

# OPENSPENDING

**Making budget data accessible with tools and fiscal standards**

PRESENTED BY

**ANDERS PEDERSEN**

**Open Knowledge**



It started with a question:  
Could budget data make  
more sense to us as citizens?

# WHERE DOES MY MONEY GO?

Showing you where your taxes get spent



The Daily Bread

Country & Regional Analysis

Departmental Spending

About

## The Daily Bread Costs for the British Taxpayer per Day

**SALARY**  
**£35,730**

**SELECT YOUR SALARY**

**YOUR TAX**  
**£14,509**



Running  
Government



£5.38

Defence



£2.80

Health



£9.69

Helping  
Others



£14.22

Culture



£0.62

Education



£2.54

Running The  
Country,  
Social  
Systems



£2.35

Order &  
Safety



£1.29

Our Streets



£0.46

The  
Environment

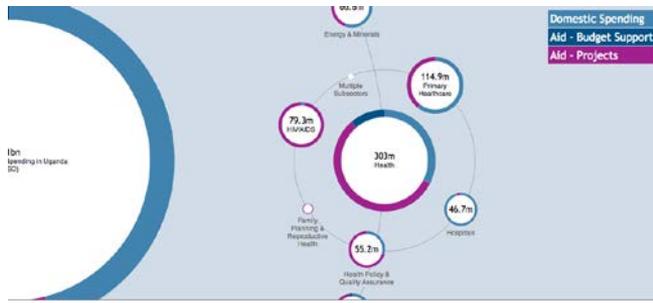


£0.40



OPEN KNOWLEDGE

# A few successes



**Breaking data silos and providing insight:**  
OpenSpending was used to connect aid & budgets for the first time in **Uganda** - providing the government with important new insight (2010);



**Community driven sites already in over 200 locations globally;**



Used **both** by **governments & civil society** (Romania, Uruguay, UK).

Research on fiscal transparency and standards



# Significant community uptake

- Germany: Several city budgets published, references to OpenSpending in local city regulation
- Japan: +150 city based deployments of OpenSpending
- Globally: 70 countries, 800 datasets, 26 mio. transactions

WHERE DOES MY MONEY GO? 税金はどこへ行った?

2013年2月23日 Chiba Open Data Day 2013 - こどもNo.1千葉-の参加者が協力して本サイトを作りました! あなたの税金がどこで使われているかをお示しします

The Daily Bread About Data Source Open Data Dayでの活動成果 子ども関係事業のまとめ Team for 千葉市 Contact

あなたの世帯タイプは?

単身世帯 扶養有り

年収 あなたの年間収入を選んでください あなたの千葉市税 (年間) ¥220,200

¥4,000,000

あなたの市税は、1日当たり、どこで、いくら使われているか?

健康福祉	子育て・教育	経済・観光	まちづくり	環境	市民	上下水道	政策	消防・防災
¥353.35	¥84.64	¥94.11	¥27.51	¥16.23	¥8.81	¥3.80	¥8.81	¥6.03

Where Does My Money Go? (日本語版 ver.1.0) は、イギリスの Open Knowledge Foundation が開発した Where Does My Money Go? (英語版) をベースに開発されています。使われているデータは千葉市の平成23年度決算のデータをもとにしています。Where Does My Money Go? プロジェクトは、公共データのオープン化を進める有志に支えられています。

- Where Does My Money Go?
- OpenSpending
- TheDataHub
- OKFN Labs
- Core team
- Data sources used on this site
- Code and making your own

All content, code and data is openly licensed in accordance with the open definition.

Chiba City's WDMMG created on Feb. 23, 2013, the International Open Data Day



Significant community uptake

# Government of Mexico

- Visualisation of the natural disaster fund
- Tailored map of 32 provinces developed in-house
- Next step: OpenSpending / CKAN integration



# Spend browser for UK government

Open Spending

Date	Entry	Supplier	Amount	Status
2011	0018	OFFICE OF THE PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT (OPE)	3,000,000.00	Open
2011	0018	OFFICE OF THE PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT (OPE)	1,000,000.00	Open
2011	0018	OFFICE OF THE PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT (OPE)	1,000,000.00	Open
2011	0018	OFFICE OF THE PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT (OPE)	1,000,000.00	Open
2011	0018	OFFICE OF THE PARLIAMENTARY COMMISSIONER FOR THE ENVIRONMENT (OPE)	1,000,000.00	Open

Supplier

- 000017 B&B CONSULTING SERVICES LTD
- 000018 B&B PUBLIC GROUP
- 000019 B&B CONSULT
- 000020 B&B CONSULTING
- 000021 B&B
- 000022 CONTRACT SERVICES GROUP LTD
- 000023 GEFORIS LIMITED
- 000024 H&M CONSULTING SERVICES LIMITED
- 000025 H&M CONSULTING PLC

Department Family

- 000000 Department of Health
- 000001 Department for Business, Innovation and Skills

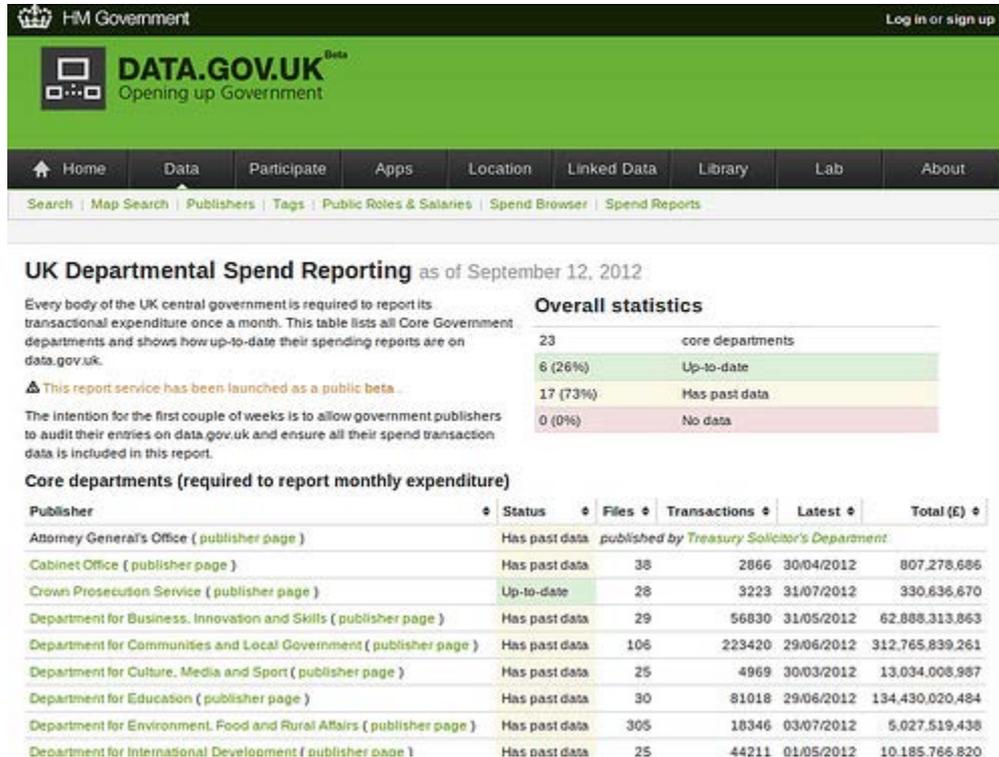
Key functions:

- reconciles unstructured spreadsheets from across departments
- makes government spending searchable across agencies
- Implemented in 2012



UK spend browser

# Reporting dashboard: benchmark agencies to drive reporting compliance



The UK *Spend Reporting Dashboard* developed for data.gov.uk. Key functions:

- reconciles unstructured spreadsheets from across departments
- makes government spending searchable across agencies
- Customized browser



How well do government agencies report?

Why work on a budget  
specification?

# Who uses budget data?

- The **governments themselves**
- Inter-governmental institutions



- Information intermediaries



ANSA-EAP



# Better budgetary standards → improved release monitoring and sharing

The OpenSpending *Budget Data Package* project:

- Why: budget standard → improve data flows, enable better analytics and visualisations
- What we've done: six months in-depth research into best practises around budget data
- Result: a *budget data package*
- Next: stress test with studies in specific countries, develop new visualisation tools and automatic loading of budget data



Why standardised release matters

Toolbar with icons for file operations, editing, and formatting. Font: Arial, Size: 10.

A1 year

	A	B	C	D	E
1	year	Administrative Classification (Level 1) -- Agency	Economic Classification (Level 1)	Economic Classification (Level 2)	Economic Classi
2	2006	101002 National Assembly of RA	4000 Running expenses	4100 Payment for labor	4110 Salaries an
3	2006	101002 National Assembly of RA	4000 Running expenses	4100 Payment for labor	4110 Salaries an
4	2006	101002 National Assembly of RA	4000 Running expenses	4100 Payment for labor	4130 Actual soci
5	2006	101002 National Assembly of RA	4000 Running expenses	4700 Social allowances and pensions	4720 Social secu
6	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
7	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4220 Business tr
8	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
9	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
10	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
11	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
12	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
13	2006	101002 National Assembly of RA	4000 Running expenses	4200 Acquisition of services and goods	4230 Acquisition
14	2006	101002 National Assembly of RA	4000 Running expenses	4800 Other costs	4860 Other costs
15	2006	101002 National Assembly of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
16	2006	101002 National Assembly of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
17	2006	101002 National Assembly of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
18	2006	105034 Control Chamber of RA	4000 Running expenses	4100 Payment for labor	4110 Salaries an
19	2006	105034 Control Chamber of RA	4000 Running expenses	4100 Payment for labor	4130 Actual soci
20	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
21	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4220 Business tr
22	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4220 Business tr
23	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
24	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
25	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
26	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4210 Continuous
27	2006	105034 Control Chamber of RA	4000 Running expenses	4200 Acquisition of services and goods	4230 Acquisition
28	2006	105034 Control Chamber of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
29	2006	105034 Control Chamber of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
30	2006	105034 Control Chamber of RA	5000 Costs in the line of non-financial assets	5100 Fixed assets	5120 Machinery
31	2006	101001 Staff of President of RA	4000 Running expenses	4100 Payment for labor	4110 Salaries an
32	2006	101001 Staff of President of RA	4000 Running expenses	4100 Payment for labor	4110 Salaries an
33	2006	101001 Staff of President of RA	4000 Running expenses	4100 Payment for labor	4130 Actual soci
34	2006	101001 Staff of President of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr
35	2006	101001 Staff of President of RA	4000 Running expenses	4200 Acquisition of services and goods	4250 On-going r
36	2006	101001 Staff of President of RA	4000 Running expenses	4200 Acquisition of services and goods	4260 Material (gr

Sheet1

Find  Match Case

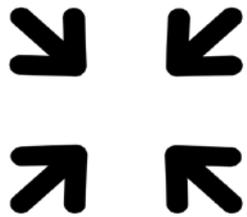


# Bringing it all together

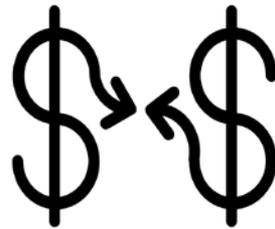
- The Tower of Budget-Babel
- Common data format
- Match publisher workflow to user needs
- Best practices from both worlds
- No disruption to existing budgeting techniques



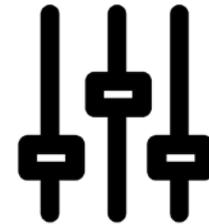
# Design decisions



Simplicity



Comparability



Flexibility



# Simplicity - key for adoption

- Simple, universal components:
  - Spreadsheet data (CSV)
  - Plain-text descriptive metadata (JSON)
- Much easier to use than alternatives (XML, RDF, ...)
- Two files keeps data simple:
  - Repetitive data goes into metadata



Toolbar with icons for file operations, editing, and formatting. Font: Arial, Size: 10.

A1		year					
A	B	C	D	E	F	G	
1	year	adminID	admin	economicID_level1	economic_level1	economicID_level2	economic_level2
2	2006	101002	National Assembly of RA	4000	Running expenses	4100	Payment for labor
3	2006	101002	National Assembly of RA	4000	Running expenses	4100	Payment for labor
4	2006	101002	National Assembly of RA	4000	Running expenses	4100	Payment for labor
5	2006	101002	National Assembly of RA	4000	Running expenses	4700	Social allowances and pensions
6	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
7	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
8	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
9	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
10	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
11	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
12	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
13	2006	101002	National Assembly of RA	4000	Running expenses	4200	Acquisition of services and goods
14	2006	101002	National Assembly of RA	4000	Running expenses	4800	Other costs
15	2006	101002	National Assembly of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
16	2006	101002	National Assembly of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
17	2006	101002	National Assembly of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
18	2006	105034	Control Chamber of RA	4000	Running expenses	4100	Payment for labor
19	2006	105034	Control Chamber of RA	4000	Running expenses	4100	Payment for labor
20	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
21	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
22	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
23	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
24	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
25	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
26	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
27	2006	105034	Control Chamber of RA	4000	Running expenses	4200	Acquisition of services and goods
28	2006	105034	Control Chamber of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
29	2006	105034	Control Chamber of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
30	2006	105034	Control Chamber of RA	5000	Costs in the line of non-financial assets	5100	Fixed assets
31	2006	101001	Staff of President of RA	4000	Running expenses	4100	Payment for labor
32	2006	101001	Staff of President of RA	4000	Running expenses	4100	Payment for labor
33	2006	101001	Staff of President of RA	4000	Running expenses	4100	Payment for labor
34	2006	101001	Staff of President of RA	4000	Running expenses	4200	Acquisition of services and goods
35	2006	101001	Staff of President of RA	4000	Running expenses	4200	Acquisition of services and goods
36	2006	101001	Staff of President of RA	4000	Running expenses	4200	Acquisition of services and goods

Sheet1

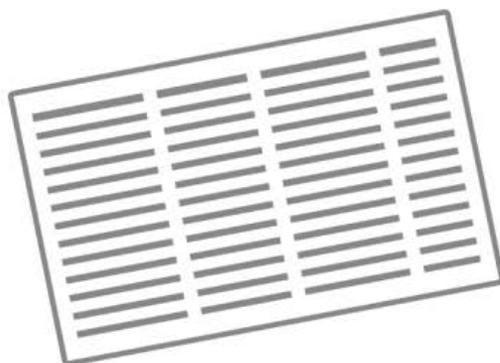
Find:  Match Case



# Budget Data Packager



[Why?](#) [What?](#) [How?](#)



## Do you have a budget spreadsheet?

We'll help you [convert it to the budget data package specification](#).



### Upload

Give us your spreadsheet as a CSV file.



### Describe

Describe your dataset for us



### Download

Download your budget data package and start using it

# Comparability

- Required fields make meaningful budget comparisons possible
  - COFOG used by e.g. Eurostat to compare EU spending data
  - GFSM is the economic classification used by the IMF
- Unique IDs make it possible to connect datasets
  - Budget line item IDs: connect spending and contracts
  - Unique dataset & package names: stable links to data



# Budget in a Box



The screenshot shows the Armenia BOOST website interface. At the top, there is a navigation bar with 'Armenia BOOST', 'Home', and 'Datasets'. The main content area features a large circular diagram representing the 2012 budget breakdown. The central circle is labeled '1t Total'. Surrounding it are various budget categories, each with an icon: Environmental protection (red), Social security (brown), Healthcare (green), Public order, security and judicial work (orange), Education (yellow), Reserve funds not covered by main divisions (black), Economic relations (purple), Recreation, culture and religion (purple), Defense (green), House-building and public utilities (green), and General public services (red). To the right of the diagram, the text reads 'Armenia BOOST' in large font, followed by 'armenia-approved-2012' and 'The approved budget of Armenia in 2012, from the Armenia BOOST dataset.' Below this text is a blue button labeled 'Learn more »'.

## New datasets

- [armenia-adjusted-2006](#)

**Fiscal year:** 2006  
**Category:** budget  
**Status:** adjusted

## Site information

The full Armenia BOOST dataset, from the Open Budgets portal.

# Flexibility of budget data package

- Few requirements, many recommendations
- Local category systems still useable
  - e.g. COFOG vs. functional category
- Covers data generated at all points of budget cycle
  - Statuses: proposed, approved, adjusted, executed
  - Both aggregated and transactional, expenditure and revenue

# Codifying good practices

- Inspired by exemplary budget data publications:
  - World Bank BOOST participants
  - Datasets suggested by OpenSpending community
- Uses international classification systems and guidelines
  - COFOG and GFSM
  - IMF budget classification guidelines

# Publication workflow

1. Categorize your data with standards
  - a. add COFOG to expenditures, GFSM to revenues
2. Set up the spreadsheet(s)
  - a. change headers to match specification
  - b. create separate files (one per fiscal year, status, category)
3. Create the metadata file
  - a. one file per package
  - b. one part per dataset



# Next: Integration and interoperability

- XBRL to CSV converter
- Validator
- Metadata creator
- CKAN - OpenSpending
- Visualisations
- Classification mappings

# Thank you!

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