

Title	Comparability for Local Financial Data
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Purpose	To propose how data standards can be applied to local financial data to improve comparability.
Type	LeGSB Report
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Revision	Date	Author	Notes
1	03/05/2012	Paul Davidson, for LeGSB	
2	24/05/2012	Paul Davidson, for LeGSB	Includes 'break out box' from LGA, and supporting text to back up the Executive Summary.
3	09/04/2015	Paul Davidson, for LeGSB	Status now Final, as approved by DCLG.

1. Executive Summary

1.1. A vision for reliable and useful comparable financial data

1.1.1. This LeGSB¹ Report supports a commitment from the Department for Communities and Local Government (DCLG) to work with local authorities to explore how to make spending data more comparable.

1.1.2. The study has revealed opportunities whereby comparable local financial data continues to enhance public scrutiny, while helping local authorities and their partners to:

- be more transparent – by bringing meaning and context to financial data so that it can be confidently combined, and compared;
- transform local services – by demonstrating how providing data to local residents and stakeholders can enable them to participate in the prioritisation of local resources, and support local accountability; and
- Identify and exploit efficiencies – by exploring how data can be shared and re-used amongst partners in a more efficient, cost-effective manner.

1.1.3. Comparability is based on finding the 'joins' between data that is published from separate sources e.g. many local authorities, and national statistics. The linking mechanisms that can be used to support comparability include:

- using consistent definitions of the meaning of the values in the data;
- using common reference schemes to refer to common items.

1.2. Developing and testing the vision with Local Authorities, and their partners.

1.2.1. LeGSB ran an online survey, designed to source ideas and enthusiasm for comparability, from which we received 107 replies, 59 of which provided detailed answers to all of the questions. The chart (Figure 1) shows that most replies came from local authority staff, working in a financial, procurement, or transparency group.

¹ <https://knowledgehub.local.gov.uk/group/localegovernmentstandardsbody>

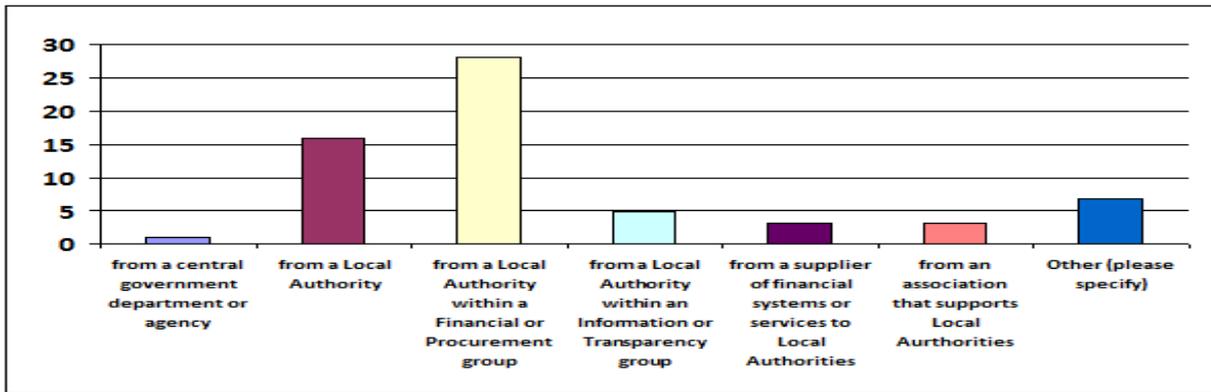


Figure 1 – respondents to the LeGSB comparability survey 2012.

1.2.2. The survey was followed by a series of workshops, and presentations, to explore opportunities that were raised in the survey. We are grateful for the participation from

- local authority staff
- suppliers of financial systems to local authorities
- linked data experts
- custodians of core reference data²
- the local government group
- the iNetwork
- department for communities and local government

1.2.3. LeGSB has worked directly with organisations that have data services that can be used for making joins across local financial data, and have created fact sheets about each of the key ones.

1.2.4. In particular, we have found that activities to co-ordinate the ‘metrics’ that can contextualise local spending, are a key component of comparability.

LG Inform, esd-toolkit and metrics

The LGA’s LG Inform tool supports comparison of “metrics” between local authorities. Metrics are measures of people, places and performance. They include revenue budgets and out-turns which can be contextualised against demographic and socio-economic factors, such as population, household count, employment and educational attainment.

The esd-toolkit Local Government Business Model (LGBM) includes a list of metric types used by LG Inform in comparing authority areas and by esd-toolkit itself for analysis within the boundaries of a single authority. LGBM relates each metric type to other parts of the model (eg relevant services) and out to related CIPFA SeRCOP headings (eg type of spend).

LGA brings together centrally published metrics and metrics gathered and published by councils themselves, which are made open through LG inform. It can support this paper’s illustrative model by providing sample feeds of metrics against which spending data can be contextualised.

Local Government Association – May 2012

1.3. Findings.

² The Cabinet Office define ‘Core reference data’ as - an authoritative or definitive set of data that provides a framework or context for understanding or using other information. It is thus of high importance or value to a large number of people and is produced by public sector bodies as a service in itself as it either favours a natural monopoly, or the market cannot or does not currently provide it

1.3.1. The survey and workshops demonstrated a broad support and appetite from local authorities to actively use data as they engage with local people and communities, seek smarter procurement, design improved services, and so on.

1.3.2. Many felt that the current approach to publishing financial data had yet to make an impact beyond 'accountability'; and is typically implemented as the last stage of processing.

1.3.3. We also found enthusiasm for re-using comparable financial data from within other parts of the public sector.

The fact that the DfT has not set any "top down" National targets for road safety does not mean that its importance has diminished as a priority for the Department.

Instead the Local Road Safety Comparison web site, (currently under construction), will be a vital tool to empower local residents, lobby groups, council officials and members to lobby for action where road safety performance is shown to be below par, or conversely, shine a light on those authorities who can be an example to others.

In order for this to be effective, it is essential that the data used is comparable between authorities so we can be confident that where comparisons are made, they cannot be undermined by claims that we are not comparing like with like.

Department for Transport

1.3.4. From the many types of local financial data, the survey demonstrated that comparability was most useful if applied to

- Payments for Goods and Services. What has been spent with who, on what, and for what purpose?
- Budgets What is planned to be spent for what purpose?
- Actual Income and Expenditure compared to a budgets What has been spent so far?

1.3.5. The survey and workshops focussed on demonstrating the potential for 'joins' based on

- Supplier Who is providing goods and services?
- Procurement Categories What type of goods and services are being purchased?
- Budget Headings The purpose for spending
- Metrics The context for spending
- Location The organisations serving communities

1.3.6. The workshops have created a model to illustrate how these joins can work together to link otherwise disparate data sets from many local authorities. See 'Figure2' where green ellipses represent local authority data, blue ellipses represent national core reference data, and the arrows show the links that can be made.

1.3.7. For each type of 'join', an authoritative source of definitions and identifiers has been demonstrated. Local authorities and their systems providers have then considered how to make it attractive to embed these standards into their processes at an early stage, looking for internal efficiencies, and minimising the effort to include them in published data.

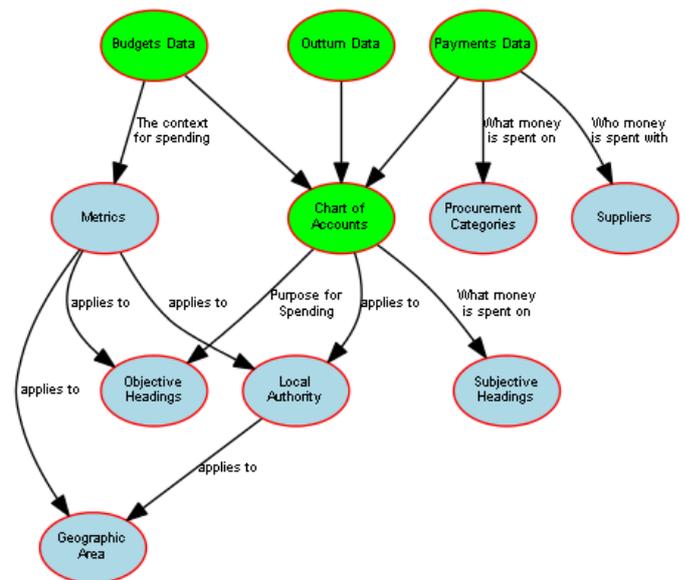


Figure 2 – model linking local authority financial data to core reference data and definitions

1.3.8. A demonstration of some of these joins has been worked up using real data provided by a number of participating local authorities, together with a demonstration of how that data, can be queried and compared.

1.3.9. There are potential direct benefits for local authorities when building 'links' into their data processing at an early stage, rather than at the final data publishing stage, for example, being alerted when suppliers are in financial difficulty; reduced data-collection and re-keying.

1.3.10. These, and other links, can then be followed through as data is published, so that residents, communities, businesses and so on, can reach informed conclusions on the financial plans and actions of local councils, where data about budgets, spending, suppliers, etc., is joined, and contextualised.

1.3.11. Initiatives such as 'open public services', and 'local neighbourhood planning and budgeting' push this need for joined up data beyond financial information, requiring links into other records such as decisions, contracts, services, plans, objectives, targets, and so on.

1.3.12. There is recognition that some structure and leadership is required to realise the potential in the data.

1.4. Barriers to Success.

1.4.1. There is a lack of awareness amongst some local authorities and their financial systems suppliers about the power and potential of open data, beyond transparency and accountability. We need to take the models and demonstrations that we have created in this study, and prove this potential at a larger scale.

1.4.2. This valuable information is typically contained in 'back-office' computer systems which are not ready to routinely release data in open, re-usable, standardised forms. We need to continue to work with suppliers to embed data standards into their systems and services.

1.4.3. The standards, and core reference data, necessary to underpin comparability, are patchy. For example, CIPFA and Companies House provide well developed definitive linked data about budget headings, and companies, respectively; now we need to extend this to topics such as procurement categories and service metrics, as identified in the model.

1.4.4. Many useful sets of data are listed in the 'The Code of Recommended Practice for Local Authorities on Data Transparency'³, but at present, there are no data standards accompanying that guidance. This is likely to lead to many different formats and definitions for these data sets which will not then be linkable.

1.4.5. There is a lack of governance and leadership to demonstrate a clear remit to drive benefits across the sector; we need to refresh the 'Code of Recommended Practice' to demonstrate strategic fit to the challenges and opportunities facing local authorities, and move to an assumption that published data should be linked and contextualised.

1.5. Recommendations.

1.5.1. Raise awareness of the power and potential for open data.

- i. promote the 'demonstrator' and learning developed during this study to local authorities, and suppliers of systems and services;
- ii. encourage suppliers of systems and services to provide data extracts that fit to the model of comparable financial data;
- iii. encourage organisations that hold core reference data, and/or definitions, to publish them in a linked data friendly form.

1.5.2. Pilot the publication of comparable financial data at a larger scale.

- i. work with the iNetwork to publish comparable financial data from many local authorities;
- ii. prove the internal and external benefits and investment necessary to publish comparable financial data;
- iii. create standards, implementation guidance, deployment models.

1.5.3. Extend the scope of comparable data beyond financial information to support 'open public services' and similar initiatives.

- i. develop a model to illustrate the links between data from many sources about services, plans, targets, contracts, and so on;
- ii. work with selected local authorities to pilot publishing data to that model.

1.5.4. The 'Code of Recommended Practice for Local Authorities on Data Transparency' is a key mechanism for encouraging councils to release more useful, comparable data on local spending. Consideration should be given to adapting the code to:

- i. give confidence to use the identifiers from OpenDataCommunities.org by making it permanent and a source of linking assets from the department;
- ii. describe the importance of linking together 'lines' from individual datasets, illustrating links over datasets explicitly listed in the code;
- iii. draw out how this 'linked' approach can bring benefits to data users and publishers, and the strategic fit to sector initiatives;
- iv. emphasise the importance of standards, as the means to describe and then link together data in a consistent, reliable manner.

³ <http://www.communities.gov.uk/publications/localgovernment/transparencycode>

2. Local Financial Data

2.1. The LeGSB survey asked for ideas about which types of local financial information would be useful if provided in a data format that could be further manipulated, e.g. sorted, filtered, combined, etc. Suggestions included:

Suggestions from the survey	Already contained in the DCLG Code of Practice
<ul style="list-style-type: none"> • Payments for goods and services. 	<ul style="list-style-type: none"> • Expenditure over £500
<ul style="list-style-type: none"> • Budgets 	
<ul style="list-style-type: none"> • Actual income and expenditure compared to a budgets 	
<ul style="list-style-type: none"> • Scales of fees and charges 	
<ul style="list-style-type: none"> • Reserves and balances 	
<ul style="list-style-type: none"> • Loans and investments 	
<ul style="list-style-type: none"> • Medium term financial plan 	
<ul style="list-style-type: none"> • Contracts 	<ul style="list-style-type: none"> • Copies of contracts and tenders
<ul style="list-style-type: none"> • Staff costs 	<ul style="list-style-type: none"> • Senior employee salaries • An organisational chart of the staff structure of the local authority including salary bands, ...
<ul style="list-style-type: none"> • Expenses 	<ul style="list-style-type: none"> • Councillor allowances and expenses

2.2. The 'code of practice' seems to focus on data about what has happened in the past, rather than about how an authority plans to allocate its resources in the future. Conversely, respondents to the survey suggested that publishing data about budgets, outturn, reserves and so on, would be more useful as they engage with their communities, but only if they were 'comparable'.

2.3. The 'code of practice' refers to other non-financial information ...

- Policies, performance, external audits and key inspections and key indicators on the authorities' fiscal and financial position.
- The location of public land and building assets and key attribute information that is normally recorded on asset registers and
- Data of democratic running of the local authority including the constitution, election results, committee minutes, decision - making processes and records of decisions.

2.4. This non-financial information, if linked to financial data, could provide context and therefore, comparability for spending plans; for example ...

- What budget achieves what performance for each service?
- How much is spent on electricity for the Town Hall?
- When was the decision made to make a grant?

RECOMMENDATION

Describe the importance of linking together 'lines' from individual datasets, illustrating links over datasets explicitly listed in the code;

2.5. The survey demonstrated that the top three sets of financial information which would be most useful to the vision, when provided in a comparable form are:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Payments for Goods and Services. | What has been spent with who, on what, and for what purpose. |
| <ul style="list-style-type: none"> • Budgets | What is planned to be spent for what |

purpose.

- Actual Income and Expenditure compared to a budgets

What has been spent so far

2.6. The workshops therefor focussed on these three sources of financial information, building on the ideas provided in the survey.

2.6.1. Payments for Goods and Services.

Content	Listing individual payments that have been made for goods and services to suppliers.
What use can be made of this data when in a comparable form.	<p>Spend and Supplier analysis to improve procurement.</p> <p>Comparing costs between councils</p> <p>Visibility of spend amounts and patterns by potential suppliers</p> <p>Analysis of types of suppliers, for example</p> <ul style="list-style-type: none"> • amount spent with local firms • type and size of supplier <p>Data can be combined over time, from a single Local Authority, to consider if it is operating within its</p> <ul style="list-style-type: none"> • Governance and Control framework • Standing Orders and Financial Regulations
Current approach to publishing	<p>As guided by the 'code of practice' councils in England routinely publish open data files of payments over £500 to their suppliers.</p> <p>Many councils have followed the practitioner guidance provided by the Local Government Association (LGA) at http://www.idea.gov.uk/idk/aio/24145197</p> <p>Typically, councils publish information at their web sites monthly</p> <ul style="list-style-type: none"> • a 'pdf' file so that the information can be viewed • a 'csv' file to that data can be downloaded and manipulated <p>Some councils publish this data as 'Linked Data'⁴ using the ontology⁵ developed through partnership with data.gov.uk.</p>
Barriers to comparability	<p>The £500 filter means that this data cannot be 'added up', to give an amount spent with a supplier, on a type of product etc.</p> <p>Often cannot judge what is actually being purchased, and how many.</p> <p>Suppliers may actually be 'resellers' for common products; those common products would not be obvious from the data.</p> <p>The name of a supplier is sometimes redacted due to personal information, or commercial confidence.</p> <p>Payments are not the only source of transactions for a category of income or expenditure, and therefore cannot be used to track actual costs against a budget.</p>

⁴ http://en.wikipedia.org/wiki/Linked_data

⁵ <http://data.gov.uk/resources/payments>

	<p>Errors are not always corrected in later published data files. For example, miss-coding to an expenditure category.</p> <p>The definitions of the columns used, may not always mean exactly the same for data from different sources.</p>
Opportunities for comparability	<p>Use of explicit definitions of the terms in the data.</p> <p>Use of common reference schemes to identify a supplier. Being alerted to early insolvency notices relating to companies on a local authority's supplier index.</p> <p>Use of common procurement classifications to categorise the goods or services purchased.</p> <p>Use of common expenditure headings to categorise the purpose of the spend in terms of public services.</p> <p>Links to contracts and projects where applicable</p>

2.7. Budgets

Content	<p>This information reports how a council has decided to allocate funds over each of its services and projects. Typically this is split into</p> <ul style="list-style-type: none"> • Revenue • Capital
What use can be made of this data when in a comparable form.	<p>To be able to calculate ratios, percentages, year on year changes, and so on.</p> <p>To see how councils are making savings</p> <p>To 'benchmark' budgets with other similar councils, i.e. those with a similar context.</p> <p>To compare planned spending to actual spending</p> <p>To consider Unit Costs</p> <p>To find regional and themed trends over time</p> <p>Can be analysed</p> <ul style="list-style-type: none"> • Horizontally (subjectively) i.e. how much is allocated to a type of cost such as staff, travel, electricity, irrespective of the purpose for the spend. • Vertically (objectively) i.e. how much is allocated to a particular service or project.
Current approach to publishing	<p>Councils publish documents summarising their budgets as a part of an annual financial cycle. Typically these are produced as web pages, and 'pdf' documents containing tables, but are rarely published by the council as data.</p> <p>Councils (in England) are required to provide the Department for</p>

	<p>Communities and Local Government (DCLG) with data containing a summary of their budgets in a standard form. This data is checked by the department and is published as a National Statistic. It has recently been made available as data at</p> <p>http://opendatacommunities.org/data</p> <p>The budget data from DCLG becomes available some months after a council has set it.</p>
<p>Barriers to comparability</p>	<p>The budgets information that councils publish is typically aggregated up to service headings, whereas the local interest may be about how resources are allocated over local cost centres. Initiatives towards 'local neighbourhood planning and budgeting, and open public services, will require that budgeting data is available at a more detailed level.</p> <p>Councils use their own ledger codes to identify each service, cost centre, project etc that spending is allocated to. These are mapped to national categories in each council's 'Chart of Accounts'. This mapping may not be applied consistently across all councils.</p> <p>There are various models of local government such that different types of local authority will have varying responsibilities to provide services to local communities and geographic areas. To compare spending on a topic, in an area, more than one organisation's budgets may have to be considered.</p> <p>Releasing data in advance of quality assured national statistics may cause confusion.</p> <p>Budget data is not linked to the non-financial data that contextualises it.</p>
<p>Opportunities for comparability</p>	<p>Use of consistent national headings for topics of spending, to enable data from many councils to be combined.</p> <p>Provide data earlier in the annual cycle, at defined levels of quality assurance, and granularity. E.g. draft, consultation, adopted, revised.</p> <p>Link budgets to metrics</p> <ul style="list-style-type: none"> • Link a whole budget to information about the spending organisation, e.g. population, area. • Link budget headings to throughput and performance information that gives context to the related services. E.g. 'Cost of Administration of Housing Benefits' can be linked to statistics on '<i>Number of Claimants</i>', and '<i>Average time to assess a claim</i>'. • Link budget headings to statistics that inform the topic e.g. '<i>Cost of Coastal Defence</i>' can be linked to '<i>Length of Coast</i>'. <p>Link budget lines to</p> <ul style="list-style-type: none"> • Corporate objectives • Strategies

	<ul style="list-style-type: none"> • Contracts • Partnerships • ... and so on. <p>Provide data to link public sector organisations which provide services to the same geographic communities,</p> <p>Link summary data published and assured by DCLG, back to more detailed and local budget data held by each Local Authority.</p>
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2.8. Outturn of Actual Income and Expenditure

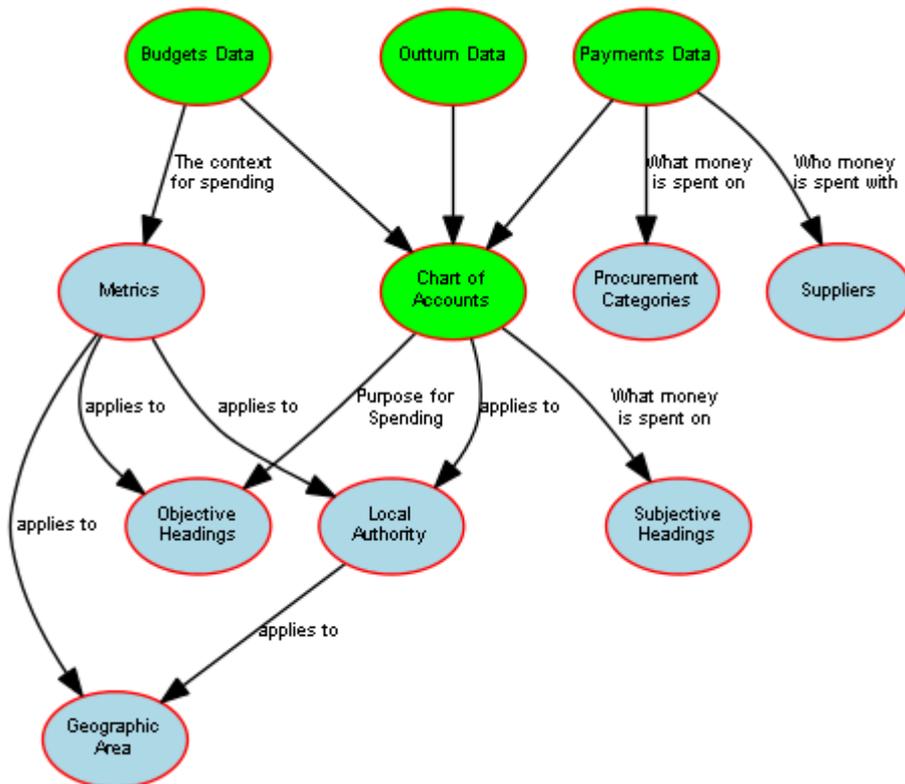
Content	<p>This information reports how actual income and expenditure have been accumulated against the planned spending contained in budgets. This information is typically reported internally on a monthly basis.</p> <p>Some budgets may be 'profiled' to show how the income or expenditure is expected to occur over time, for example 'Snow Clearance' costs are likely to apply to the winter months,</p>
Usefulness as data	<p>Can compare actual spend to planned spend.</p> <p>Can forecast over or underspends</p>
Current approach to publishing	<p>Councils publish documents containing an annual statement of accounts, summarising their actual spending for a year. Typically these are produced as web pages, and 'pdf' documents containing tables, but are rarely published by the council as data.</p> <p>Councils are required to provide the Department for Communities and Local Government with data containing a summary of their actual income and expenditure in a standard form. This data is checked by the department and is published as a National Statistic.</p> <p>It has recently been made available as data at</p> <p>http://opendatacommunities.org/data</p> <p>The outturn data from DCLG becomes available some months after a council has closed its accounts for a year.</p>
Barriers to comparability	<p>All the same barriers that are described for budgets, apply here too.</p>
Opportunities for comparability	<p>Use consistent headings for types of spending.</p> <p>Provide data as it becomes available in the financial cycle, at defined levels of quality assurance, and granularity.</p> <p>Link actual spending to planned spending.</p> <p>Link summary data published and assured by DCLG, back to more detailed and local budget data held by each Local Authority.</p>

3. Linking financial data to underpin comparability?

3.1. Comparability will be based on finding the ‘joins’ between data published from separate sources, for example, many Local Authorities, and national statistics. The linking mechanisms that can be used to support comparability include:

- Using consistent definitions of the meaning of the values in the data
- Using common reference schemes to refer to common items.

3.2. The survey and workshop brought forward that the following ‘joins’ could usefully be made across the three types of local financial data selected.



where

- the green ovals represent local data files from many councils, and other sources.
- the blue ovals represent national reference schemes and definitions

Figure 3 – model linking local authority financial data to core reference data and definitions

3.3. Breaking this apart ...

3.3.1. Budgets Data

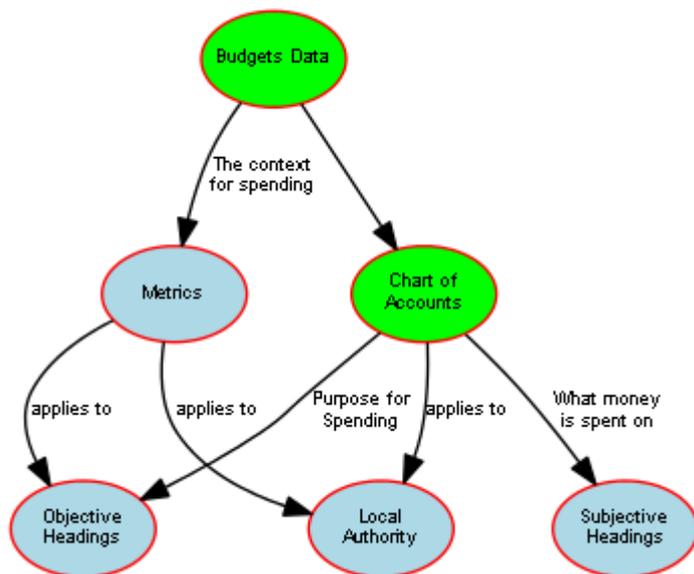


Figure 4 – model linking local authority budget data to core reference data and definitions

Local Authority Budgets are designed using a local ‘Chart of Accounts’⁶ where the ‘Cost Centres’ and ‘Cost Categories’ are defined and given a local code.

Examples of local ‘Cost Centres’ may include

- individual buildings such as a swimming pool
- local services such as waste management, or council tax collection etc.

These ‘cost centres’ are known as ‘objective’ codes. Local ‘cost centres’ have no meaning outside of the defining local authority, however, they are mapped to national schemes that group them into ‘objective headings’

For example, if you want to know the cost to run a local swimming pool, you would need to look at that individual cost centre at that individual local authority. However, if you wanted to know the expected spend on leisure services in a region, you could expect to find a suitable national ‘objective heading’ against which all councils in a region have grouped those cost centres.

The local ‘Chart of Accounts’ also defines general types of income and expenditure that may apply to any cost centre. Examples may include

- Heating
- Salaries
- Training
- Insurances
- Materials
- ... and so on

These are known as ‘subjective codes’. For example, if you want to know the income generated from an individual car park, you would need to look at the ‘income’ subjective code for that individual car park at the individual local authority. However, if you wanted to know the income from car parks in a region, you could expect to find a suitable national ‘objective heading’ and ‘subjective’ heading against which all councils in a region have grouped that income.

Local Authorities set their annual budgets for each ‘cost centre’ and then break them down further for each relevant subjective code.

In simple terms, the subjective code can indicate *what money is spent on*, and the objective code indicates the *purpose for spending*.

These local codes are not comparable, but they are typically mapped to national headings.

‘Metrics’ are individual statistics that can be used to bring context to local decision making; for example

- Number of abandoned vehicles reported in a year
- Numbers of pupils achieving 5 GCSEs
- Length of ‘A’ roads
- ... and so on.

⁶ http://en.wikipedia.org/wiki/Chart_of_accounts

Some metrics apply to the Local Authority itself, or to the throughput and performance of its services, e.g.

- Number of FTEs
- Average time to complete a new claim for housing benefit

Some metrics apply to particular services, and therefore particular objective headings, e.g. for an objective heading of 'Road Maintenance', metrics of

- Length of roads
 - Number of reported Potholes
 - Traffic Accidents
- ... may be relevant.

Some metrics can describe the targets and objectives of the Local Authority e.g. 'Increase recycling to 30%'.

The survey and workshops were cautious about simply as drawing up comparison lists based on derived unit costs; rather, the expectation is that budget data is put into context by associating it with a common set of metrics applicable to each budget heading.

3.3.2. Payments Data

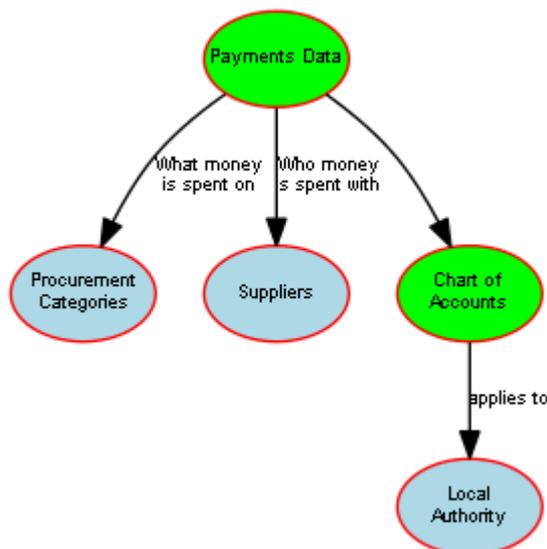


Figure 5 – model linking local authority payments data to core reference data and definitions

As a payment is made, it becomes possible to be more specific (than a subjective code) about the type of 'goods and/or services' being purchased. This is typically recorded as an order is raised, using one or more procurement categories. For example, a purchase of a particular make and model of laptop, may be allocated to a procurement category of 'laptops'. This may have been allocated to a budget with a subjective heading of 'IT Equipment'.

If common procurement categories are used, or can be mapped to, it becomes possible to accumulate purchases of the same category of product within, and across councils.

The name of the recipient of a payment (the supplier) is usually recorded in Local Authority payments data as free text. Councils tend not to include their internal supplier reference in their published data to avoid fraudulent contacts which quote that number. Many councils publish a reference that is just for publishing purposes. This enables payments to a single supplier to be identified within a council, but does not read-across to data from other councils.

If nationally managed references were used to identify suppliers, then it becomes possible to

- Combine spending data for a single supplier across many councils
- Consider the type, size and location of suppliers.

3.3.3. Outturn Data

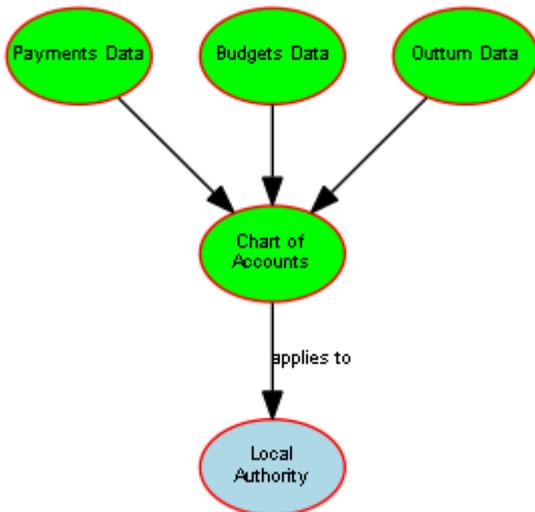


Figure 6 – model linking local authority outturn data to core reference data and definitions

Payments for goods and services are one of many causes for a transaction to be applied against a budget, and therefore, it does not follow that adding up payments data will arrive at the actual amount applied to a budget line.

For example, income, transfers, internal recharges, benefit payments etc will not feature in payments data.

This 'outturn' data could be published in a similar monthly cycle to the current typical approach to publishing payments data. As it is linked to the 'Chart of Accounts', 'outturn' data can be used to compare how a council's actual activities compared to that forecast in its budget.

3.3.4. Location data

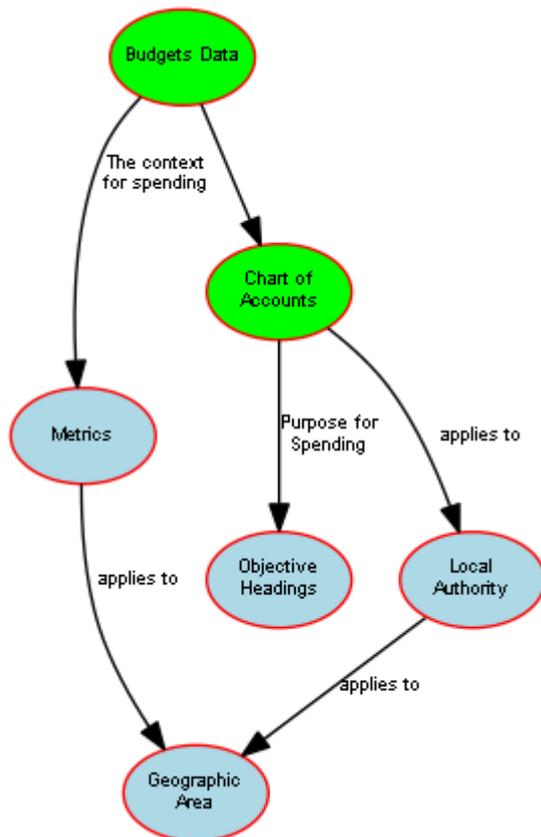


Figure 7 – model linking local authority financial data to location information

National location data can make joins to

- Discover which local public sector bodies are responsible for which areas. In particular, where more than one organisation provides a component of a service in an area, it will be important to combine the spending of each.
- The Metrics that describe the context in which a local authority is operating. For example
 - Demographics
 - Hospital Admissions Rates
- The use of local suppliers.

4. Making the Joins in local financial data?

4.1. To make the joins between local financial data, reliable 'core reference data' will need to be found, maintained, and consistently applied across each council, for each of the topics shown as blue ellipses from figure 3. That is

Linking Concept	Core Reference Data
Local Authority	A reliable set of identifiers for each local authority (in England).
Objective Headings	A set of codes and headings that describe the service or purpose of spending.
Subjective Headings	A set of codes and headings that describe the nature of spending.
Suppliers	Identifiers and basic information about the businesses that supply local authorities.
Procurement Categories	Categories of the goods and services that can be purchased.
Geographic Area	Codes to define the spatial extents of the area administered by each local public sector organisation.
Metrics	A set of definitions of metrics, combined with values for each area, and time period, associated with a set of 'Objective Headings'.

4.2. The choice of the right 'core reference data' for each concept should take into consideration:

- is the set already in use by all local authorities?
- is the set already in use by many local authorities and has mappings to other popular schemes?
- is the set provided from a definitive, and authoritative source?
- is there a commitment to the longevity and data quality of the set?
- is the set itself, open data, i.e. royalty free?
- is the set complete?
- is the set available as a data service, which provides extra context or further links?

4.3. Via the workshops, we can make the following recommendations for each concept.

4.3.1. Local Authority

Recommended set	Identifiers provided by the Department for Communities and Local Government at http://opendatacommunities.org/datasets/local-authorities
Already in use?	Used to link DCLG financial data about each Local Authority.
Mappings to others.	Links to identifiers from Ordnance Survey and Office of National Statistics.
Definitive?	There are a number of sets of identifiers for Local Authorities in use across many government departments, however, each has some doubt as to its timeliness and completeness. This set has been created by DCLG expressly for the purpose of linking data.
Commitment	DCLG should commit to keeping this set up to date as local authorities need to be added to the list. RECOMMENDATION Give confidence to use the identifiers from OpenDataCommunities.org by making it permanent and a source of linking assets from the department
Open?	Yes – via the Open Government Licence
Complete?	Yes – All Local Authorities in England. Other sets of identifiers will be needed to be able to link across the UK.
Data?	Yes – conforming to the cabinet office guidance for URI Sets.

	Includes, Type of Council, Statistical Geography
--	--

4.3.2. Objective Headings

Recommended set	Identifiers provided by CIPFA at http://doc.cipfa.org.uk/SeRCOP/GeneralFundRevenueAccount/EnglandWales/2011-2012.html
Already in use?	Local Authorities are required to provide budget and outturn information to DCLG using these headings.
Mappings to others.	These SeRCOP headings have been mapped to the Local Government Services List (LGSL), and the LglInform Metrics List by the esd-Toolkit.
Definitive?	CIPFA are the professional association.
Commitment	CIPFA refresh these headings every year.
Open?	Yes – via the Open Government Licence
Complete?	Yes. Three levels of heading are provided. The top two are a requirement from DCLG.
Data?	Yes – conforming to the cabinet office guidance for URI Sets.

4.3.3. Subjective Headings

Recommended set	Identifiers provided by CIPFA at http://doc.cipfa.org.uk/SeRCOP/SubjectiveList/2012-2013.html
Already in use?	Many councils use these headings although they are NOT a requirement in returns to DCLG.
Mappings to others.	Mappings to ProClass for procurement categories.
Definitive?	CIPFA are the professional association.
Commitment	CIPFA refresh these headings every year.
Open?	Yes – via the Open Government Licence
Complete?	Yes.
Data?	Yes – conforming to the cabinet office guidance for URI Sets.

4.3.4. Suppliers

Recommended set	Identifiers provided by Companies House at http://www.companieshouse.gov.uk/about/miscellaneous/URI.shtml
Already in use?	Many councils do NOT routinely capture the Companies House Registration Number as they set up supplier on their local index, however, this is easily found on headed paper or at the Companies House web site.
Mappings to others.	Maps to Notices from the Insolvency Service.
Definitive?	Yes
Commitment	Yes.
Open?	Yes – via the Open Government Licence
Complete?	No. Not all suppliers are companies, so this set will only make links for those that are.
Data?	Yes – conforming to the cabinet office guidance for URI Sets. Provides registered address, sic codes etc.

4.3.5. Procurement Categories

Recommended set	Identifiers provided by Corporation of London as 'ProClass'.																																																																																																
Already in use?	<p>A recent survey shows that there are a number of procurement categories in use across local authorities.</p> <table border="1" data-bbox="443 338 1497 882"> <thead> <tr> <th>Region</th> <th>ProClass</th> <th>CPV</th> <th>UNSPCC</th> <th>Thompson</th> <th>NSV</th> <th>e-class</th> <th>Bespoke</th> </tr> </thead> <tbody> <tr> <td>Eastern</td> <td>11</td> <td>4</td> <td>1</td> <td>1</td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>East Midlands</td> <td>3</td> <td>2</td> <td>3</td> <td>2</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>London</td> <td>27</td> <td>13</td> <td>12</td> <td>1</td> <td></td> <td></td> <td>4</td> </tr> <tr> <td>North East</td> <td>7</td> <td></td> <td>5</td> <td>3</td> <td></td> <td></td> <td>2</td> </tr> <tr> <td>North West</td> <td>19</td> <td>6</td> <td>5</td> <td></td> <td>1</td> <td></td> <td>2</td> </tr> <tr> <td>Scotland</td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>South East</td> <td>32</td> <td>16</td> <td>6</td> <td>3</td> <td></td> <td></td> <td>3</td> </tr> <tr> <td>South West</td> <td>11</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>West Midlands</td> <td>6</td> <td>4</td> <td>4</td> <td></td> <td></td> <td></td> <td>2</td> </tr> <tr> <td>Yorkshire and Humberside</td> <td>7</td> <td>2</td> <td>3</td> <td>3</td> <td></td> <td></td> <td>3</td> </tr> <tr> <td>Totals</td> <td>124</td> <td>52</td> <td>39</td> <td>14</td> <td>2</td> <td>0</td> <td>18</td> </tr> </tbody> </table> <p>Note that - An authority could tick more than one box so these do not equate to unique authorities</p> <p>Source - ProClass Survey of Local Authorities conducted by Improvement and Efficiency South East (iESE) between 16 and 26 March 2012</p>	Region	ProClass	CPV	UNSPCC	Thompson	NSV	e-class	Bespoke	Eastern	11	4	1	1			1	East Midlands	3	2	3	2	1			London	27	13	12	1			4	North East	7		5	3			2	North West	19	6	5		1		2	Scotland	1			1				South East	32	16	6	3			3	South West	11	5					1	West Midlands	6	4	4				2	Yorkshire and Humberside	7	2	3	3			3	Totals	124	52	39	14	2	0	18
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Mappings to others.	Proclass proves mappings to each of the popular categories.																																																																																																
Definitive?	No. There are other sets.																																																																																																
Commitment	Yes																																																																																																
Open?	Yes. The Copyright in ProClass is owned by iESE Ltd., a not for profit local government mutual, on behalf of local government.																																																																																																
Complete?	Yes.																																																																																																
Data?	No. The data is available for download as a spreadsheet, but it is not yet a set of URIs that can be linked to over the web.																																																																																																

4.3.6. Geographic Area

Recommended set	Identifiers provided by the Ordnance Survey at http://data.ordnancesurvey.co.uk for postcodes, civil voting areas and administrative units in Great Britain.
Already in use?	These identifiers are generated from the existing Boundary Line product..
Mappings to others.	Links to identifiers from Office of National Statistics.
Definitive?	The Ordnance Survey is the national mapping agency for Great Britain
Commitment	This is still considered to be an experimental project from Ordnance Survey.
Open?	Yes – via the OS OpenData License which incorporate the Open Government License - http://www.ordnancesurvey.co.uk/oswebsite/opendata/licensing.html
Complete?	Yes.
Data?	<p>Yes – conforming to the cabinet office guidance for URI Sets. Includes, relationships between council areas such as</p> <ul style="list-style-type: none"> • touches • covers • overlaps

4.3.7. Metrics

There are numerous sources of metrics that can bring context to the spending plans and outcomes of local authorities, including:

Source	
Police	<p>Crime statistics at both street and neighbourhood level” – see http://www.police.uk/api/docs/</p> <p>A Data Service is available via a REST API for which a key is required. See API - http://www.police.uk/api/docs/method/neighbourhood-crimes/</p>
DCLG triple store	<p>This data service, currently a ‘Proof of Concept’, contains data for:</p> <ul style="list-style-type: none"> • Household Projections by district, 1991-2033; • Additional affordable housing supply, • Net additional dwellings by local authority district, England 2004-05 to 2010-11; • Dwelling stock by tenure and district, England, 2011; • Homelessness statistics – Local Authorities’ actions under the homelessness provisions of the 1985 and 1996 Housing Acts (DCLG Live Table 784a); • Local Authority Revenue Expenditure and financing England: 2011-2012 budget – individual local authority data; • Indices for Multiple Deprivation (2004, 2007 and 2010 series). <p>Full dataset listing available via http://opendatacommunities.org/datasets.rdf</p>
NOMIS – official labour market statistics from ONS.	<p>Extensive statistics on population (2001 census and subsequent estimates), vacancies, earnings, VAT registrations/de-registrations, etc.</p> <p>Full dataset list available at http://www.nomisweb.co.uk/api/v01/dataset/def.sdmx.xml</p> <p>Data can also be queried and downloaded in a choice of formats. See API documentation here: http://www.nomisweb.co.uk/api/v01</p>
ONS Neighbourhood Statistics	<p>API available here - http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?page=nde.htm</p> <p>Expecting the current service will be subsumed within a new Census 2011 web services.</p>

Each of these sources of metrics has its own unique data interface which reduces the ability to scale-up comparability. Ideally, we need a single interface that can provide real-time access to values data for any metric, council, and period.

The Local Government Association and partners in the Local Government Group have created a service for Local Authorities, LgInform, that seeks to provide this single interface to metrics. Initially, the service provide a reporting and comparing facility for Local Authorities. The LGA are now considering what open data service can be provided.

We therefore recommend that LgInform should be the focus for providing the link from spending data, to contextualising metrics.

- 4.4. Having identified this cohesive set of 'core reference data', we should now bring the custodians together to ensure that they remain fit for purpose to support comparable financial data.

RECOMMENDATION

Encourage organisations that hold core reference data, and/or definitions, to publish them in a linked data friendly form.

5. Demonstrating Comparability

5.1. As at May 2012, the Local eGovernment Standards Body (LeGSB) is working with partners to create demonstrations of some of the links and joins proposed in this document.

5.2. Linking Payments data to Suppliers.

5.2.1. Unit4 Business Software (<http://www.unit4software.co.uk/>) are creating a 'stand-alone' demonstration to show how entering a Companies House registration number into a back office ordering system, can make simple 'linked data' calls to data services from Companies House, and the London Gazette so that

- current company information such as 'registered address' can be pulled straight into a local supplier index, avoiding re-keying;
- the current status of a company can be viewed;
- any insolvency notices that are linked to the company can be highlighted.

These checks can be repeated automatically during a 'payments run' so that the council is alerted if it is about to make a payment to a company whose status has changed.

5.2.2. This is a simple demonstration of a 'painless' efficiency gain that then also leads to a definitive identifier being published within financial data (as a URI).

5.2.3. When a supplier is identified by a definitive URI, we can then confidently identify payments made by separate local authorities, to the same supplier.

5.3. Discovering Budgets.

5.3.1. The Stationary Office (<http://www.tso.co.uk>) are creating a demonstration to show how a web site, or app could enable a member of the public to browse and compare budgets from local councils on national and local topics

5.3.2. The user will be able to ...

- Select a group of councils or a region based on the OS geographies.
- Select a single 'objective heading' from a list of 'top level' headings, for example "Housing Services"
- List Councils and the values for 'This Year Budget', and 'Last Year Actual'.
- Select a lower 'objective heading' from a list, say "Homelessness".
- Again see budget and actual figures across councils.
- Select a single Council
- List local Cost Centres to view how the selected heading's budget is allocated
- Also
List Councils...
 - contained within the same administrative geography
 - that contain this administrative geography
 - that neighbour this administrative geography... and their budget for the selected heading
- Select a local cost centre' and list local subjective' descriptions with 'This Year Budget', 'Last Year Actual' to see how the types of expenditure.

5.4. Contextualising budgets.

5.4.1. The Stationary Office (<http://www.tso.co.uk>) are building on the previous demonstration to incorporate data provided by LgInform to link budget headings, to the values of associated metrics.

5.4.2. The user will be able to ...

- when viewing a budget for a council, also see metrics for
 - population, number of households, area
- when viewing a budget heading, also see metrics that apply to that heading, for example
 - Homelessness
 - Number of households accepted as homeless
 - Number of homeless households housed in temporary accommodation

5.5. These demonstration can be used to prove and promote the data links, and the potential customer experience.

RECOMMENDATION

Promote the 'demonstrator' and learning developed during this study to local authorities, and suppliers of systems and services;

6. Extending ‘Comparability’ beyond financial data

6.1. Publishing local data in this linked method can

- Enable local authorities and their partners to use data to tell the story of how public services have been designed and commissioned in a particular locality
- Enable citizens, communities and businesses to better understand local priorities and decision making, and engage more effectively in shaping and using local services.

... thus making a practical contribution to support the aims of ‘Open Public Services’⁷.

6.2. Data that is relevant to the Open Public Services programme held by local public sector organisations is often not all in one place, not in a standard form, not described using consistent terms and identifiers, and not linked to other related information.

6.3. Working with several local authorities, LeGSB has drawn up a concept model that proposes how some of these sets of data, can link to other sets of data as shown in Figure 8.

- Providing timely and easily accessible information about what services are available and how good they are
 - Ensuring that key data about public services, user satisfaction and the performance of all providers from all sectors is in the public domain in an accessible form.
 - This will include data on user satisfaction, spending, performance and equality
- Open Public Services white paper – 2011**

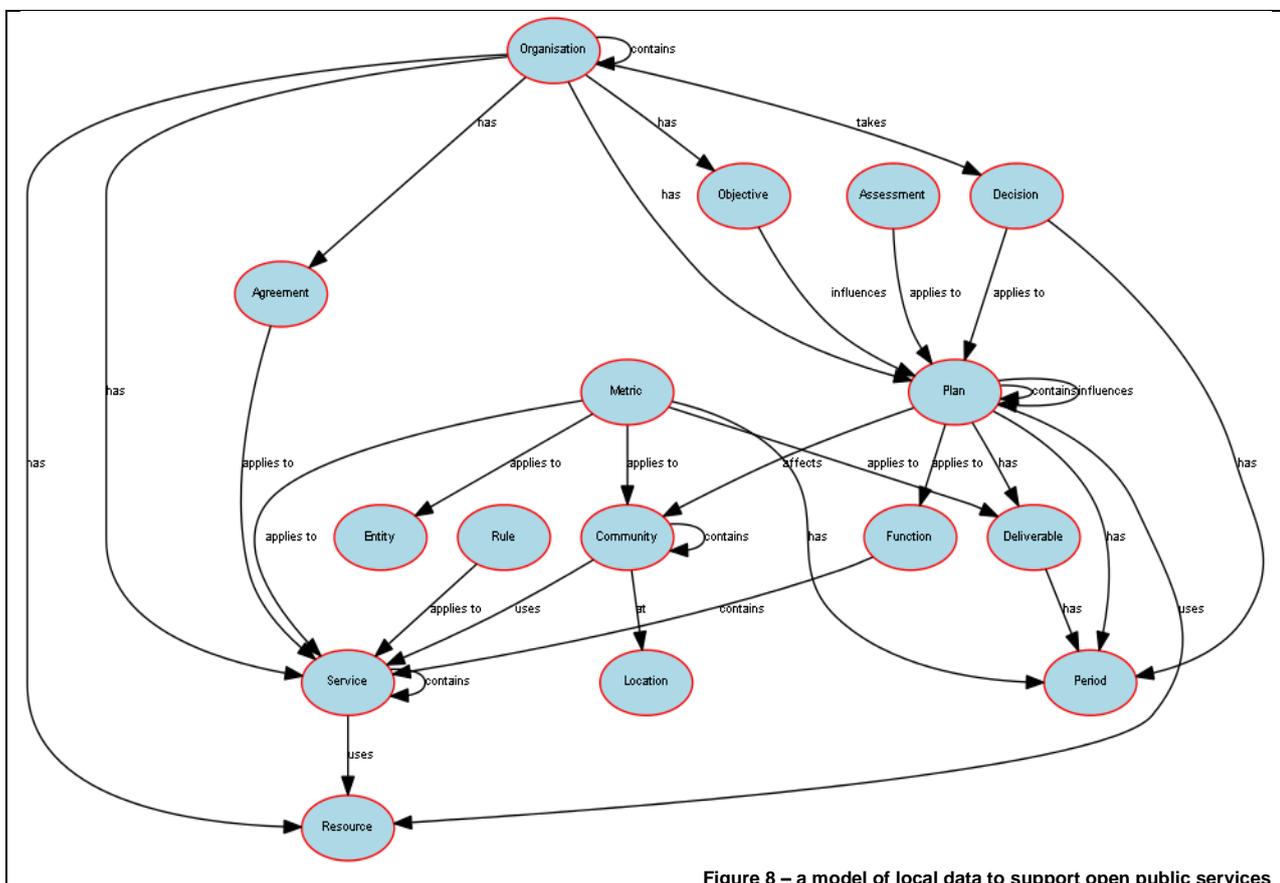


Figure 8 – a model of local data to support open public services

- 6.4. The model illustrates how rows from individual datasets from many local public sector organisations, can be published and linked to give a view of how local services are commissioned.
- 6.5. The 'Resource' concept contains not just financial resources, but also assets, capacity, skills and so on.
- 6.6. The model retains the links that have been made in this report and makes further links from Resources to
 - Plans, Decisions, Objectives, Deliverables, Contracts etc
- 6.7. LeGSB is continuing to work with Local Authorities, and the Open Public Services program to propose 'light-weight' standards and links that would enable this type of data to be published in a way that can support local dashboards, and generate customer feedback.

RECOMMENDATION

Develop a model to illustrate the links between data from many sources about services, plans, targets, contracts, and so on.

Work with selected local authorities to pilot publishing data to that model.

7. Next Steps

7.1. Having demonstrated the links that are possible to local financial information, we now need to prove that they are practical and useful, by working at a larger scale. We recommend that the Local Government Group and LeGSB work with a group of councils to

- Prove the internal and external benefits and investment necessary to publish comparable financial data
- Create standards, implementation guidance, deployment models.

RECOMMENDATION

Work with the iNetwork (formally NWEFG) to publish comparable financial data from many local authorities.

7.2. The ability for Local Authorities to be able to publish data in this linked form, will be accelerated by supporting suppliers of systems and services to adopt the underlying standards and data services.

RECOMMENDATION

Encourage suppliers of systems and services to provide data extracts that fit to the model of comparable financial data.

7.3. The 'Code of Recommended Practice for Local Authorities on Data Transparency' is a key mechanism for encouraging councils to release more useful, comparable data on local spending.

RECOMMENDATION

Consideration should be given to adapting the code to:

- Describe the importance of linking together 'lines' from individual datasets, illustrating links over datasets explicitly listed in the code;
- Draw out how this 'linked' approach can bring benefits to data users and publishers, and the strategic fit to sector initiatives;
- Emphasise the importance of standards, as the means to describe and then link together data in a consistent, reliable manner.