



Improving understanding through better data presentation.

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Data presentation

Displaying meaningful information in ways users find easy to access, understand and re-use.

Why does it matter?

Allowing users free access to very detailed data in a format for re-use is a good thing.

But it is only part of the job.

We need to make it easy for our users to understand, learn or make informed decisions from our data. This will

- Improve public debate.
- Broaden our user base.
- Be more efficient.

Our data should be displayed for a clear purpose, whether in open data format, reference tables or when summarising or demonstrating a point.

Our users will have a bearing on how we present the information.

What do our users want?

Internet based publications make understanding the varied uses and users of our data challenging.

But we have sought feedback.

We have a variety of external users who use our data in many different ways. In summary our users

- Like having access to lots of data
- Like things to be explained simply
- Like to access data in different ways

Our ability to release increasing amounts of data means ensuring that users understand our material is more important than ever.

The way we display our data is important for interpretation.

Continuous improvement

We continue to increase the ease of access and clarity of our presentation to aid understanding.

Our summaries are becoming more

- **Compelling:** engaging and inviting users to find out more
- **Concise:** presenting main messages and conclusions
- **Clear:** well-written commentary and well designed visuals

Our underlying data is becoming more

- **Comprehensive:** with many low level breakdowns.
- **Convenient:** easily located and used, via suitable channels
- **Customisable:** allowing users to access the data relevant to them.

Work Programme

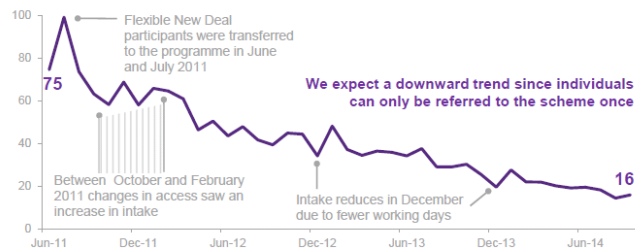
DWP scheme helping unemployed people into work using providers who get paid when individuals reach defined periods in work.

Joining the Work Programme

The Work programme uses private and public companies, called providers to find work for claimants transferred from Jobcentre Plus at specific points in their claim.

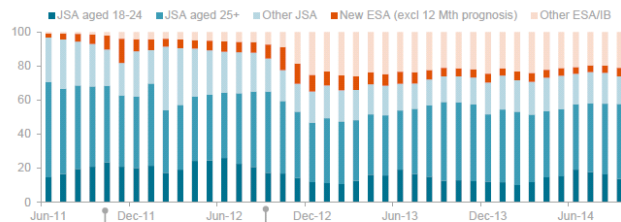
Monthly intakes are decreasing

Intake in thousands in each month from June 2011 - June 2014



The makeup of monthly intakes has been changing

percentage of each monthly intake made up by each customer group



From October 2011, New ESA claimants expected to be fit for work within 6 months joined immediately

Differences from September 2012 reflect changes in access to the programme

Main findings

The number of individuals joining each month has been decreasing. Since individuals generally remain on the Work Programme for 2 years, until late May 2013, the overall number being supported increased month on month, at which point the first intake began to complete the Programme.

See [Table 1.1](#) for full data.

More recent intakes contain a higher proportion of individuals expected to require more support and assistance. A quarter of the September 2014 intake is from ESA groups compared to less than 3% in the first intakes to the scheme.

Differences since September 2012 reflect changes in access to the Programme, especially for ESA claimants including the introduction of information sessions for potential ESA volunteers, a Jobcentre Plus exercise to identify eligible ESA Claimants who had not been referred to the Programme.

See [Table 1.2](#) for full data.

Summary

Based on user feedback the summary accompanying the data release now incorporates some key design principles and standards to aid understanding

- Journalistic structure
- Accounting for how the human brain and visual systems work.
- Written in plain English with descriptive titles, headings and subheadings. Short sentences and paragraphs.
- Impartial and objective interpretation, placed in context.

An example of excellence across the Government Statistical Service for the use of visuals and storytelling to explain quite complicated data.

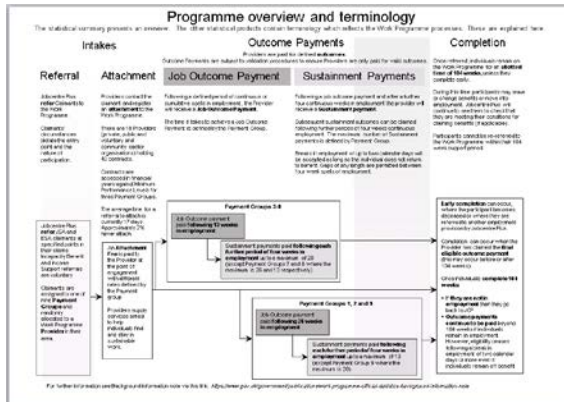
Meaningful presentation at all levels

Layers of detail

Work Programme processes are relatively complicated.

Process diagrams have been welcomed by our users to help them understand the various elements of the scheme and the resulting data.

These act as 'translators' from the high level overview and more simplified language to the technical detail and language required when presenting lower level information.



[Process Map Statistical Summary Dec 2014](#)

Low level data

We allow access to low level data via Excel reference tables, Tabulation Tool and csv files.

2011.11	11.4	1380	12140
2011.12	10.6	1040	9850
2012.01	13	1550	11880
2012.02	13.4	1260	9370
2012.03	15.2	1480	9720
2012.04	16.9	1600	9460
2012.05	17.8	1880	10580
2012.06	17	1660	9750
2012.07	16.6	1560	9370
2012.08	16.3	1210	7410
2012.09	15.5	890	5760

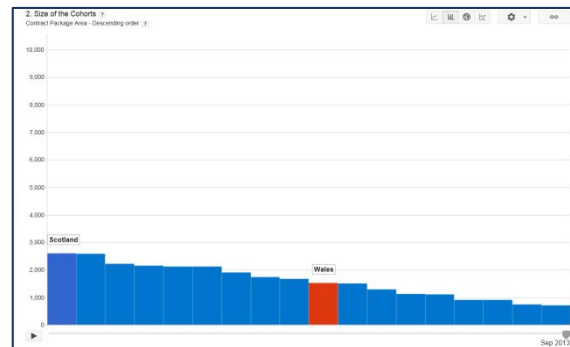
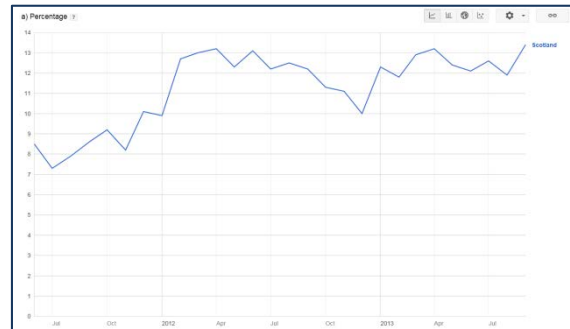
[Work Programme cohort data in .csv format](#)

Department for Work and Pensions Work Programme Statistics - December 2014							
Percentage of monthly intakes of Referrals that achieved a Job Outcome payment in the subsequent months following referral Up to September 2014							
Number of months after Volume of intake (Thousands)	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 month	74.62	99.21	73.66	63.27	68.27	68.74	58.06
2 months	-	-	-	-	-	-	-
3 months	-	0.1	0.1	0.1	0.1	0.1	-
4 months	0.3	0.4	0.4	0.5	0.3	0.1	0.2
5 months	0.7	0.8	0.8	0.8	0.4	0.3	0.4
6 months	1.2	1.4	1.2	1.0	0.8	0.6	0.8
7 months	2.6	2.4	1.8	2.1	1.6	1.3	1.7
8 months	3.8	3.3	3.3	3.1	2.8	2.4	2.9
9 months	4.7	4.8	4.3	4.4	4.2	3.6	5.2
10 months	6.3	6.7	6.6	6.6	5.5	5.9	6.6
11 months	7.3	6.8	6.9	6.9	8.1	7.2	8.6
12 months	8.4	7.9	8.0	9.4	9.4	9.1	9.9

[Work Programme Excel Tables](#)

Public Data Explorer

We allow the ability to visualise low level data via Google Public Data Explorer.



[Work Programme cohort data and time series data provided through Public Data Explorer](#)

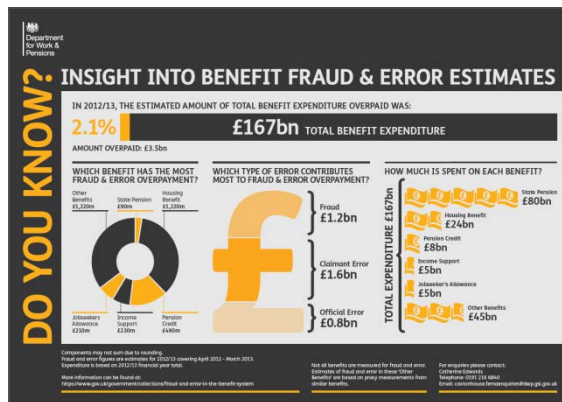
What next?

More sophistication

Good data presentation combines analytical and data insight, IT and journalistic skills and good design.

The best results are achieved by teaming up, particularly for more sophisticated visuals.

There are already some good examples of analysts and communications experts working together to deliver impactful products.



DWP Fraud and Error Infographic

More innovation

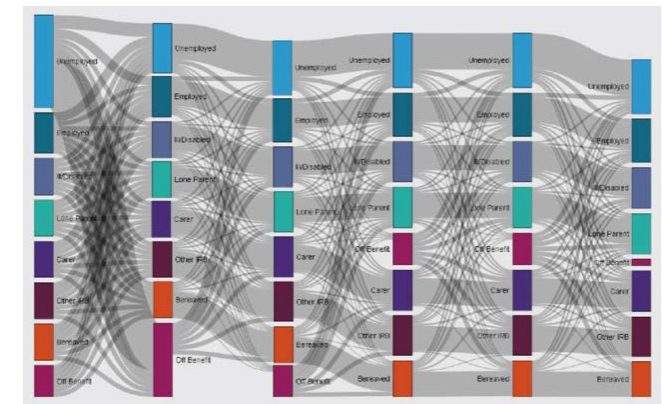
Typically in DWP we present our main findings via static charts, where we control the narrative

Exploratory and interactive visuals provide easier ways to find insights in our data.

Visuals that users can interact with and explore open up more and more of our data.

The mark-up to HTML 5 presents us with an incredibly powerful toolkit for data visualisation in particular the JavaScript library [D3.js](http://d3.js.org/)

Custom visualisations can be built and displayed on every platform and device with a modern browser.



Interactive Sankey diagram to illustrate flows