

ESPRESSO Tool

Guidance

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**new
economy**

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1 INTRODUCTION

- 1.1 In autumn 2015, New Economy was commissioned to identify the total expenditure by the public sector and total tax generated within individual areas of the UK. This was part of a wider piece of work looking at the learning to be gained from current and future devolution deals. The aim of the tax and spend element was to provide a single, consistent tool that showed each local authority district's reliance on HM Treasury, and thereby on the taxpayer.
- 1.2 Two tools were originally created, showing two separate aspects: total net expenditure by all public sector organisations, broken down to a local authority district level; and total tax generated, also broken down to a local authority district area. These have since been merged into a single tool: ESPRESSO – an estimated and simplified public revenue and expenditure standardised statistical output.
- 1.3 The tool provides two pivot tables and two pivot charts that are customisable to individual authority districts, years and groupings of districts (e.g. county council district level, combined authority districts). The tool has been designed to provide data down to local authority district level, so that they can be built back up to create larger areas.

2 THE ESPRESSO TOOL

Aims and objectives

- 2.1 The primary aim of the ESPRESSO tool is to help public sector organisations and groups of public sector organisations working together to understand the scale and distribution of expenditure on public services. This can help inform an understanding of proactive and reactive expenditure. The tool is also designed to help assess the scale of tax receipts generated within an area.
- 2.2 By providing both tax receipts and public sector expenditure, this can help to quantify the gap between tax and spend, and the extent to which an area is a net contributor or net recipient of funds from the taxpayer. In turn, this work can provide evidence to support development of devolution propositions, including asks around specific funding streams and fiscal devolution, as well as to support new service design, understand areas of high cost reactive services and provide evidence towards service integration, joint procurement and joint service delivery.
- 2.3 Finally, the use of these data can help to inform the design of programmes to accelerate both economic growth and the reform of public services – closing any identified fiscal gap by increasing tax receipts and reducing the cost of dependency.

Methodology and sources

- 2.4 A range of data have been used to inform the ESPRESSO tool. The expenditure data are focused around spend directly committed on public services received by an area's residents and / or within that area's geographical footprint.
- 2.5 Data are taken from a range of statutory returns (e.g. Department for Communities and Local Government [revenue outturn statistics](#) and [capital outturn statistics](#)); government allocations and payments to relevant bodies (e.g. Clinical Commissioning Groups (CCGs), fire services, police, Department for Work and Pensions (DWP) benefits); and annual accounts from specific agencies (e.g. National Health Service (NHS), fire service within Scotland).
- 2.6 Additionally, wider national public expenditure, not targeted specifically at any single area's residents or provision within any area (e.g. defence, international development, rail / motorway infrastructure, govt. administration) is also included. This is primarily taken from the central government PESA database ([Public Expenditure Statistical Analysis](#)), and includes organisations' expenditure not already captured in the analysis of area-specific spend.
- 2.7 Tax data are largely taken from two sources: district level data (e.g. council tax, business rates) and national data from HMRC produced disaggregations of tax receipts, which have been further disaggregated to each area. Disaggregations of tax data are based on multiple methodologies.
- 2.8 A separate methodology document has been produced, and acts as an accompaniment to this guide.

Caveats and data issues

- 2.9** There are multiple caveats in using both the tax and spend data for local authority districts, particularly in the ability to obtain robust local data, and in choosing an appropriate method with which to disaggregate national or regional figures. ESPRESSO findings should therefore be considered and quoted with the relevant caveats and data issues. The ESPRESSO tool is not an audited financial expenditure tool. It is a tool that brings together data from disparate sources to provide a more contextualised view of tax take and public revenue expenditure in each local authority district in the UK. Caveating these data is crucial to understanding its effectiveness and the implications drawn from such data.
- 2.10** There are several known elements that are currently ‘missing’ from the local expenditure analysis as individual lines of spend. These include further and higher education spending from organisations such as the SFA and HEFCE; statutory paternity payments; and some local expenditure within the devolved administrations. However, while these figures may not appear as lines of spend in their own right, they will appear as part of the national government expenditure line – which is calculated by removing total known local expenditure from total public sector expenditure. As a result, the proportion of total public sector expenditure attributable to national government expenditure will vary from place to place.
- 2.11** Linked to this, an effort has been made to separate local front-line expenditure on services from more national or back-office functions. The reason for this is simple: national services such as the government civil service and defence may be delivered from a specific place (e.g. Whitehall in London, military bases around the UK etc) but provide services to the extent of the UK. This is distinctly different from locally provided services, which are delivered to, or in a specific place. As a result, local service expenditures are attributed to a specific place, while national government expenditure is split equally across the UK dependent on population. Analyses of total expenditure should consider this distinction.
- 2.12** Expenditure is provided as both revenue and capital splits. Additionally, the data supplied show net current expenditure, taking account of any income from activities by local delivery organisations. Separate values for gross expenditure and income are not currently provided. The difficulty in focusing on net current expenditure, excluding income (fees, sales and charges), inter-agency transfers and non-cash items as separate, is that in several instances there is a negative net current expenditure provided.
- 2.13** It is important to consider the methodologies used in the disaggregation of national, regional or local data to local authority district areas. A separate methodology guide explains the splits used for each data source and tax type. This is especially important in understanding how expenditure and tax have been assigned to an area.
- 2.14** One particular issue that is worthy of note is around the disaggregation methodology for income tax. The method employed assigns income tax to the area in which it was generated. As a result, high value employment areas or areas of high employment

are assigned higher proportions of the national income tax receipts, even if most employees are from neighbouring boroughs or further afield. In this context, it would be valuable to consider income tax receipts as part of an array of information about an area, including resident employment rates, deprivation and other useful indicators on the health of a local economy.

- 2.15** As part of future developments, New Economy will continue to look at four areas of work: adding in new data; improving methodologies; improving the tool user interface; and supporting schemes to open up data that would add weight to this analysis. As part of this work, we will aim to identify more available data at the local level for the devolved areas of the UK, and attempt to split out locally delivered services (e.g. skills and education funding) from national government expenditure. Additionally, the aim is to provide options for looking at the data using different methodologies – for example, considering income tax on a residence basis as well as a workplace basis.
- 2.16** The continuing evolution of the ESPRESSO tool – and seeking feedback from users on issues identified – will help to improve the analysis and understandings from the data in the long-term.

3 USES OF THE ESPRESSO TOOL

Greater Manchester: Using tax and spend analysis to inform devolution discussions

- 3.1 As part of the initial round of devolution discussions, Greater Manchester (GM) identified the need to better understand its net contribution to the public purse. The ESPRESSO tool is a natural progression of the initial work undertaken within GM, making slight changes in approach and methodology to account for a much larger area of focus.
- 3.2 The initial analysis identified that GM public revenue expenditure had remained relatively stable between 2008/9 and 2013/14, dropping by only 2.6% in real terms over the period. However, within this analysis, it was identified that local authority expenditure had dropped by around a third. At the same time, health expenditure largely increased because it had been protected from spending reductions. However, reduced proactive expenditure, particularly by local authorities, may in some cases lead to increases in reactive expenditure in other broad spending categories. Including national expenditure within the analysis showed a total expenditure of around £27.0bn in 2013/14.
- 3.3 In terms of tax receipts, the picture was much more mixed. Tax receipts varied considerably over the 2008/9 – 2013/14 period, from £18.9bn in 2009/10 to nearly £20bn in 2013/14. The variations over the period were considered in large part to be due to the economic downturn and subsequent economic growth.
- 3.4 In total, a £7.0bn gap between expenditure and tax was identified. This helped GM inform its overall aim of becoming a net contributor to the national exchequer. It is a significant challenge for GM to become financially self-sustaining, and this particular aim requires a concerted effort both to stimulate growth and reduce public service demand. There needed to be a core focus on both, with both growth and reform of public services clearly interlinked.
- 3.5 Crucially, the analysis also identified a range of implications for what actions GM might need to take, and what ‘asks’ would need to be made as part of devolution discussions. The analysis went further to try understand whether expenditure was reactive to demand, proactive ahead of need or a fixed spend. Reform activity needed to focus on areas of high reactive spend – scale mattered considerably.
- 3.6 The analysis informed both potential devolution asks around funding streams as well as areas for potential fiscal devolution. Around funding streams, education and skills was a key area. The analysis showed that though the SFA’s Adult Skills Budget had already been devolved, the funding of apprenticeships, which went alongside adult skills as a key component of skills strategies, was not devolved. There was also interest in the Dedicated Schools Grant’s ‘High Needs’ and ‘Early Years’ blocks.
- 3.7 Further analysis compared the impact of fiscal devolution against the centralised control of each tax. A pragmatic approach was adopted by GM to establish the principle of fiscal devolution, focusing on Air Passenger Duty; stamp duty; climate change levy; business rate reform; and council tax reform.

Replicating a similar approach in your area

- 3.8** The ESPRESSO tool is a progression of much of the work completed by Greater Manchester and across the Core Cities in understanding tax and spend within an area. This flexible tool comprises a database of relevant data for local areas to build their own analyses, enabling users to define the geographical level at which they want to model expenditure and tax receipts.
- 3.9** Core Cities and the LGA are working towards making this an open access tool, hosted online and available for use across the country. This is because a general tax and spend analysis has become a central element of the devolution evidence base for many areas – underpinning broad dialogue with government, supporting specific asks and (in time) helping to track impact.
- 3.10** In using the ESPRESSO tool to support devolution, local areas need to consider how devolution proposals seek to balance risk and reward:
- The ESPRESSO tool may indicate a focus on growth or reform is required to reduce net reliance on the national exchequer, or that the area is a net contributor to the national exchequer. In these circumstances, it is important to bear in mind that both growth and reform of public services are not mutually exclusive, but mutually supportive.
 - Fiscal devolution should be considered in light of the ability of local areas to cope with fluctuating receipts;
 - Areas of spend where control is not wanted should be identified alongside areas where control is wanted;
 - In some areas, greater local control over funding streams, or in terms of fiscal devolution could promote greater integration and innovative developments. However, there needs to be a consideration as to whether the approach is practical within current requirements and capacity of local areas to enhance growth and reform services.

Wider uses of the tool

- 3.11** Early engagement with local authorities has indicated multiple uses for the ESPRESSO tool beyond that originally identified as part of the devolution process. In particular, several options were considered for further use of the tool:
- Identifying comparator areas based on existing information on per head expenditure;
 - Comparing expenditure and tax receipts against existing comparator areas to identify efficiencies or new ways of working with other local authority districts; and
 - Identifying areas for joint procurement, or joint service delivery between agencies or authorities – this is especially helpful when per head expenditure is

similar between neighbouring areas, but there is also a wider benefit from joint working between areas whose per head expenditure on services varies significantly.

4 USING THE ESPRESSO TOOL

Tool basics

- 4.1 The tool is designed in Excel, and currently comprises six spreadsheets, two with a pivot table to access the data, alongside two pivot charts that visualise the data. Two further hidden sheets are available in the document, which contain the background database on which the pivot tables and charts are based. Users will need to have Excel installed on their device, and in particular a version that can open an .xlsm file, which means that the tool uses 'macros' to call the relevant data.
- 4.2 Users may be prompted to 'Enable content' when they open the document, which they should do. If users are not prompted, search for 'Enable content' and follow the instructions. If a further question asks if the file should be deemed a 'Trusted document', users should click 'No'.
- 4.3 The tool has a front sheet introduction; a summary guide for each tool; and a methodology with sources for the data within the tool. The data used in the tools are hidden and password protected, as these are the basis for the tool. The data can be accessed if the user so wishes, by contacting New Economy.
- 4.4 Taken as a single database, the hidden tables include nearly 240,000 rows of expenditure data and over 25,000 rows of tax data. This is because there are fewer types of tax than areas of expenditure, while most tax is collected nationally rather than locally.
- 4.5 Each row within the expenditure data covers one type of cost by one organisation within one area and during one year. The data row comprises:
- a series of reference codes for each local authority district;
 - an area name – where the expenditure takes place, or the area that benefits from the expenditure;
 - a delivery agency – this may be the police, HMRC or a number of other agencies, and references the agency that spends the money in that area;
 - a breakdown of a cost type – this applies general divisions of spend into general broad themes as well as more specific cost categories, and splits expenditure by revenue or capital expenditure;
 - a net expenditure figure, which takes accounts of total expenditure and income that offsets that cost;
 - the year of the expenditure, given in financial years and currently available for 2013/14 and 2014/15;
 - an identifier which explains whether the expenditure is capital or revenue;
 - the population of the area that year;
 - a calculation of total expenditure per head;

- the county, combined authority, LEP or region area that the expenditure occurs within, or that benefits from the expenditure;
 - notes referencing where the expenditure may have been disaggregated from; and
 - the disaggregation methodology (e.g. disaggregation by population or crime).
- 4.6** The tax tool's hidden data are of a similar structure, except that there are fewer areas of tax than expenditure, and no delivery agency.

Using the tool

- 4.7** Both pivot tables are used in similar ways. The default for the pivot table provides all expenditure or tax across the UK for a set year.
- 4.8** A series of filters have been created that allow the user to choose one or multiple areas, years, types of areas and types of expenditure or tax. The filters use an OR function within each filter, and an AND function across the filters¹. Users can choose a series of filters to identify, for example, capital expenditure within Arun in 2013/14 (from the expenditure table), or all taxes generated in the East Midlands in 2014/15 (from the tax table).
- 4.9** Below the filters is an output table, providing expenditure or tax generated in £s. The output table sums all the data with the tags identified in the filters, and provides this in a simple and easily readable table format. Both tax and expenditure are presented as positive figures. This does not align directly with accounting practices, but rather is designed to provide an overall, widely understood figure of total expenditure, and a similarly widely understood figure for total tax generated. A fiscal gap can be calculated by subtracting one total figure from the other, but this is not currently provided as an option in the tool.
- 4.10** The tax tool is broken down into broad tax groupings. For example, income tax is provided as a whole, rather than identifying the proportion from higher rate taxpayers. However, the expenditure tool provides a much more detailed breakdown of expenditure. In large part, this is due to the availability of data from expenditure statistics, and that public finances are spent on a much wider array of public services than the number of taxes used to generate those finances.
- 4.11** Local public sector organisations may find these data useful to compare – between tax and expenditure, across geographical and administrative boundaries, across expenditure and tax types, and across years. However, care should be taken in interpreting the figures, taking account of the issues identified below and in the tool itself.

Issues with using the tools

¹ See the issues identified below.

- 4.12 The use of various filters means that *within* each filter, users can choose multiple examples and the output table will provide the sum of these areas. For example, a user choosing 'Liverpool' and 'Sefton' from the local authority areas filter will see an output table that chooses all data that have the area tag of *either* Liverpool or Sefton, and will sum these together.
- 4.13 If, however, a user chooses options from two or more filters, the output table will provide a sum of all data where these options intersect. Choosing 'Liverpool' from the local authority area filter and 'North East' from the region filter, the tool will output everything with *both* the tag 'Liverpool' and the region tag 'North East'. As Liverpool is in the North West, the output table will be blank – there are no areas where Liverpool AND the North East match.
- 4.14 This is important when considering Local Enterprise Partnership areas. In some cases, local authority districts are contained within more than one LEP area. As a result, to allow filtering of local authority districts, LEPs have been split into three groups. These three alphabetical groupings cover all English local authority districts and all LEPs. However, as a result of the above issue, it is not currently possible to produce an output table that is a sum of multiple LEPs from more than one group. As an example, choosing the Greater Manchester LEP and the Liverpool City Region LEP from two separate filters will return an output table of data that have both of these tags. As the Greater Manchester LEP and the Liverpool City Region LEP do not intersect anywhere (i.e. no local authority districts are in both LEP areas), the table returned will be blank.
- 4.15 Additionally, all data within the two tools are not designed to match directly. Rather, the data are provided to show a relative position of what an area generates in taxes as opposed to what proportion of those taxes they spend. There are a variety of reasons for the difference between the sums of the two tools, including accruals and pre-payments, sources of data and reporting approaches, and the multitude of national and international sources of income and expenditure for all organisations.
- 4.16 The data will also not match directly with national estimates of regional expenditure provided in tools such as OSCAR, or work derived from these estimates. This is because of the different approaches taken to the data. The OSCAR data (provided by the Cabinet Office) provide expenditure based on the agency spending the funding. This tool, by comparison, builds data from the bottom up – taking information on expenditure down to the local authority districts, and summing this up to provide a regional view.

5 PUBLIC SECTOR EXPENDITURE

Information included within the tool

- 5.1 Public sector expenditure includes all expenditure by public sector agencies based within an area. These include, but are not limited to, expenditure by: local authorities, including county councils and unitary authorities; NHS bodies such as CCGs; blue light services such as fire and rescue services, and police forces; commissioning or oversight organisations or bodies, such as Police and Crime Commissioners; integrated transport authorities; waste authorities; and National Park authorities.
- 5.2 Expenditure includes only a net expenditure figure, and does not currently show gross expenditure and income as separate items. In this way, it shows a net reliance on HM Treasury for funding – external income from, for example, car parking fees would reduce the reliance of an area on HM Treasury.
- 5.3 Additionally, the public sector expenditure tool also incorporates the expenditure of national bodies that provide services across the UK. This group includes national agencies that commission or deliver services locally, such as NHS England, which directly commissions specialist services. It also includes welfare expenditure, which is provided on a local basis by a national agency – e.g. DWP or HMRC.
- 5.4 For devolved administrations' expenditure, there were in many cases different definitions or titles used for areas of expenditure. Where relevant, these have been matched across England, Wales and Scotland to provide a more comprehensive comparison between areas.
- 5.5 A summary of the sources and methodology for disaggregating data is provided in the ESPRESSO methodology companion to this guide.

Provision of services nationally

- 5.6 Services that are provided locally are usually provided by a local service or agency working at a local level. This includes the aforementioned DWP and HMRC services for welfare expenditure. However, many areas benefit from public expenditure at a national level. The two definitions we utilise are national services provided from a centralised location, and national services provided from a non-centralised location.
- 5.7 The former covers services that may have a central location from which they are delivered or administered, and which benefit people across a much larger area than that where the central service is located. Two examples are presented below:
 - Central government civil service: much of this is based in one centralised location, to help reduce costs or improve communication and closer working with government. Whitehall is a primary example of this, with much of the Government's direct civil service support based within the City of Westminster. However, this administrative capacity supports the running of the entire country. While the service is not provided directly to the public (as is often the case with much of the locally delivered expenditure), the work of the departments and

organisations benefits people across the jurisdiction of that department. As a result, though the expenditure is centralised, the benefit (which local areas would need to replace if it were not provided) is counted as an expenditure against each local authority district.

- We can also consider HMRC services. There are several HMRC offices throughout the UK, providing services directly to residents; specifically beyond the boundary of the area they are located. Due to the interconnectedness of these offices, it may be difficult to differentiate what proportion of the service provided to the public is provided to individual areas. The expenditure on tax credits, however, can be easily apportioned to a place based on the individuals or families they are provided to.

5.8 In each of these cases, local areas benefit from the provision of services paid for, generated or delivered from elsewhere. If these services were not provided, each area would need to provide this service in some way. As a result, the expenditure tool disaggregates the net expenditure of national organisations delivering these types of services to local areas, based on the most relevant disaggregation methodology. In most cases, this will be population, but could also be aspects such as crime.

5.9 The second type of national service provision is one provided on a non-centralised basis. This specifically includes all defence expenditure: while each area may not have an armed services base or headquarters, they do benefit from the defence of the realm. This is provided on a non-excludable basis, in a similar way to BBC services (i.e. specific locations in the UK cannot be excluded from accessing the services), and also in a non-spatial way: the national defence is partly based on expenditure or delivery of service outside of the UK.

5.10 The only way to value this benefit (which, again, local areas would need to pay for directly if it wasn't provided nationally) is via the amount currently spent on the service. This net expenditure is therefore disaggregated evenly across the UK based on population.

English data sources

5.11 Sources of data for net expenditure vary dependent on the nation to which they refer. This is largely a result of the different jurisdictions of national government departments and the devolution of national expenditure to the relevant administrations.

5.12 English data are mainly sourced from four datasets:

- Revenue and capital outturn statistics produced by DCLG – these provide a range of figures across the main areas of responsibility for expenditure by local authorities, combined authorities waste authorities, police forces, fire and rescue services, integrated transport authorities and national parks;
- National government expenditure from the Government Interrogating Spending Tool – this provides national departmental and agency expenditure, and provides a more detailed breakdown of the expenditure to groupings such as

staffing and purchase of goods and services. Some of this expenditure is included within the DCLG-provided revenue outturn statistics, and this has been disentangled to provide as clear a picture as possible;

- National welfare expenditure – these data is mainly supplied by DWP and provides the total expenditure on welfare by benefit type (such as Jobseeker’s Allowance and Employment Support Allowance). Further information is provided by HMRC from their child benefit and tax credit data, which have been calculated by New Economy from nationally released data;
- NHS expenditure from NHS England – this includes both the national spending and commissioning of primary care services, as well as the total CCG expenditure on secondary and community healthcare.

Scottish data sources

- 5.13** Scottish expenditure in a local area is largely provided in a single block grant to each of the 32 unitary authorities. This makes up around 85% of all expenditure within an area by a local authority. Other income sources include non-domestic rates, council tax, and applications for individual grants and relief.
- 5.14** Recent reorganisation of police and fire and rescue services within Scotland has brought each service together into one single national organisation. Additionally, national health services are controlled by national NHS services, and then split into several national boards (focusing on specialist services or treatment) as well as 14 local NHS boards.
- 5.15** As such, Scottish data are largely taken from local government returns (as within England), as well as from the Scottish Police Authority and Scottish Fire and Rescue Service accounts, and NHS Scotland expenditure tables. Additionally, information on tax credits, child benefit and other welfare payments are taken from the national datasets supplied by DWP and HMRC.

Welsh data sources

- 5.16** Welsh data are less complex than the Scottish devolved administration’s data. This is due to the fewer number of policy areas over which the Welsh Assembly has control. The main source of data has been through the Welsh Government’s local finance statistics, available through StatsWales. The data provided are passed through to police, local authority and national park finances.
- 5.17** For national parks, the expenditure has been split based on the local authority districts represented within the parks’ membership. For police data, these has been split by crime figures per authority for the relevant years.
- 5.18** NHS Wales and fire and rescue service accounts provide the additional net expenditure for the main services within Wales.

Northern Irish data sources

- 5.19** Most Northern Irish data is taken from two sources: existing UK figures identified above; and individual data sourced from the Northern Irish Assembly. Unfortunately, NI data within the ESPRESSO tool are significantly less advanced than that of England, Scotland and Wales – there are fewer data breakdowns and much of the expenditure information will be contained within the national analysis. As a result, NI data should therefore be treated with a degree of caution.

6 TAX

Information included within the tool

- 6.1 The tax data include all taxes collected by HMRC and local authorities or relevant bodies under broad definitions. Tax data are provided by the type of tax, rather than on individual tax levels within a tax type. This is for two primary reasons: variances and levels of tax within a tax grouping can vary significantly based on the person or organisation providing the tax payment; and in some cases, the use of tax levels below that of the tax group could eventually become disclosive.
- 6.2 The tax take tool provides the overall level of tax received by relevant organisations – it does not take into account tax credits. These are presented within the expenditure tool. However, due to the nature of tax returns, the total value of tax receipts may include individual circumstances where tax breaks or refunds have been applied before the total calculation.
- 6.3 The tax pivot table does not include areas of public sector expenditure where a negative expenditure has been recorded. These are simply recorded as negative expenditure within the expenditure pivot table.

National and local taxes

- 6.4 National taxes, on the whole, are those taxes and payments received primarily through national organisations such as HMRC or the TV Licencing authority. Local taxes, by comparison, are those that are set, levied or controlled by local institutions or organisations. This primarily includes council tax and non-domestic rates.
- 6.5 In instances where national taxes are identified, the tax level is split out by an appropriate disaggregation methodology. In cases where local taxes are collected, and where this information is available, the information is provided at the locally reported level. This is the case for council tax and non-domestic rates.

Indirect and direct taxes

- 6.6 National taxes are also split between direct and indirect taxes. Direct taxes include those that are targeted at individuals or organisations, primarily based on earnings or profits, and which rise or fall in direct relation to these factors. Indirect taxes include those which are not influenced by earnings or profits, primarily taxes on transactions.
- 6.7 Within each of these types of taxes, the value attributable to an area is calculated by disaggregating the tax based on various methodologies. A detailed approach has been taken for each of the taxes to identify taxes generated within a certain area – for example, air passenger duty is generated based on passenger numbers at airports, while income tax is based on the location and value of jobs.

7 GEOGRAPHIC COVERAGE

Areas covered

- 7.1 Where possible, the ESPRESSO tool covers all local authority districts across the UK. Northern Irish data are available for post-2015 authority districts.
- 7.2 For England, data are provided on the lowest local authority district level. This means that, where data are available only on a regional, metropolitan or county basis, then these are disaggregated down to the district or borough council. For example, there are 27 county councils in England. Expenditure and tax data are broken down to the districts and boroughs that comprise these county councils. The tools also allow for these data to then be combined to provide a county council view if this is desired.
- 7.3 For Scotland and Wales, data are provided on a unitary authority district basis. There are 32 unitary authority districts in Scotland and 22 unitary authority districts in Wales. In Northern Ireland, there are 26 districts, which have recently been combined to form 11 districts. As this has only been completed relatively recently (i.e. from April 1st 2015), the tools cover this reorganisation and do not retain the original 26 districts – however, the notes sections do allow for an identification of which data are attributable to which of the original 26 districts. There are no further amalgamations of the data to a higher government level than the nation in question (available to view through the ‘Region’ or the ‘Country’ filter).

Disaggregation of data

- 7.4 Many public sector organisations cover more than one local authority district, and expenditure or tax data are not provided to the local authority district level. This includes, as an example, waste authorities, fire and rescue authorities and police authorities. In general, the approach used has been to identify the local authority districts covered and to disaggregate expenditure or tax to the local authority district level. There are several methods used for this disaggregation when the data are not provided at the local level.
- 7.5 The first, and most widely used, is to disaggregate the data by the population within each local authority district. This is based on the assumption that each delivery or commissioning organisation will aim to provide a similar level of expenditure per head across the area that they cover². For example, county council expenditure data are split amongst the constituent authority districts by apportioning the expenditure based on the proportion of the county council’s resident population within each district or borough council area. The population figures are largely taken from the Office for National Statistics’ (ONS) ‘Mid-Year Population Estimates’, except where identified below.
- 7.6 A second method, mainly used within the tax tool, is to apportion tax income by area based on methodologies attributable to how the tax is collected. This is because

² This is unlikely to be the case, though, given variances in economic conditions, affluence, health and deprivation.

several taxes are generated through different activities – for example, air passenger duty is based on an estimate of tax receipts based on the numbers of flights and passengers from each airport to each country, and the banding of that country.

- 7.7 A third method is similar to the population method above, but instead utilises recorded crime data from the ONS. This is provided on a police force area basis for England, and so a further breakdown by population is also utilised. The proportion of total crime within an area is used as a rough estimate for the expenditure of police forces for that area.

Non-standard geographic jurisdictions

- 7.8 In some cases, a public sector organisation’s jurisdiction covers only part of a local authority district – this is sometimes the case for Clinical Commissioning Group boundaries and National Park boundaries. In these cases, special calculations have been made to apportion out expenditure.
- 7.9 For clinical commissioning groups, ONS provide a look-up, matching lower super output areas³ to CCG areas. Utilising this look-up, and LSOA population estimates from ONS, a percentage split of CCG expenditure by local authority district was estimated.
- 7.10 To take an example, Tameside and Glossop CCG covers the local authority district of Tameside, and several LSOAs covering mainly the town of Glossop in the High Peak local authority district. In 2013, around 33,000 of the 264,000 residents (13.0%) living within the Tameside and Glossop CCG area lived in High Peak. As a result, 13.0% of Tameside and Glossop CCG net expenditure in 2013 was apportioned to High Peak, and the remainder to Tameside. This highlights the proportion of public sector spending likely to be incurred on the residents of High Peak, or the proportion of spend within High Peak.
- 7.11 For areas such as National Park authorities, the boundaries again do not conform to local authority district boundaries. In these cases, where a national park’s boundaries cross those of a local authority district, that district is included within the list of districts to whom the disaggregated national park expenditure falls.

³ Lower super output areas (LSOAs) are areas covering between 1,000 and 1,500 residents.