How often are statistics on GOV.UK looked at?

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Follow up to 2015 work by Rhys Strafford and Nick Woodhill

Introduction

Overview

- Each month the Cabinet Office send the Good Practice Team website page views for pages tagged on GOV.UK as 'statistical'.
- We've analysed the 2016 data and also investigated how GSS members in different departments use website analytics.
- We have produced a series of recommendations to take this work forward (**slide xx**)

The datasets

- The are 3 ways to access the stats data on gov.uk:
    - Department homepages: /government/organisations/**xxxxx**/about/statistics
    - Statistical datasets *(usually a time series)*: /government/statistical-data-sets/**xxxxx**
    - Statistical release *(stats for one point in time)* landing pages: /government/statistics/**xxxxx**

All data is stored under the '/government/statistics' area, however links form departmental home pages provide an alternative way of finding them

Caution
- Labelling inconsistencies on GOV.UK make a comprehensive analysis difficult

Scope of analysis

- Analysis covered included all Ministerial and most Non-Ministerial Departments who produce official statistics

- Statistics from bodies such as UKSA, NHS digital and devolved governments are linked to from '/statistics' but then refer to an external website

- Traffic going direct would not be captured

- There is some labelling confusion – e.g. The Government Legal Service doesn't produce official statistics – although they do not appear under '/statistics', they do have a '/about/statistics' page and so are excluded from this analysis

  - We believe this is incorrectly labelled as 'statistics' on GOV.UK

- The Cabinet Office (FOI stats) and HM Treasury (general economic statistics) do not have GOV.UK statistics homepages – some information on these has been gained from an analysis of the '/statistics' pages

- The initial analysis is based on the 'statistics' page views – year and category information being gained from the URL – this is not 100% accurate however and is only around 85% coverage by topic

Metrics used

- In 2015, 'page views' were looked at – this gives a good starting point as to what is the most popular content on the website, however we have now expanded on this to analyse further metrics.

- This analysis looks at the most popular data sets (top 250 results each month)

Page views on statistical home pages ('/statistics') - 2016

- Page views are a good indicator of what people want to look at and what is most popular on the site – inevitably however, the home page will have the most
- It doesn't measure downloads, or give an indication of whether users found what they were looking for
- The top page views have been presented below

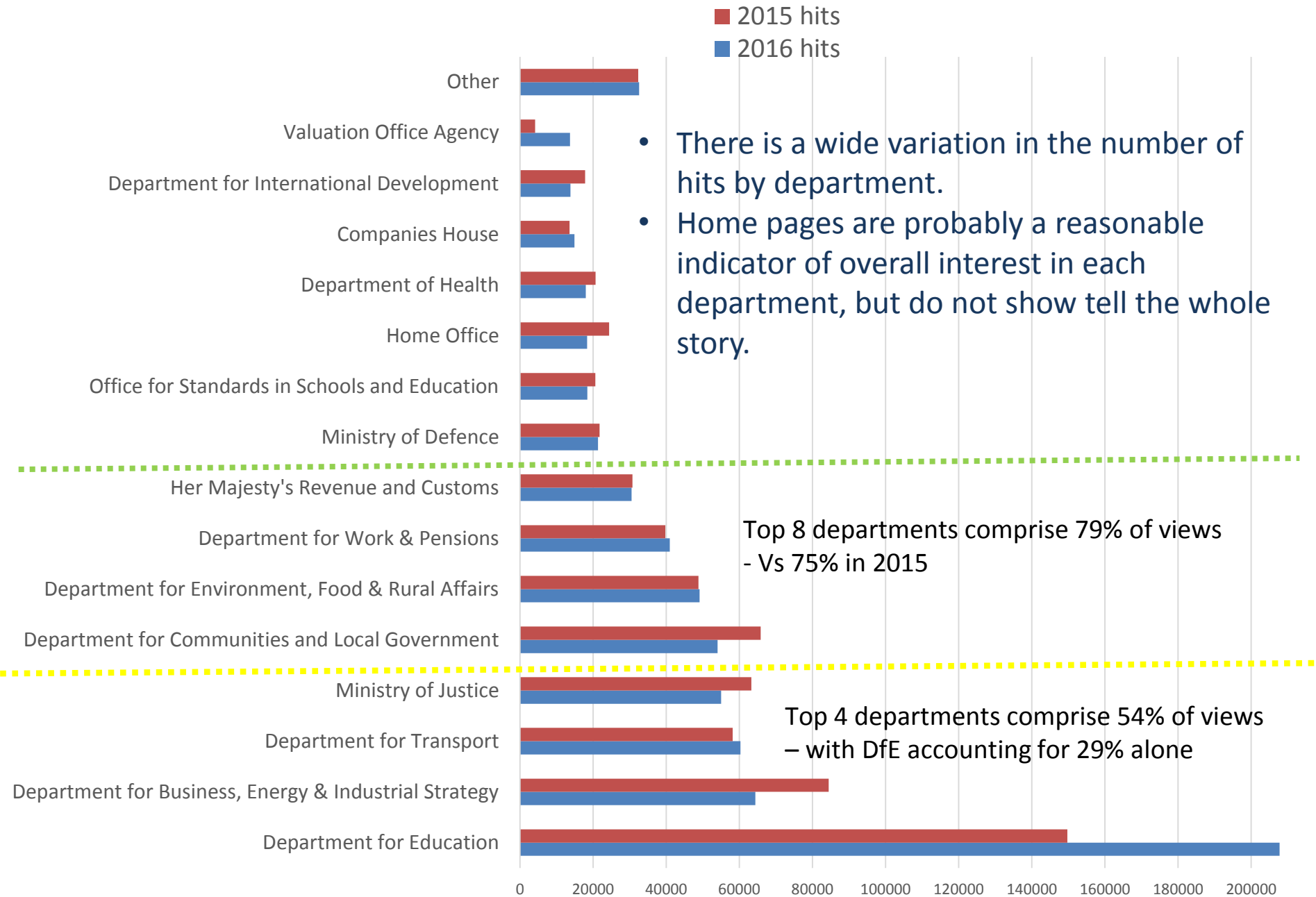*Adjusted % page views (i.e. excluding home page traffic)*
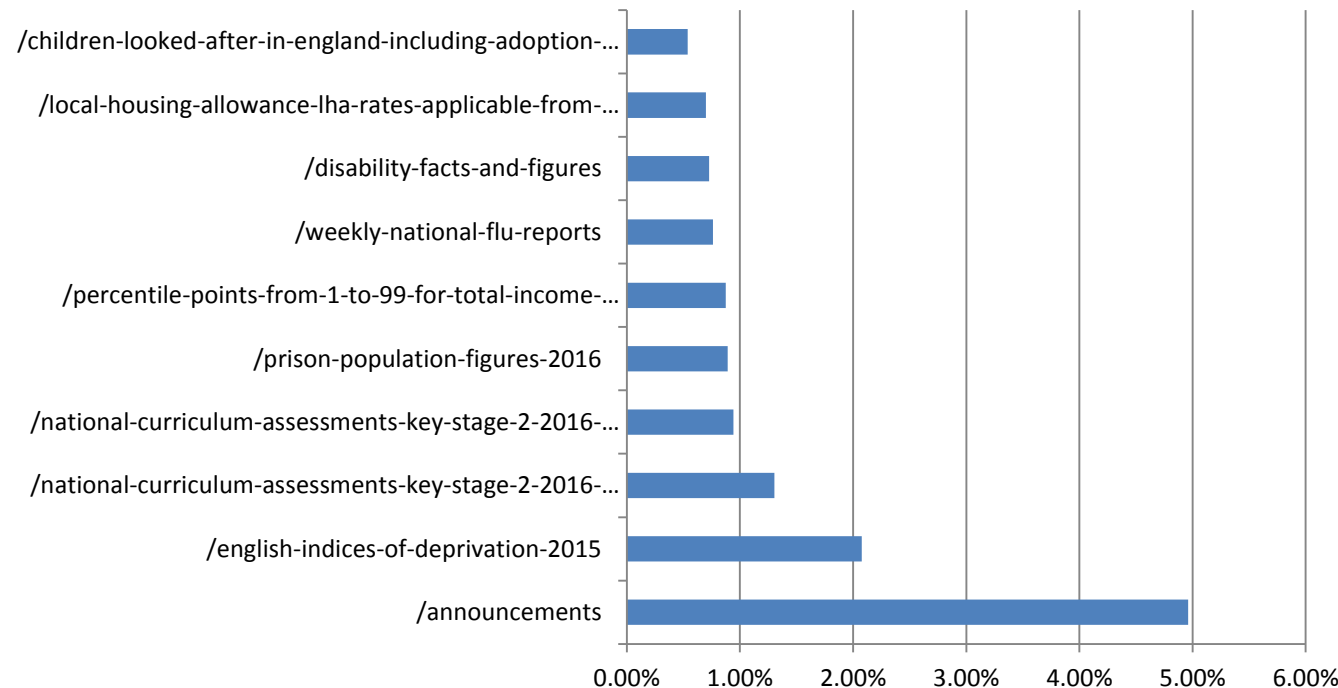
The top page was for announcements – the release calendar
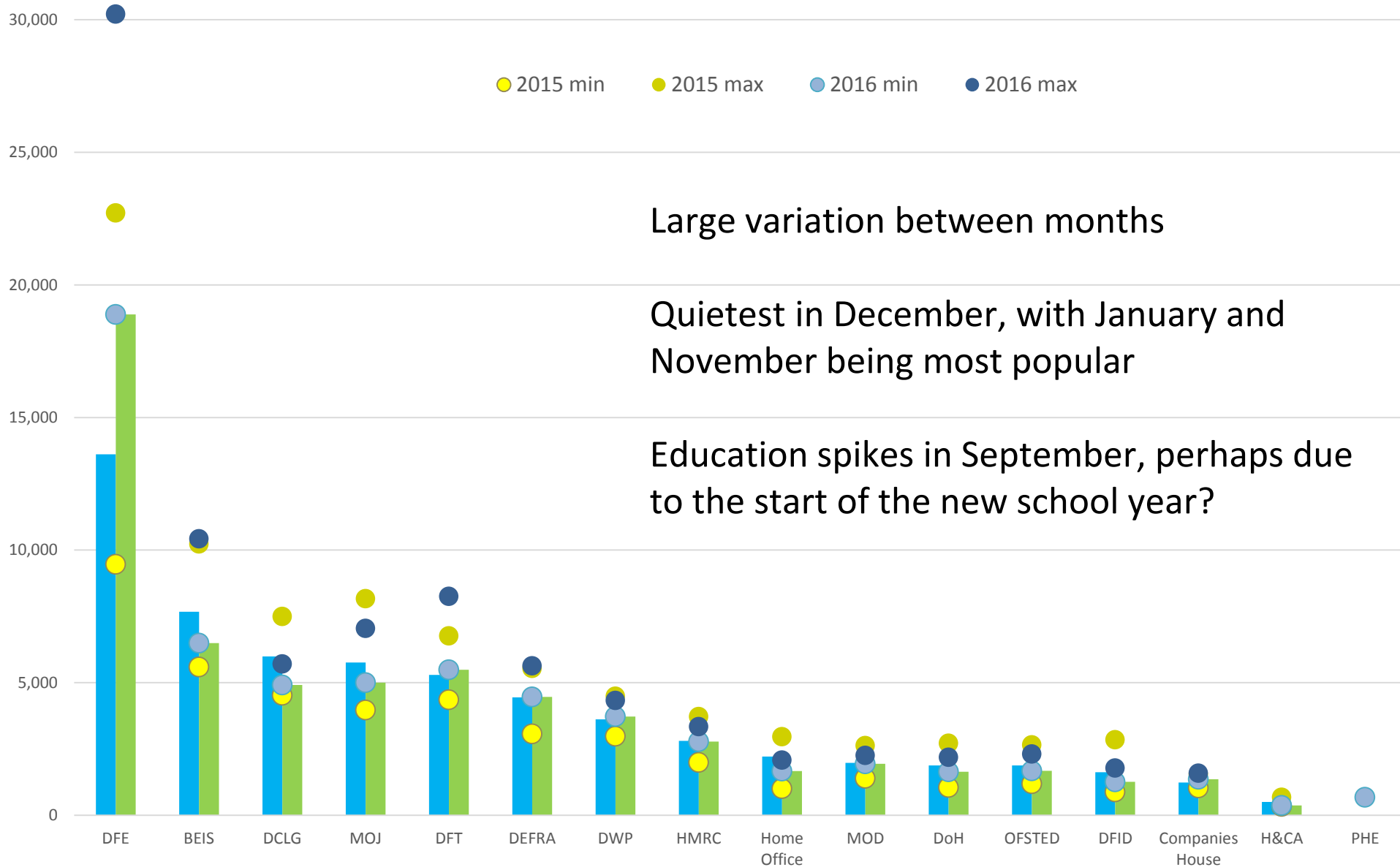
Popular release pages included:

National curriculum
Deprivation
Prison population
Flu reports

Diverse array of subjects

	Adjusted % page views
/children-looked-after-in-england-including-adoption-…	
/local-housing-allowance-lha-rates-applicable-from-…	
/disability-facts-and-figures	
/weekly-national-flu-reports	
/percentile-points-from-1-to-99-for-total-income-…	
/prison-population-figures-2016	
/national-curriculum-assessments-key-stage-2-2016-…	
/national-curriculum-assessments-key-stage-2-2016-…	
/english-indices-of-deprivation-2015	
/announcements	

0.00%   1.00%   2.00%   3.00%   4.00%   5.00%   6.00%

Stats homepage views – 2015 vs 2016

Legend:
- 2015 hits
- 2016 hits

Departments (top to bottom):
- Other
- Valuation Office Agency
- Department for International Development
- Companies House
- Department of Health
- Home Office
- Office for Standards in Schools and Education
- Ministry of Defence
- Her Majesty's Revenue and Customs
- Department for Work & Pensions
- Department for Environment, Food & Rural Affairs
- Department for Communities and Local Government
- Ministry of Justice
- Department for Transport
- Department for Business, Energy & Industrial Strategy
- Department for Education

X-axis: 0, 20000, 40000, 60000, 80000, 100000, 120000, 140000, 160000, 180000, 200000

- There is a wide variation in the number of hits by department.
- Home pages are probably a reasonable indicator of overall interest in each department, but do not show tell the whole story.

Top 8 departments comprise 79% of views
- Vs 75% in 2015

Top 4 departments comprise 54% of views – with DfE accounting for 29% alone

Statistical Home Page Views – 2015 vs 2016 – with a combined BEIS

Legend: 2015 min · 2015 max · 2016 min · 2016 max

Large variation between months

Quietest in December, with January and November being most popular

Education spikes in September, perhaps due to the start of the new school year?

Categories: DFE, BEIS, DCLG, MOJ, DFT, DEFRA, DWP, HMRC, Home Office, MOD, DoH, OFSTED, DFID, Companies House, H&CA, PHE

Statistical Home Page Views – 2015 vs 2016

- DfE has the highest page views in both 2015 and 2016.

- Higher and Further Education (HE/FE) moved to DfE from BIS in mid July 2016, likely accounting for the significant jump.

- Statistical data set on apprenticeships (FE data library) most popular with around 11,700 views in second half of 2016. This is is the most significant dataset relating to HE/FE.

- 2015 graduate labour market statistics received around 6,500 in the second half of 2016.

- Most 'BEIS' statistics are from the former DECC side – e.g. energy prices

- Outside of Companies House, very few statistics relating to the former BIS area are produced.

2015 vs 2016 – most popular statistics pages

No major shifts in interest in year – 2015 figures have dropped in popularity but still reasonably viewed

Equivalent statistics for 2016 have been reasonably constant

Exception is for National Curriculum KS2 stats – both years published at around same point during year, so hard to explain reason for increase without further context.

Re-baselined for 2nd half of 2015 – original data was for 7 months, July 2015 - Jan 2016

Publication name	Department	Official Statistic?	Further info	Total Hits (July 15 to Dec 15)	Total Hits (July 16 to Dec 16)	2016 pos
Announcements	N/A	N/A	N/A	221,057	184,353	#0
English-indices-of-deprivation-2015	Department for Communities and Local	Yes - published every 3-5 years	Statistics on relative deprivation in small areas in England.	79,181	81,223	#2
Prison-population-figures-2015	Ministry of Justice, National Offender Management Service and HM Prison	Yes - Monthly tables - (should this be a labelled as a	Latest prison population figures for 2015. **Stats for 2016 are 41,661 (#6) -**	40,310	5,115	#16
National-curriculum-assesments-at-key-stage-2-2015-provisional	Department for Education	Yes	Provisional information on the 2015 national curriculum assessments at key stage 2 in England. 2016 equivalent hits 74,751 -nearly 2x as many (#3) KS2 interim reports 103,335 - published 2 months earier	39,032	2,432	#242
Weekly-national-flu-reports	Public Health England	Yes - Weekly	National influenza reports for winter 2013 onward, tracking seasonal flu and other seasonal respiratory	25,854	25,560	#11
Early-years-foundation-stage-profile-results-2014-to-2015	Department for Education	Yes. Interesting to note this page includes the datasets too.	Early years foundation stage profile (EYFSP) results for the 2014 to 2015 academic year, at national and local authority level. **2016 equivalent hits of 27,900 - reasonably static**	28,743	16,154	#22
Percentile-points-from-1-to-99-for-total-income-before-and-	HM Revenue & Customs	Yes - Annual	More of a dataset - spreahseet contains all years from 1999-00 to	26,764	32,463	#7

'Statistics' page views – by content
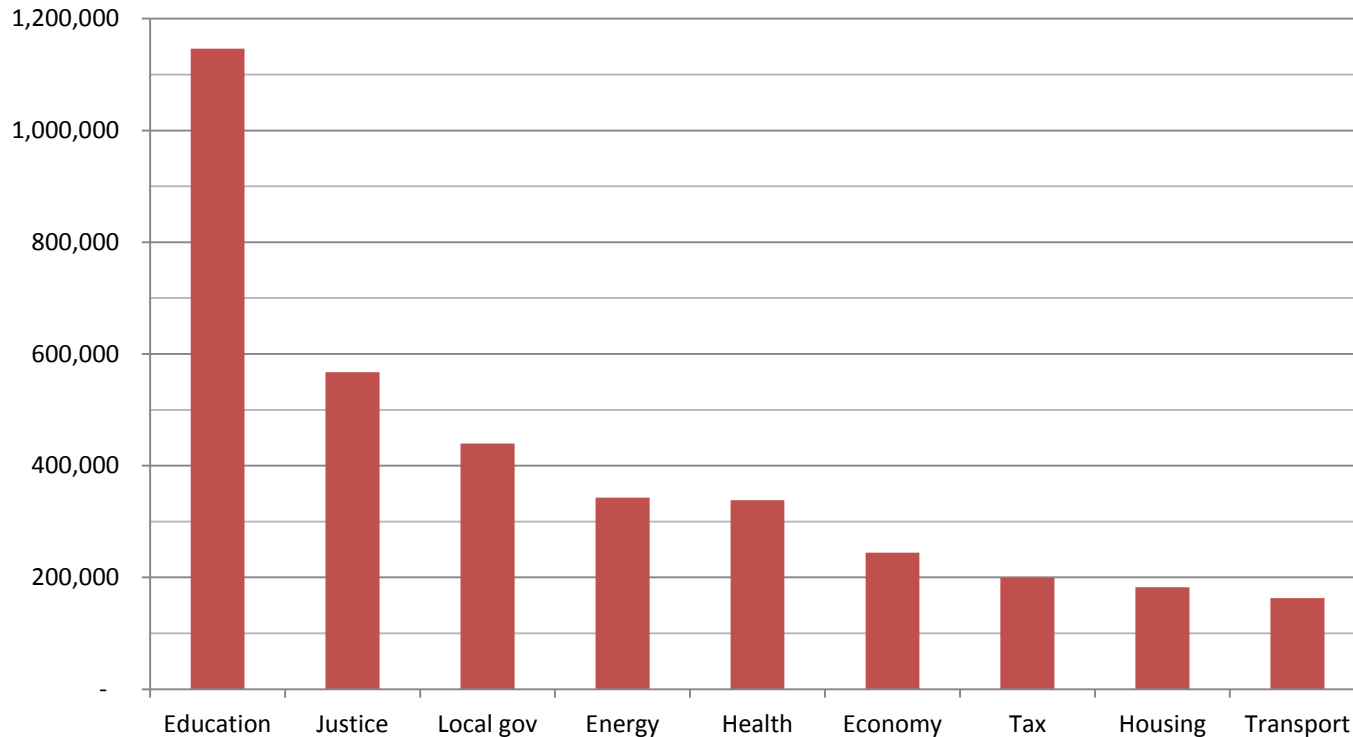
Around 97% of page views have been classified by content.

Education was the most popular topic (approx. 27% of views).

The top 3 areas accounted for 52% of the total

Some caution is needed - volume of information may over estimate popularity
e.g. lots of stats are published related to education. We may want to consider average hits per topic

Page view analysis of statistical data sets – by content - overview

Data sets can often be for multiple years, so no analysis of this has been done here

Also, a user viewing the dataset page does not necessarily indicate a download
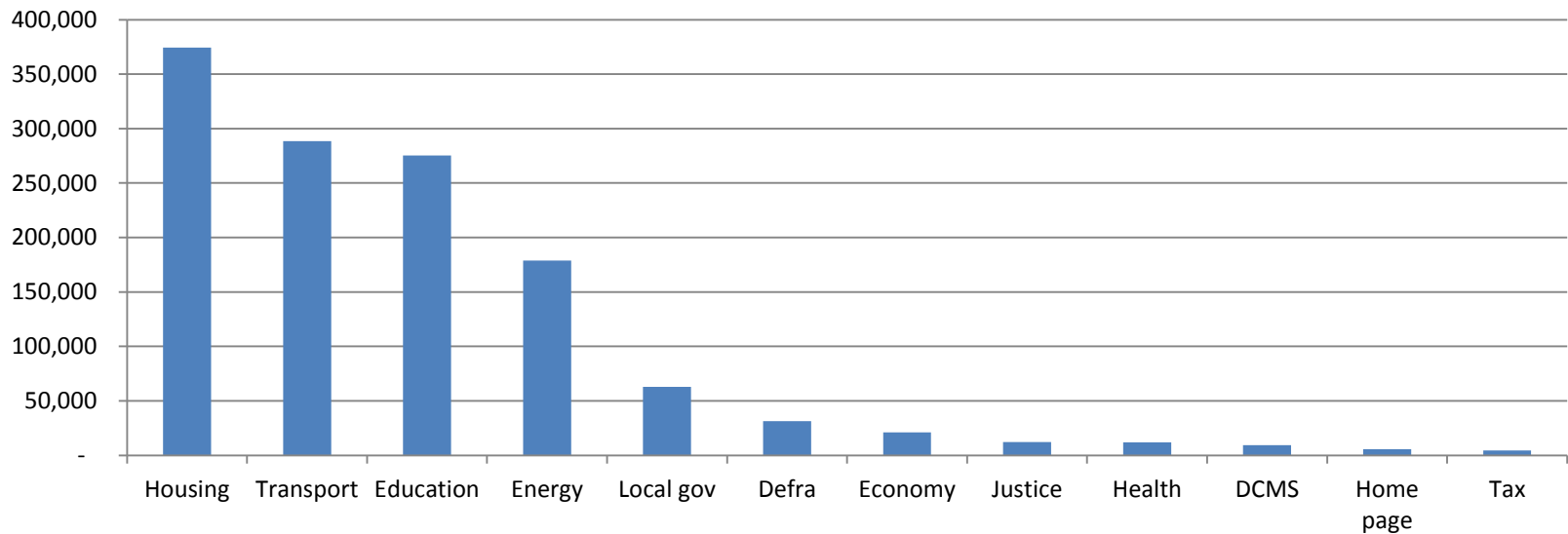
Housing is the largest category based on dataset page views – likely this is partially due to number of datasets related to housing specifically vs total content.

Note here, most Defra datasets are fishing related (compared to environment and agriculture for the statistics pages)

Page view analysis of statistical data sets – by content - overview

The top 10 most popular statistical datasets
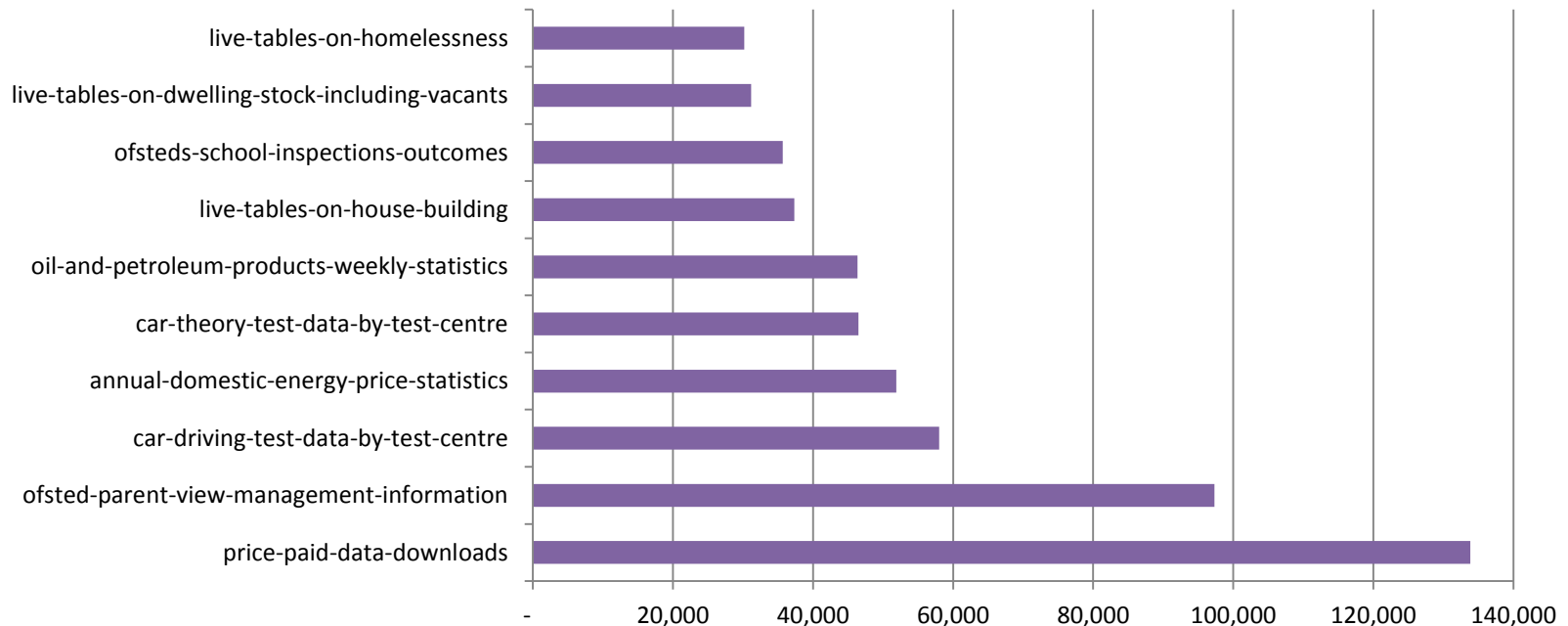
Price paid data downloads is published by HM Land Registry on house price sales

Most popular pages reflect overall trend towards housing, education, transport and energy

Statistical Data Sets – most popular 2015 vs 2016

No major shifts in terms of popularity of content – the 'Ofsted parent view' and car driving test data have increased slightly in popularity.

Of the 9 most popular datasets, only 5 were official statistics

Name	Department	Official Statistic?	Further info	Total Hits (July 15 to Dec	Total Hts (Jul 16 to Dec 16)	2016 pos
Unclaimed-estates-list	Government Legal Department	No	A list of unclaimed estates held by the Treasury Solicitor.	173,914	168,014	#1
Price-paid-data-downloads	Land Registry	No	Our Price Paid Data includes information on all residential property sales in England and Wales that are	35,712	70,178	#2
Annual-domestic-energy-price-statistics	Department of Energy & Climate Change	Yes - Quartlery	DECC publishes annual estimates of gas and electricity bills, along with statistics on household expenditure on	26,135	21,961	#5
House-price-index-statistical-report	Land Registry	Yes - Monthly	Download the latest monthly House Price Index (HPI) report and see the average house price for England and Wales.	23,388		during the year - statistics in 'collections' and available with ONS - no data
Oil-and-petroleum-products-weekly-statistics	Department of Energy & Climate Change	Yes - Weekly	DECC publishes weekly prices for road fuels.	21,591	20,011	#7
Outstanding-providers-2013-14	Ofsted	Yes - Annual	The list of providers who have been judged to have outstanding overall effectiveness in an Ofsted inspection.	23,207	6,720	#15
Live-tables-on-house-building	Department for Communities and Local Government	Yes - quarterly	Various tables provide the latest, most useful or most popular data, presented by type and other variables, including	17,493	15,845	#8
ofsted-parent-view-	Department for Education	No	Published November 2015	10,360	85,566	#3
car-driving-test-data-by-test-	Department for Transport	No	Published 29 September 2015	2,210	51,494	#4

Bounce/ Exit Rates

Bounce Rate - percentage of people who leave the site without following through to any other page – a one page session = # bounces / # entrances

Exit Rate – percentage of people who exit from that page (via manual address, closing it, or following external links) – they *may have found what they want then exit* = # exits / # page views

These metrics are **key for the home page**
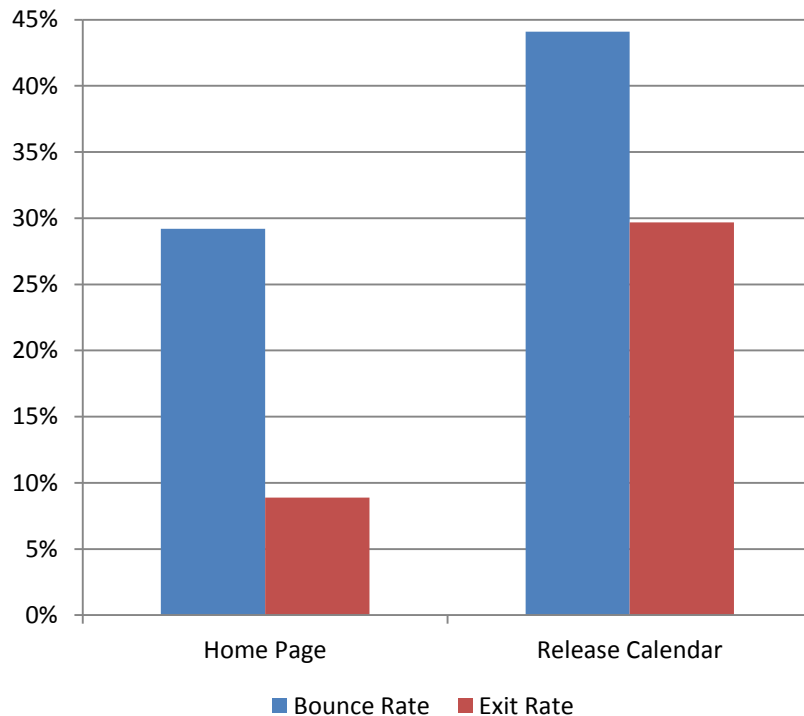
Home page bounce rate is <30%, whilst exit rate is at 9% - *does 30% bounce rate for '/statistics' seem high?*

For the release calendar, people may be viewing this and leaving the site without necessarily visiting any particular release page, so would expect a higher rate

Not as useful for other pages - user may either:
- download stats and leave
- Follow an external link (e.g. to ONS)

e.g. highest exit rate was on building materials – users download the stats and *exit* the site

Browsers / Devices

% Sessions 2016	Browser					
Device	Chrome	Safari	Internet Explorer	Firefox	Edge	Grand Total
desktop	25%	4%	18%	5%	3%	56%
mobile	13%	17%	1%			31%
tablet	2%	7%				9%
Grand Total	**40%**	**29%**	**19%**	**5%**	**3%**	**96%**

% Sessions 2015	Browser				
Device	Chrome	Safari	Internet Explorer	Android Browser	Grand Total
desktop	24%	4%	31%		58%
mobile	10%	15%	1%	2%	27%
tablet	2%	8%			10%
Grand Total	**35%**	**27%**	**32%**	**2%**	**96%**

Generally there are no significant changes between the two years.

Chrome is up 5% in total from 2015-2016 with increased mobile and desktop usage.

The share for the Android browser has became insignificant – likely that Android users are switching to Chrome for mobile, or possibly to iPhones (Safari).

*Percentages may not add up due to rounding

Summary

- There is still not enough understanding across the GSS of how to use metrics and it has been hard to gauge the level of analysis departments currently do on their statistics

- In this work we've started to look at a specific set of metrics, but further feedback would be required to ascertain as to whether they are the most helpful.

- Further training to Presentation Champions could be considered.

- Clear labelling of some statistics should be explored.
  - E.g. "Attitudes and satisfaction" – part of a housing survey

- Is the organisation of material overly complicated on gov.uk?

- There are currently 2 or 3 routes to get statistics on gov.uk
  - - via the department's home page
  - -via the 'statistics' page
  - -via the '/statistical-data-sets' page

- Further examples of labelling issues are given in <u>annex 2</u>

Summary and future analysis to consider

- Consider duplication of datasets - some also available on data.gov.uk – are users aware of the distinction?

- Some analysis of the least popular data sets may be insightful.
  - Do they appeal to a 'niche' audience?
  - Or are they limited value?

- It would be useful to incorporate ONS's statistics pages in the analysis as these account for around 19% of total Official/National Statistics.

- Collaboration with Welsh Government and NHS digital would increase coverage to 85%.

- We also need to ensure the analytics account is set up in such a way to get maximum benefit from it e.g. do analytics currently capture actual downloads of publications and datasets?

Annex 1 - organisations included in the analysis

- All organisations on gov.uk that produce official statistics have been included
- This accounts for only 44%
- The top 3 producers were all excluded as they don't publish on gov.uk – ONS, the Welsh Government and NHS digital – including these would give 85% coverage
- The main exclusion was ONS itself – producing 19% of official statistics
- Also the devolved administrations were excluded (Wales, Scotland, NI) – the various bodies within these accounted for 26% of the total (half of this being the Welsh Government)

Type of body

- gov.uk
- Devolved Administrations - total
- ONS
- Exec Agency / Other UK body
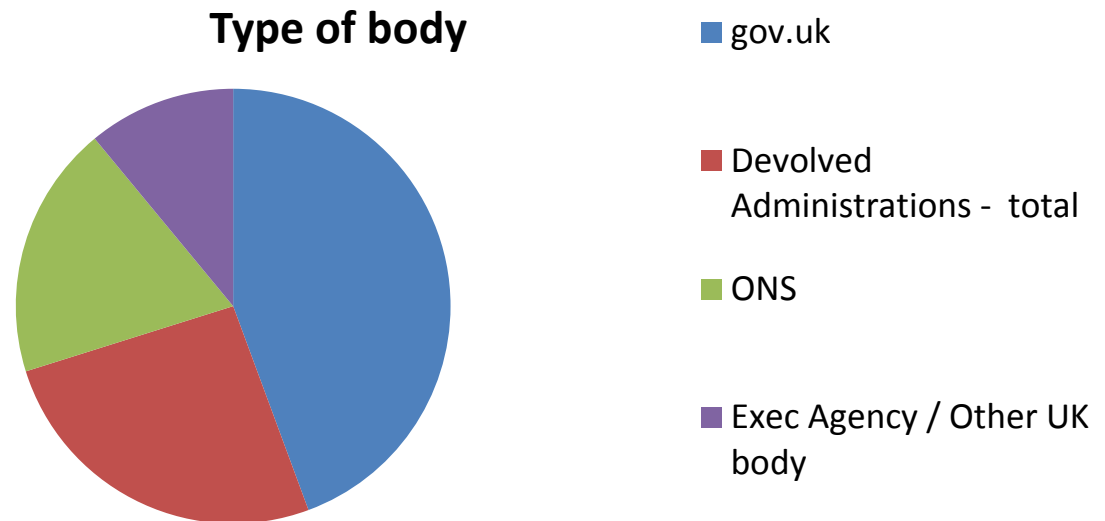
Annex 2 – examples of labelling

- The "Vehicle licensing statistics: January to March 2017 tables" downloads a zip file of tables that are all individually downloadable under a 'statistical data sets link

- [/government**/statistics/**vehicle-licensing-statistics-january-to-march-2017](#)

- [/government**/statistical-data-sets/**all-vehicles-veh01](#)

- [UK Sea Fisheries Annual Statistics](#) page, the first link is to a table of fish species

- "This table provides a list of species included in United Kingdom Sea Fisheries Statistics."

- Yet the datasets for Sea Fisheries outline the individual fish

- [Energy trends data](#)
    - These are time series presented in quarters or years
    - Under '/statistics' but would be better classed as a statistical data set