard and sell data drip by drip, rather than sharing it and letting a thousand flowers bloom. Too often, those in charge of guarding data not only regard it as a potential revenue source but fear the release of it as a competitive threat. 'Value-for-money' in these instances is too easily used as a way to maintain the status quo and resist disruptive innovation and new competition. We would encourage the Government to work with the public and with the

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private sector to pursue innovative means to unlock data that may prove difficult or expensive to access. For example, where the cost of 'cleaning up' data is cited as a reason for holding data back, the Government should seek simply to release the data and let others take on the risk and challenge of 'cleaning it up'.

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