Department for
Communities and
Local Government

Fair funding review: a review of relative needs and resources

Technical consultation on relative need

Contents

Ministerial foreword

The world in which we live is changing. The demographics of our population are shifting, public services are being transformed by new thinking and new technology, even the way we work and travel is not the same as it once was.

All of that has an impact on local government, with changes in the demand for and delivery of the many different services it provides. And that, in turn, has an impact on the funding required by different councils.

The current system for allocating that funding has been in place for over a decade, and it has served the country well. But the world has changed almost beyond recognition since it was introduced, and now it's time for the system to change too.

I want local government funding to be decided in a fair, robust and evidence-based way, one that reflects the most up-to-date picture of councils' relative needs and resources. That's why my predecessor committed to a Fair Funding Review and why, last year, we published a call for evidence to help us see what that review could look like.

This consultation is the next step in the process, seeking views on what factors drive local government spending, and how we account for this in a way that draws a more transparent and understandable link between local circumstances and local resources.

Authorities up and down the country have called for a funding allocation mechanism that's fit for the future, and that's exactly what this review will deliver. I look forward to working with the sector to make it as robust and effective as it can be.

Secretary of State for Communities and Local Government

The Rt Hon Sajid Javid MP

Minister for Local Government

Marcus Jones MP

December 2017

Scope of the consultation

Topic of this consultation:	Consultation on the approach to measuring the relative needs of local authorities.
Scope of this consultation:	This consultation seeks views on the approach to measuring the relative needs of local authorities.
Geographical scope:	These proposals relate to England only.
Impact Assessment:	No impact assessment has been produced for this consultation.

Basic Information

To:	The consultation will be of particular interest to local authorities, and representative bodies for local authorities.
Body/bodies responsible for the consultation:	Local Government Finance Directorate within the Department for Communities and Local Government.
Duration:	This consultation will last for 12 weeks form 19 December 2017 to 12 March 2018. All responses should be received no later than 23:45 on 12 March 2018.
Enquiries:	For any enquiries about the consultation please contact the Local Government Finance Settlement Team: NeedsAndResources@communities.gsi.gov.uk
How to respond:	Consultation responses should be submitted by online survey: https://www.surveymonkey.co.uk/r/relativeneeds The online survey assists us in our analysis of the responses received. The online survey allows respondents to save and return to the survey later and submit additional information or evidence to support your response to this consultation. Further advice on how to use these features is available on the home page of the online survey. Should you be unable to respond via the online survey we ask that you complete the consultation response pro-forma published alongside this consultation paper. Additional information or evidence may be provided in addition to the completed pro-forma. Pro-forma responses and any additional information or evidence may be sent by email to:

NeedsAndResources@communities.gsi.gov.uk

Written responses may also be sent to:

Local Government Finance Settlement Team
Department for Communities and Local Government
2nd floor, Fry Building
2 Marsham Street
London
SW1P 4DF

When replying to this survey please confirm whether you are replying as an individual or submitting an official response on behalf of an organisation and include:
- your name,
- your position (if applicable),
- the name of organisation (if applicable),
- an address (including post-code),
- an email address, and
- a contact telephone number

1. Introduction

1.1 About this consultation

1.1.1. Funding baselines for local authorities, as determined by the local government finance settlement, are based on an assessment of local authorities' relative needs and resources. The methodology behind this assessment was introduced over ten years ago, and has not been updated since the introduction of the 50% business rates retention system in 2013/14.

1.1.2. Since that time, demographic pressures have affected local areas in different ways, as has the cost of providing particular services. In recognition of these pressures, the Government last year announced a review to address concerns about the fairness of current funding distributions. The outcome of this review will enable the Government to reconsider how the relative needs and resources of local authorities should be assessed in a world in which they will continue to have greater control over the money that they raise.

1.1.3. Last year the previous Government published a Call for Evidence on needs and redistribution, which resulted in over 200 responses from a range of local authorities and representative bodies. These responses have been carefully considered in preparing this consultation paper. A summary of responses received to the Call for Evidence together with the Government's response to a number of the important issues raised is published alongside this consultation:

   https://www.gov.uk/government/consultations/self-sufficient-local-government-100-business-rates-retention

1.1.4. Over the past year, the Department for Communities and Local Government (DCLG) has worked in close collaboration with local authorities and their representatives on the design of the review, including through a joint Local Government Association (LGA) and DCLG chaired technical working group. Records of the technical papers and discussions are available on the LGA's website:

   www.local.gov.uk/topics/finance-and-business-rates/business-rates/business-rates-retention

1.1.5. This consultation focuses specifically on potential approaches that have been identified to measure the relative needs of local authorities. Responses to this consultation are requested by 12 March 2018.

1.2. The case for change

1.2.1. Local government is the frontline of our democracy and accounts for almost a quarter of public spending. It delivers a wide range of important services used by residents on a daily basis, and provides essential support for the most vulnerable people in our society. The local government funding system must therefore offer appropriate levels of stability and assurance to councils to support financial planning, along with greater control over the money they raise and strong incentives to deliver services efficiently and in a way that promotes local economic growth. The Government will therefore seek to ensure funding is allocated in a way that supports these objectives whilst providing councils with the flexibility to meet their own local priorities.

1.2.2. No two local authorities are the same. Changes in demography and the cost of service delivery will affect areas differently across the range of services, while the challenge of growing local economies varies. This review will address concerns about the fairness of the current distribution of funding to local authorities, ensuring that funding allocations reflect the relative 'need to spend', and taking into account the capacity of authorities to fund local services through local income.

1.2.3. The current local government funding system is often criticised for its complexity. The Government will therefore work towards a system that is, as far as is practicable, more simple and transparent whilst providing as much discretion as possible to local councils over the use of resources so as to empower the transformation of local services and ensure that councillors are accountable for deciding how funding is used locally.

1.3. Terms of reference

1.3.1. The fair funding review will set new baseline funding allocations for local authorities by delivering an up-to-date assessment of their relative needs and resources, using the best evidence available.

1.3.2. The review will:

- **set new baseline funding allocations** for local authorities,

- deliver an **up-to-date assessment of the relative needs of local authorities**. The Government has been clear that there will continue to be redistribution of business rates between local authorities to take account of relative needs; the review will determine what the redistribution should be,

- **examine the relative resources of local authorities**. The Government will take a fresh look at how council tax income should be taken into account when redistributing business rates at local government finance settlements, and will also consider other potential sources of income available to councils,

- focus initially on the **services currently funded through the local government finance settlement**, and

- be **developed through close collaboration with local government** to seek views on the right approach. Alongside on-going engagement with the sector and formal consultation, we plan to publish a series of technical papers to ensure that local authorities are well sighted on our progress, as outlined in section 1.5.3 below. This will include careful consideration of transitional arrangements to ensure any changes in funding are introduced in a manageable way.

1.4. Guiding principles

1.4.1. Last year the Government published a Call for Evidence on needs and redistribution which received 209 responses, 179 of which were from local authorities. It included 14 questions that were designed to explore respondents' views on the key issues that the Government will address: how to measure relative needs, how resources should be taken into account, the approach to transition and the geographical level at which need should be assessed.

1.4.2. A summary of the wide range of responses received, and the Government's response to these important issues, is published alongside this consultation.

1.4.3. Based on the responses received to this Call for Evidence the Government has identified a set of principles to guide the work of the fair funding review. These represent the framework which the Government will use in designing a new relative needs assessment methodology, having considered the responses to this consultation:

i) **Simplicity** – the overall number of formulas used within the current methodology, along with the layers of complexity contained within them, means that they are little understood and may no longer hold the same relevance as when they were first introduced. This is an opportunity to identify the most important factors that drive the 'need to spend' on local services, and we will aim to produce a relative needs assessment that is as simple as is practicable,

ii) **Transparency** – it should be straightforward for those affected by the relative needs assessment to understand what factors have influenced the levels of funding received by a local authority so that they can hold their local representatives to account for the decisions that they make. To support this we will make the link between local circumstances and funding allocations more visible,

iii) **Contemporary** – the new relative needs assessment will be based on the most up-to-date data that is available. To facilitate more frequent updates, as far as practicable the funding formula will be based on data that can be regularly updated at planned intervals. If the collection of data or other technical requirements means that desirable changes cannot be made at the point of implementation, the Government will consider whether and how to phase these in at a later date whilst providing councils with financial certainty,

iv) **Sustainability** – an evidence-based approach will be deployed to identify the factors which drive costs for local authorities today *and* in the future. The new funding formula must, as far as is practicable, anticipate future demand for services,

v) **Robustness** - the new funding formula should take into account the best possible objective analysis, and

vi) **Stability** – the funding formula should support predictable, long-term funding allocations, ideally as part of a multi-year settlement. Local authorities' long-term financial planning and service delivery will also be assisted by temporary transitional arrangements to their new relative needs baseline to ensure there are no undue year-on-year changes in funding.

1.4.4. In addition to these principles, a key objective of the review is to work in conjunction with wider reforms to local government finance and help provide a strong incentive for councils to grow their local economies and to use their resources as efficiently as possible.

1.5. Implementation

1.5.1. There have been widespread calls for a thorough, evidence-based review, based on effective collaboration with local government. Many have argued that the current four year settlement should run its course to 2019/20. The Government believes that working towards an implementation date for the review of 2020/21, while keeping this under review as work progresses, offers the best opportunity to achieve these

objectives, alongside wider policy developments in local government finance and adult social care.

1.5.2. The focus of the review can broadly be divided into three closely related strands of work:

> i) relative needs,
> ii) relative resources, and
> iii) transitional arrangements.

1.5.3. This consultation is specifically concerned with the first of these areas - the measurement of relative needs. The Government plans to follow this consultation with a series of technical papers that will consider other aspects of the review, including topics such as:

- the structure of formulas for **service specific cost drivers** that may, subject to this consultation, be included in the relative needs assessment,

- the assessment of the **relative resources** of local authorities, including how income from council tax will be taken into account, and

- **transitioning to the new funding distribution**. The Government recognises that introducing a new needs and resources formula could result in significant changes to the funding baselines of some local authorities. We therefore intend to introduce transitional arrangements that are fair, transparent and easily understood so that budgetary impacts can be accommodated. We anticipate that any transitional arrangements will unwind over time.

1.6. This consultation

1.6.1. The Government proposes to base the assessment of local authorities' relative needs on a relatively small number of forward looking cost drivers with a transparent process for establishing the weightings between them. To help inform the debate about how to refine this proposal, this consultation:

- provides a summary of how relative needs assessments in England have worked in the past (Chapter 2),

- presents the idea of using a simple foundation formula to measure the relative needs of local authorities, based on a small number of common cost drivers (Chapter 3),

- considers a number of service areas where in addition, a more sophisticated approach to measuring relative needs may potentially be required (Chapter 4),

- outlines the statistical techniques that could be used to construct relative needs formulas (Chapter 5), and

- seeks views on the potential impact of the options outlined in this consultation document on persons who share a protected characteristic (Chapter 6).

2. Measuring need

2.1. Summary

2.1.1. This chapter outlines the previous approaches that have been used to measure the relative needs of local authorities and considers the structure of a new relative needs assessment formula. In summary it describes:

- how the formulas used to determine relative needs have operated in the past,

- the key criteria that the Government will use to assess whether cost drivers should be included in a new relative needs assessment,

- the services currently provided by different tiers of local government, which will be the initial focus of the relative needs assessment, and

- potential approaches to grouping the cost drivers of these services, and therefore the structure of the relative needs assessment.

2.2. How funding formulas work

2.2.1. The overall level of funding available to local government as determined by the local government finance settlement is redistributed between individual councils using a number of mathematical formulas. These funding formulas are populated by indicators or variables, chosen because they were considered at the time to be predictive of the costs that councils face when delivering different services.

2.2.2. For example the adult social care relative needs formula includes variables that reflect the number of eligible older people, while the formula for highways maintenance includes variables which measure road length and usage. The formulas will allocate more money to areas where the data indicates that they have relatively more older people, or relatively more roads, and so on.

2.2.3. For most services there is more than one indicator of 'need to spend'. Taking adult social care as an example again, in addition to the number of older people in an area, the number of older people with complex health problems and the income of those older people can also have a significant impact on the cost of providing adult social care services to the area. This has resulted in the current formula for Social Services for Older People, for example, consisting of a basic amount per person aged 65 and over, plus a number of additional top-ups. The relative amount to be allocated to each local authority for this service is therefore calculated as follows:

- The projected population aged 65 and over in that area (unique to each local authority)

multiplied by

- A basic amount per person over 65 (the same for every authority)

Plus

- A top up for the number of people aged 90 or over, which is calculated by taking:

  o The proportion of those aged over 65 who are also aged 90 or over (unique to each local authority)

  multiplied by

  o A scaling factor, representing how important this cost driver is (the same for every authority)

- Plus a series of similarly constructed top ups for deprivation, sparsity, low income and area costs which are considered the other relevant drivers of costs for this particular service.

2.2.4. These cost drivers represent only one client group for adult social care services and one of the key challenges when designing a relative needs assessment formula is to decide how many cost drivers for different services and client groups should be included. The costs of providing adult social care in any authority will depend on the unique characteristics of the population in that area. Whilst in theory, including a large number of variables to capture all of these characteristics would perfectly predict the costs for that area, this would result in significant complexity and may not be a good predictor for the cost of providing care anywhere else. The aim of funding formulas is therefore to identify the most efficient number of variables to explain the greatest amount of variance in 'need to spend' as is both practicable and desirable.

2.3. The evolution of the local government relative needs assessment

2.3.1. The use of formulas to distribute grant funding to local authorities can be traced as far back as the 19th century. Since the 1970s and the advent of computing, statistical analysis has periodically been carried out to ascertain the most important indicators of relative need. Over recent years, funding formulas have

become more complicated. They have collected more data from within local authorities, utilised sophisticated analytical techniques and attempted to capture as many factors as possible that influence local authorities' 'need to spend'.

2.3.2. Between 1990 and 2003, a formula-based approach known as '**Standard Spending Assessments**' (SSAs) was used to calculate authorities' funding requirements for the annual local government finance settlement. The formulas were arrived at using a mixture of analytical techniques. An authority's Revenue Support Grant (RSG) was set as the difference between its need (its SSA) and a measure of the income it could raise from council tax and redistributed National Non-Domestic Rates (business rates).

2.3.3. With the aim of increasing both transparency and predictability of local government funding through SSAs, the Government undertook a fundamental review of the funding formulas in 2000, in partnership with the sector and other interested parties. This resulted in a new approach known as '**Formula Spending Shares**' (FSSs) in 2004, with a number of changes including:

- a more explicit link to the relative needs and resources aspect of determining an authority's funding allocations,

- a system of transitional 'floors and ceilings', which was extended to all councils to give councils greater predictability in their funding from year to year, and

- a standard format for representing formulas, which made them easier for councils to understand.

2.3.4. The system of FSSs lasted until 2006, when the Government introduced the **'4-block' model**. The blocks in this instance referred to the four components of calculating funding under the approach, which were:

i) the relative needs amount – this allocated funding based on relative need using formulas similar to the previous FSSs,

ii) the relative resource amount – this acted to adjust a council's funding to take into account its relative ability to raise income from council tax,

iii) the central allocation – this allocated an amount of funding to each local authority based on its population, and

iv) the floor damping block – this ensured that all authorities received at least the floor percentage change year-on-year.

2.3.5. The 4-block model introduced for the first time the redistribution of business rates between councils on the same basis as RSG.

2.3.6. The 4-block model was maintained until 2013/14 and the introduction of the 50% business rates retention system. Authorities' initial funding under this scheme was calculated using the same 4-block model, with the allocation split between an amount funded from business rates and an amount from RSG. This was done to give councils stability in their funding as the local government finance system moved to incentivise growth.

2.3.7. Since the 2013/14 local government finance settlement, councils' underlying levels of 'need' have not been updated. This has ensured that councils that have grown their business rates have benefited from the additional income that this has generated.

2.3.8. The current individual funding allocations for local authorities are therefore based on relative need formulas that were last updated in 2013/14, although the underlying statistical modelling which determines the cost drivers and the weightings given to them is older.

2.4. Key criteria for including cost drivers in the formula

2.4.1. A previous desire to fully capture every aspect of local authorities' needs has led to increasingly large numbers of variables being included in the formulas over time. Over 120 variables were used in the last relative needs assessment and many of those variables have a relatively minimal impact on the overall distribution of funding. Using such a large number of variables across multiple different formulas, in combination with the three other steps in the existing 4-bock model to adjust for relative resources, split funding between tiers of services and implement damping, has made the overall funding formula less transparent and consequently harder to comprehend.

2.4.2. Chapter 1 of this consultation sets out the guiding principles that the Government is using to direct the work of the review. The Government believes that, in line with these principles, a new formula should focus only on the most important cost drivers for delivering services today and in the future, with the aim of developing a simpler, more transparent and up-to-date funding formula.

2.4.3. If a new formula is to include fewer variables that represent the key cost drivers facing local authorities, it will be even more important to ensure they are the right cost drivers. The Government is therefore proposing that the following criteria should be used to assess cost drivers before they are included in the funding

formula:

i) **Relevant** – there should be evidence to demonstrate that the cost driver has a significant impact on the cost of providing services,

ii) **Objective** – the cost driver should be measurable using robust, up-to-date data that is collected on a consistent basis across England. Local authorities should not be able to directly affect the indicator (i.e. the cost drivers should not create perverse incentives to 'game' the system),

iii) **Distinct** – the cost driver should explain significant variation in the 'need to spend' that is not covered by another cost driver,

iv) **Stable** – the cost driver should not exhibit unpredictable or large changes year-on-year, and

v) **Future proof** – the cost driver should be expected to drive the on-going costs of providing services (i.e. they should not be one-off events).

2.5. Services provided by local government

2.5.1. The cost drivers that are included in the formula will need to relate to the services currently delivered by local government. Local authorities are responsible for around a quarter of public expenditure in England and they deliver a very wide range of essential public services. These include personal protective services such as adult and children's social care, as well as waste collection and disposal, highways maintenance, housing, cultural facilities, and other protective functions such as environmental, coastal and flood defences.

2.5.2. However the structure of local government varies across England, with different types of local authority responsible for providing different sets of services. The relative needs assessment developed by the Government will therefore need to provide local authorities with their appropriate share of the available funding to support the services for which they are responsible.

2.5.3. Some of the responsibilities of different types of local authorities are illustrated in Table 2.1.

Table 2.1: Local authority responsibility for services in England

Main services	Shire areas			Metropolitan areas	London	
	Unitaries	Counties	Districts	Metropolitan Districts	London boroughs	GLA[1]
Education	●	●		●	●	
Environmental health	●		●	●	●	
Highways	●	●		●	●	●
Housing	●		●	●	●	●
Leisure	●		●	●	●	●
Libraries	●	●		●	●	
Passenger transport	●	●		●		●
Planning applications[2]	●		●	●	●	●
Revenue collection	●		●	●	●	
Social care	●	●		●	●	
Strategic planning	●	●		●	●	●
Transport planning	●	●		●	●	●
Waste collection	●		●	●	●	
Waste disposal	●	●		●	●	

[1] The GLA is a local authority and has responsibility for fire, planning applications, strategic planning, housing, transport planning, cultural and leisure and other functions directly and through its functional bodies. It also receives police funding through the current local government finance settlement in respect of prior year council tax freeze grant. Mayoral Combined Authorities will progressively have similar functions (but not necessarily all), from 2017/18.

[2] County Councils are responsible for planning applications that relate to waste sites and minerals, as well as their own developments, such as most schools, care homes, fire stations and non-trunk roads.

2.6. Options for measuring relative need for different services

2.6.1. At present, 15 relative need formulas and several tailored distributions for services previously supported by specific grants are used to determine annual funding allocations for each local authority across England. These formulas involve over 120 indicators of 'need', reflecting factors previously identified as driving the costs of service delivery.

2.6.2. This approach of using different formulas for the various different service areas has been used for a number of years. However there are a range of options which could be considered for the new relative needs assessment. There are three broad approaches that can be taken:

i) Individual funding formulas for each duty

Instead of grouping services into general themes or blocks, individual formulas could be constructed for each individual service that local authorities are responsible for. Each formula would reflect factors specific to the service concerned and could generate a highly nuanced relative needs distribution. However, given the wide range of legal duties performed by local authorities - the National Audit Office have counted over 1,200[3] - this approach would mean local government funding would depend on a very large number of overlapping formulas using the same or similar underlying indicators. This could make it difficult to understand the principal factors which drive local authorities' 'need to spend', and it would lead to a much more complicated system than currently exists.

ii) Grouping services into blocks

Grouping similar services, such as all services relating to adult social care, into blocks would reduce the number of individual formulas that are required in the relative needs assessment. This approach could significantly simplify the current funding formulas while enabling the necessary accuracy to be retained for specific areas where more detailed formulas add value. However, it could also lead to the exclusion of some specific drivers of need for smaller or more specialised services that may be important for some authorities.

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[3] https://www.nao.org.uk/wp-content/uploads/2014/06/Local-government-funding-assurance-to-parliament.pdf

iii) A simple 'foundation' funding formula

There are a number of factors, such as the basic demographic characteristics of an area, which affect the cost of providing multiple services. Therefore it may be possible to use a simple foundation formula to allocate funding to each type of local authority based solely on these cross-cutting or 'common' cost drivers. This approach would make the relative needs assessment much simpler but would result in particular cost drivers for some large specific service areas being excluded, which may result in a less fair distribution for authorities that have high costs in delivering those services.

2.6.3. The Call for Evidence on needs and redistribution that was published last year asked for views on the balance between simple and complex funding formulas. The majority of respondents advocated a simpler approach. However many also argued that simplification should not be achieved at the expense of accuracy. Many of the responses received also felt that it should be possible to retain an appropriate level of complexity while increasing the level of transparency.

2.6.4. Introducing a foundation formula based on common cost drivers to allocate funding to each type of local authority would result in the most understandable and transparent system. Non-specialists would easily be able to see in the clearest possible terms how the differences in common cost drivers between areas affected the level of funding authorities received. However, such a simple approach would involve a greater degree of Ministerial judgement than the current relative needs assessment. Changing the structure of the relative needs assessment in such a significant way could lead to dramatic changes in funding allocations for some authorities, and such a simplified approach might fail to capture variation in important cost drivers. This would likely be amplified for those authorities with an exceptionally high level of demand for, or unique costs of delivering a relatively expensive service.

2.7. Structure of the relative needs assessment

2.7.1. Having considered the responses to the Call for Evidence on the balance between simplicity and complexity, the Government is committed to implementing an approach that is as simple and transparent as possible but recognises this should not be at the expense of accuracy and fairness.

2.7.2. We are therefore proposing to develop an approach that begins with a transparent foundation formula to allocate all, or at least a proportion, of the available funding

to each type of local authority. Chapter 3 of this consultation considers what 'common cost drivers' should be included in a foundation formula.

2.7.3. However, we also acknowledge that there may be particular service areas where a more specific approach is required, and so we will also consider the case for going further and allocating a proportion of the available funding based on the particular cost drivers for those services. The potential services that may be treated in this way are outlined in Chapter 4 of this consultation where we invite views, supported by evidence, on which service areas may require a more specific approach and the most important 'service specific cost drivers' to include in developing this approach.

2.7.4. Adopting a more specific approach for one or more service areas would reduce the scope of the foundation formula, and the services it represents. A foundation formula, based on a set of common cost drivers, could then be a simple and transparent way of reflecting many of the universal services provided by councils (see section 3.2) for which population is a key cost driver. This approach to the foundation formula could be particularly relevant to district councils given that several of the specific services discussed in Chapter 4 are not district responsibilities (e.g. social care).

2.7.5. Even a foundation formula, for each type of authority, is likely to include more than one cost driver. Chapter 5 of this consultation therefore considers the approach to determining the relative weighting of different cost drivers, which would then help to determine how much funding is allocated to each authority, based on its local circumstances, for these key cost drivers.

Question 1: **What are your views on the Government's proposals to simplify the relative needs assessment by focusing on the most important cost drivers and reducing the number of formulas involved?**

3. Common cost drivers

3.1 Summary

3.1.1 This chapter outlines the key cost drivers that the Government is proposing to use as the starting point for a simple foundation formula. In particular it:

- considers whether there are common cost drivers that the Government should consider for a foundation formula,

- describes three potential common cost drivers that the Government believes affect the costs of delivering a wide range of services, and

- considers whether adjustments need to be made for the different costs facing authorities across different parts of the country.

3.2 Universal and targeted services

3.2.1 An important consideration is that many of the services provided by local authorities are not universal and therefore cannot be accessed by all residents. Particular services instead involve some level of means testing or eligibility assessment in order to determine which individuals are entitled to access them and which are not. The relationship between eligibility and certain population characteristics has a much greater influence on the `need to spend' on particular services than others. The Government will therefore need to consider cost drivers which affect eligibility, as well as those which affect demand for services, and the relationships between the two groups of drivers.

3.3 Using 'common cost drivers' to determine allocations

3.3.1 Since the Call for Evidence on needs and redistribution was published last year, DCLG has worked closely with local authorities, the technical working group and other government departments to consider the main factors that affect the costs faced by local authorities in a number of different service areas.

3.3.2 This work has led to the identification of a number of common cost drivers which there is good reason to believe have a significant effect on the cost of providing multiple services. We expect these common cost drivers to be responsible for most of the variation in local authorities' 'need to spend'. The Government is therefore proposing to use these as the starting point for developing the option of a

foundation formula. The common cost drivers that have been identified so far are as follows:

i) <u>Population</u>

3.3.3 The number of people each local authority has to provide services for has been universally identified as the single most important predictor of the costs that local authorities face. However, the cost of different services can be driven by different sections of the population. For example the number of eligible older people directly affects the costs of adult social care but not the cost of providing children's services. Therefore the Government believes it is highly likely that the cost of providing services is not just dependent on the overall number of people in an area but on age profiles as well, and that it is therefore necessary to reflect this in a formula.

3.3.4 As well as the cost variance associated with different age groups, the demographics of a particular area will change over time. The rate and nature of population change is likely to vary from one part of the country to another. The majority of responses received to the Call for Evidence argued that the Government must not simply reflect the relative cost of providing services at the outset of the system, but should attempt to reflect 'future need' as well. Reflecting the changes in an area's population over time in the relative needs assessment is therefore a key challenge.

3.3.5 The Office for National Statistics (ONS) produces a number of products, including population projections indicating the future size and age structure of national and local populations. The projections are based on a set of assumptions around future fertility, mortality and migration. Using these projections would allow the formula to reflect expected future population changes while giving authorities certainty over their income for the duration of a funding period. Taking account of expected population changes should reduce the risk of a relative needs assessment becoming quickly out of date.

3.3.6 However population projections cannot reflect unpredictable changes. Reflecting actual population changes more accurately in a relative need formula would require more frequent updates, which may reduce medium term financial certainty for local authorities. This may undermine the confidence of local authorities to build achieved growth into their base budgets, or to use that growth for long-term investment.

Question 2: **Do you agree that the Government should use official population projections in order to reflect changing population size and structure in areas when assessing the relative needs of local authorities?**

Question 3: **Do you agree that these population projections should not be updated until the relative needs assessment is refreshed?**

ii) Rurality

3.3.7 In 2014 LG Futures, a specialist consultancy firm, was commissioned by DCLG and DEFRA to establish whether and to what extent rural authorities face additional costs in delivering services compared to urban authorities. The research recognised that there are specific challenges in rural areas, which include scattered and remote populations, a lack of private sector service providers, and poor broadband or mobile phone coverage.

3.3.8 The research[4] conducted by LG Futures also found evidence based on a survey of local authorities that services which require more travel time generally incur higher unit costs, and that this is more common in rural rather than urban areas. This is due to a combination of travel expenses and a longer 'down time' (e.g. a care worker providing domiciliary care may perform fewer visits per hour in a rural area because it takes longer to get from one residence to the next).

3.3.9 The research was subject to several assumptions and limitations in the availability of cost and activity data at geographical level within authorities, which made it difficult to explicitly identify direct additional costs. However it reported evidence for higher costs in rural areas for 11 services (comprising around 15% of local authority spending) and lower costs in 15 services (comprising around 31% of local authority spending). Furthermore, some rural authorities asserted that unmet need for certain local services, such as local public transport, was not represented in the available data and that less tangible costs, such as barriers to reducing service costs through channel shifts to digital, were not possible to quantify, which means there may be additional costs not accounted for in empirical analyses.

3.3.10 At the last update of relative needs in 2013/14, adjustments were made to the funding formulas to reflect the additional cost of providing certain services in rural areas. This was achieved by increasing the weighting for population sparsity indicators in the formulas, as well as weighting the formulas for places which were described as 'super sparse' (i.e. that had fewer than 0.5 people per hectare).

3.3.11 Taking into account the limitations of the LG Futures research discussed above, it is possible that altering the weightings in 2013/14 may have only partially reflected the challenges faced in delivering some services in rural areas. The Government is therefore proposing to explore whether alternative data sources are available that measure or proxy the relative cost of providing services in rural areas, which could be drawn on in a needs assessment.

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[4] https://www.gov.uk/government/publications/costs-of-service-delivery-in-rural-areas

Question 4: **Do you agree that rurality should be included in the relative needs assessment as a common cost driver?**

Question 5: **How do you think we should measure the impact of rurality on local authorities' 'need to spend'? Should the relative needs assessment continue to use a measure of sparsity or are there alternative approaches that should be considered?**

iii) Deprivation

3.3.12 Like population and sparsity, many of the existing relative need formulas include an adjustment for deprivation. The adjustments were intended to reflect the fact that deprived individuals, and particularly income deprived individuals, are more likely to access certain services than more prosperous individuals, leading to higher costs.

3.3.13 The Government takes the view that levels of deprivation remains an important cost driver for a wide range of services that must be captured by any new relative needs formula. However as with the other important issues considered in this consultation, changing patterns of deprivation across the country mean it is important that we reconsider this relationship and the impact that deprivation has on authorities' 'need to spend'.

3.3.14 The deprivation adjustments made in the current relative needs assessment are based on a relatively narrow measure of income deprivation. Specifically, they reflect the number of people in an area receiving income and employment related benefits, such as job seekers allowance, income support, tax credits and various incapacity benefits. Since these formulas were last updated, the expansion of Universal Credit has meant that many of the individuals that previously received these benefits are now in receipt of Universal Credit. The rollout of Universal Credit is on-going, which means that the number of people currently in receipt of Universal Credit or still receiving the legacy benefits mentioned above will vary across the country. As a result, during this transitional period the number of claimants in receipt of different benefits will not be directly comparable across the country.

3.3.15 This Government is therefore considering whether a relatively narrow measure of deprivation based on an individuals' income is still the most appropriate approach to measuring the impact of deprivation on the cost of providing services. Alternative measures could be considered instead, such as the Index of Multiple Deprivation (IMD), which captures factors beyond income and employment[5], and may provide a robust and consistent approach. Alternatively, more tailored approaches that focus on the specific factors that lead to higher demand for each particular service could

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[5] The Index of Multiple Deprivation has seven domains of deprivation: Income, Employment, Crime, Education, Health, Living Environment and Barriers to Services.

be used (for example, Income Deprivation Affecting Children, a supplementary indicator within the IMD, may be a more appropriate way of measuring the impact that deprivation has on the 'need to spend' for children's services than a more general measure of deprivation).

Question 6: **Do you agree that deprivation should be included in the relative needs assessment as a common cost driver?**

Question 7: **How do you think we should measure the impact of deprivation on 'need to spend'? Should the relative needs assessment use the Index of Multiple Deprivation or are there alternative measures that should be considered?**

3.3.16 The Government believes that the three common cost drivers outlined above are the most important characteristics of a community that affect the costs a local authority will face in delivering services. However, as described in Chapter 2, we acknowledge that some service areas have unique cost drivers that nonetheless drive a significant proportion of the overall costs that a local authority may face. The Government intends to use the three common cost drivers outlined above as the starting point for a foundation formula but will consider whether there are other, service specific cost drivers that should also be included.

Question 8: **Do you have views on other common cost drivers the Government should consider? What are the most suitable data sources to measure these cost drivers?**

3.4 Area Cost Adjustments

3.4.1 The three common cost drivers outlined above represent the characteristics of the population that affect the *demand for services*. The characteristics of an area may also affect the *cost of delivering* services, so that local authorities with exactly the same population characteristics may be faced with different costs when purchasing the inputs they need to deliver local services.

3.4.2 For example the costs of employing staff or renting non-domestic properties can vary considerably between different places. Some local authorities will face unique cost pressures related to their geography; such as the costs associated with providing services on an island, or to a widely dispersed population in rural areas. The Government will therefore consider how the Area Cost Adjustment could be updated and improved to better reflect these sources of differences in costs.

3.4.3 The current Area Cost Adjustment attempts to estimate the market price of labour, and some land costs, in an authority area. The current approach takes into account four main factors for each distinct block of services:

- **the local cost of labour** measured by average hourly earnings excluding overtime, controlling for differences in the age, gender, occupation and industry of workers between local areas,

- **the share of total costs for the block of services which is spent on employees**, including pensions, using data supplied by local authorities for the majority of services. For services which are likely to be contracted, this is based on industry statistics,

- **the local level of business rates** measured by the rateable value of schools for the Education block (the current Area Cost Adjustment was developed in 2003, before the Dedicated Schools Grant was introduced) and the rateable value per square metre of office space for other service blocks. These are adjusted for the effect of transitional relief, estimated from data supplied by local authorities, and

- **the estimated share of total costs for the block of services which is spent on business rates.**

3.4.4 The Government's view is that it is important to reflect differences in the costs of these inputs in any future funding formula, and we will explore whether there are other differences in input costs which should and can be reflected. For example, it might be possible to incorporate measures of rurality within the Area Cost Adjustment. It is essential that the factors and data used are reviewed in order to ensure that a new funding formula best captures the varying costs of delivering services today and in the future.

3.4.5 We will also need to consider how area-based adjustments might operate within a foundation formula, as currently each relative needs formula has its own Area Cost Adjustment to reflect the particular impact that different employee and running expenses have on the costs of providing the different types of services.

Question 9: **Do you have views on the approach the Government should take to Area Cost Adjustments?**

3.5 Treatment of small but locally significant duties

3.5.1 As described in paragraph 2.5.1, the current needs assessment reflects a number of local authority duties, many of which will share common cost drivers. However some duties, which only account for a small proportion of the overall expenditure of local government, can have a significant impact on individual authorities. An

example of this would include the funding for flood defences distributed through the local government finance settlement to lower-tier authorities.[6]

Question 10a): **Do you have views on the approach that the Government should take when considering areas which represent a small amount of expenditure overall for local government, but which are significant for a small number of authorities?**

Question 10b): **Which services do you think are most significant here?**

3.6 Deciding the relative importance of cost drivers

3.6.1 The Government's intention is to limit the number of cost drivers included in a simple foundation formula to those that have a significant impact on the cost of providing services. However we expect that the formula will need to include more than one cost driver, which will therefore make it necessary to determine the appropriate weights to be given to each. It cannot be assumed that each driver of need has exactly the same level of importance.

3.6.2 Chapter 5 outlines different statistical techniques available to weight the cost drivers used in a funding formula in an objective way.

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[6] Flood funding is also available from the Environment Agency and non-government sources such as drainage charges and levies.

4. Service specific cost drivers

4.1. Summary

4.1.1. The previous chapter set out our commitment to developing a simple relative needs assessment formula based on common cost drivers which will be used to distribute at least a proportion of the available funding. This chapter explores the main service areas where a more specific approach may be required. It describes:

- why formulas for specific cost drivers may be required in some circumstances, and

- the main service areas that have unique drivers of need and which may require a more specific approach.

4.2. Why might a specific approach be required?

4.2.1. The current assessment of relative needs includes 15 different relative needs formulas and several tailored distributions for services that were previously incorporated or 'rolled into' the local government finance settlement. The Government agrees with the majority of the respondents to the Call for Evidence that this level of complexity leads to an opaque funding distribution. However there is good reason to believe that there may be some areas of local authority service provision where a more specific approach is justified.

4.2.2. The Call for Evidence asked respondents for their views on this subject. 67% of respondents indicated that they believe adult social care justified a more specific approach, and 56% identified children's services. A significant number of representatives also identified highways maintenance, waste and recycling, and legacy capital financing as requiring bespoke formulas.

4.2.3. Adult social care and children's services accounted for 45% of service expenditure[7] by local authorities in 2016/17 and the need for local authorities to spend money in these areas, particularly children's services where there is the potential for individual cases to carry significant costs, can depend on relatively small changes in specific key cost drivers. There are also some service areas, such as highways maintenance, where costs are driven by different factors to the majority of other services such as the number and length of roads, or traffic volume.

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[7] 2016/17 Net Service Expenditure minus Dedicated Schools Grant and spending on Police.

4.3. Service areas with distinct cost drivers

4.3.1. The service areas set out below either account for a significant proportion of local government expenditure, or have a unique set of factors which drive costs for many authorities. The Government is therefore proposing to explore how best to incorporate more specific formulas for these areas and the impact this would have on the overall assessment of relative needs.

4.3.2. One reason to consider social care, highways maintenance and transport, and fire and rescue services as individual service block areas rather than as part of a foundation formula are that none of these are universal population based services. Both adult social care and children's services are targeted services rather than universal, and are therefore difficult to allocate on an adjusted per capita basis. Highways, transport and fire and rescue services are also not strictly population based services, being based on road length, bus boardings and risk respectively. These functions are also performed at one tier of local government, and in the case of fire and rescue services performed by stand-alone fire authorities in some instances.

4.3.3. We have worked closely with local authorities, the technical working group and other government departments to consider the main factors that affect the costs faced by local authorities in providing the services mentioned in this chapter. This work has led to the identification of a number of service-specific cost drivers which there is good reason to believe have a significant effect on the cost of providing these services. We are now seeking wider engagement to understand whether these are the most appropriate cost drivers to include as variables in the event that a more specific approach is taken for the service areas concerned.

4.3.4. Several service specific formulas could conceivably sit alongside a foundation formula based on the common cost drivers as outlined in Chapter 3, which would continue to distribute funding for any services that do not require such a specific approach.

4.3.5. A number of the common cost drivers discussed in Chapter 3, including rurality, deprivation and area cost adjustments have a bearing on the specific service areas discussed in this chapter. If a specific approach is adopted for some service areas, the Government will consider how the two sets of cost drivers should interact.

Adult social care

4.3.6. Within the current relative needs assessment there are two formulas which make up the Adults Personal Social Services (PSS) service block, which is more commonly

referred to as adult social care. The two existing formulas reflect the difference in the cost of providing social care to two distinct age groups: older people over the age of 65 and younger adults aged between 18 and 64. Given that adult social care is means tested, carer-sighted and subject to a national eligibility framework, the following factors have so far been identified as the key cost drivers for adult social care:

i) **Number of adults by age groups** – Local authorities are responsible for providing social care for all adults and as a result, the number of people in an area who are eligible for care will have a bearing on the number of people who are likely to require care. However the responsibilities and cost of care vary for different age groups. We will need to consider how this relationship should be reflected in the relative needs assessment,

ii) **Number of adults with income and wealth that meet the means test** – Local authorities are only responsible for providing care to those adults who lack the resources to fund their own care. The number of adults that fall below those thresholds will therefore be a key cost driver. Some elements of this eligibility threshold are based on household rather than individual characteristics,

iii) **Number of people with higher levels of impairment** – Adults with more complex conditions or who require more intensive care are more likely to be eligible for support, which may also cost more,

iv) **Number of people who live alone** – Individuals who live alone are less likely to have a support network of family or friends who can provide care. This makes it more likely that the local authority will need to provide care, and

v) **Sparsity** – In order to provide domiciliary care, social workers in sparse areas have to travel longer distances, which reduces the number of visits that can be completed in a day.

Question 11a): **Do you agree that the cost drivers set out above are the key cost drivers affecting adult social care services?**

Question 11b): **Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting adult social care services?**

Children's services

4.3.7. Children's services are also part of the current relative needs assessment. This service block uses three distinct relative need formulas that reflect the different types of services local authorities provide for children: children's social care, youth

and community services, and local authority central education functions (this does not include the duties covered by grants provided by the Department for Education, such as the Dedicated Schools Grant).

4.3.8. The three existing formulas currently share a number of variables, which suggests that the same cost drivers influence the 'need to spend' in each of these areas. For example, both the children's social care and youth and community formulas use the same deprivation indicator. It may be possible to simplify the current approach by combining them into a single children's services formula. The following factors have so far been identified as the key cost drivers for providing services to children:

i) **Number of children (under 18 years of age)** – The cost of providing services to children is heavily dependent on the number of children in an area,

ii) **Number of children for whom parents receive Disability Living Allowance** – Childhood disability has a bearing on the likelihood of a child needing children's services. Children with disabilities, and in particular those with more complex and multiple conditions, are likely to require more expensive support which is associated with greater costs in terms of social worker resource and service provision.[8]

iii) **Deprivation** – A higher proportion of families facing multiple challenges associated with deprivation will influence the overall level of demand for, and cost and complexity of providing services to children, and

iv) **Distance to schools** – Local authorities are responsible for providing school transport to children who attend their nearest suitable school where this is more than a prescribed distance from their home. Areas with a large number of children who live in scattered locations a long distance from a school will therefore face a higher 'need to spend' in this area.

Question 12a): **Do you agree that these are the key cost drivers affecting children's services?**

Question 12b): **Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting children's services?**

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[8] Ward et al 2004, The costs and Consequences of different types of child care report to the Department of Health; Ward H, Holmes L, Soper J. 2008, Costs and consequences of placing children in care. London: Jessica Kingsley Publishers; Beecham J. Unit costs - not exactly child's play. A guide to estimating unit costs for children's social care. University of Kent: Joint publication from the Department of Health, Dartington Social Research Unit and the Personal Social Services Research Unit; 2000.

Highways maintenance and public transport

4.3.9. Local authorities are responsible for maintaining the roads in their areas and providing concessionary travel to certain client groups, and the revenue costs involved in providing these services are reflected in the current local authority relative needs assessment. The following factors have so far been identified as the key cost drivers for these services:

i) **Road length** – The day-to-day cost of maintaining roads is strongly correlated with the length of roads being maintained. It may also be necessary to consider the classification of roads as well as the costs of maintaining a road in a built up area, which are likely to be higher than in a less developed area,

ii) **Traffic flow** – Traffic volume, particularly that of heavy goods vehicles, has a significant impact on the length of time that will pass before the state of a road deteriorates. More frequent repairs will lead to higher costs overall,

iii) **Forecast snow days / predicted grit days** – A local authority will need to spend more on snow ploughs or gritting in areas where a larger number of snow or ice days is predicted, and

iv) **Concessionary bus boardings** – Bus boardings has been shown to be the main cost driver of expenditure for concessionary travel due to the explicit link to the reimbursement of operators for journeys made.

Question 13a): **Do you agree that these are the key cost drivers affecting routine highways maintenance and concessionary travel services?**

Question 13b): **Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting routine highways maintenance or concessionary travel services?**

4.3.10. The current local government finance system also funds local bus support outside London.[9] Historically this element of need was part of the county level Environmental, Protective and Cultural Services formula, which unlike the other formulas currently in use is designed to meet the relative need of local authorities

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[9] Local bus support in London was historically part of the funding provided directly to Transport for London.

to fund a wide range of services.[10] Although no specific cost drivers are included in respect of bus support, we will need to consider how need for this service is measured.

Question 14a):   **Do you have views on what the most suitable cost drivers for local bus support are?**

Question 14b):   **Do you have views on what the most suitable data sets are to measure the cost drivers for local bus support?**

Waste collection and disposal

4.3.11. In two-tier areas the responsibility for household waste collection lies with shire districts and disposal with shire counties. Historically these elements of need were part of the Environmental, Protective and Cultural Services formulas, although no specific variables are included. The Government proposes to reconsider how need for these services is measured and the following factors have so far been identified as the key cost drivers for these services:

   i)   **Number of households** - The majority of the waste that local authorities collect is from households. Therefore the more households that there are in an area presenting their waste on collection day, the higher the costs involved,

   ii) **Types of property** – The efficiency of waste collection is affected by access. Complications in accessing properties increases the time taken to collect waste and by extension staff and equipment costs,

   iii) **Travel times** – Local authorities have to collect waste from all households in their areas. The greater the distance between those houses, the longer the collection will take and the fewer the houses can be serviced in a given time, and

   iv) **Deprivation** – Individuals from more deprived areas tend to make less use of recycling services, which increases the amount of standard waste that needs to be disposed of. Deprived areas also tend to suffer from a lower quality local environment which can result in increased costs (e.g. addressing littering, dog fouling, etc.). Overall, deprivation increases the cost of managing waste in these areas.

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[10] Allotments, Building regulations, Cemeteries and crematoria, Civil defence, Consumer protection, Coroners' courts, Council tax collection, Economic development, Environmental and port health, Libraries, Magistrates' courts, Miscellaneous services, Museums and galleries, Parking, Performing arts, Planning control, Planning implementation, Private housing, Public transport support for buses, Recreation, Refuse collection, Refuse disposal, Registration of electors, Registration of births, deaths and marriages, School crossing patrols, Sheltered employment.

Question 15a): **Do you agree that these are the key cost drivers affecting waste collection and disposal services?**

Question 15b): **Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting waste collection and disposal services?**

Fire and rescue services

4.3.12. The cost of providing a fire and rescue service is driven by risk, rather than purely by demand. As a result many of the cost drivers are therefore unique to this service area.

4.3.13. The current fire and rescue services formula consists of a basic allocation of funding per resident, with adjustments for coastline, population density and sparsity, deprivation, fire risk areas, community fire safety and other area costs. These elements include indicators of both the risk of requiring a fire service response, such as the risk of dwelling fires occurring, as well as indicators of the cost of providing fire service cover, for example as a result of population sparsity.

4.3.14. The indicators used in the current fire and rescue services relative needs formula are as follows:

(i) **Projected population** – A basic amount of funding per resident,

(ii) **Adjustments**:

— **Coastline** – The length of coastline. This is a measure of remoteness and reflects the extent to which an authority can receive mutual aid support from surrounding fire authorities

— **Population Density** – This is an indicator of risk reflecting the higher rate of incidents in more densely populated areas

— **Population Sparsity** – The cost of supplying fire and rescue services in sparsely-populated areas differs from that of more densely populated areas due to the increase in distances travelled to an incident

— **Risk index** – A measure of deprivation, this takes into account the following factors which correlate with an increased risk of fire incidence in an area:

• The proportion of working age adults with no qualifications,
• The proportion of working age population not in employment,

- The proportion of working age adults in receipt of income support, and
- The authority's standardised mortality ratio

— **Control of Major Accident Hazards (COMAH) sites** – COMAH sites contain dangerous substances of a particular quantity, such as oil or chemical refineries. These sites create a high-risk environment and therefore require appropriate resources and plans to be in place to deal with potential incidents

— **Property and Societal Risk** - Property loss and societal risk frequency relate to the likelihood of a large number of people who would require assistance by the fire and rescue service to escape from a fire

— **Community Fire Safety** – This indicator reflects those groups in greater need of fire safety education:

- Pupils in maintained and independent schools aged five to ten, to encourage the education of all children in fire safety, which is recognised as a key long term prevention activity,
- Residents living in areas with a greater need for fire safety education, based on ACORN classifications, and
- Resident population aged 65 and over.

(iii) **Area Cost Adjustment for Fire and Rescue** - A factor calculated to reflect differences in the cost of providing fire and rescue services across the country.

4.3.15. Funding for national resilience capabilities, including urban search and rescue and high volume pumps, is distributed outside of the local government finance settlement.

Question 16a): **Do you agree these remain the key drivers affecting the cost of delivering fire and rescue services?**

Question 16b): **Do you have views on which other data sets might be more suitable to measure the cost drivers for fire and rescue services?**

Legacy capital financing

4.3.16. The capital finance system was based on the principle that authorities could borrow or use credit only up to the limits specified by the Government through the

issue of credit approvals.[11] Where borrowing was not accounted for within a council's Housing Revenue Account, funding for this borrowing was instead provided through the local government finance settlement and allowed for both the payment of interest on the loan together with repayment of the principal.

4.3.17. In April 2004 the Prudential Capital Finance System was introduced. The prudential system no longer required Government approval and enabled councils to determine whether borrowing was used as capital or revenue funding. The funding support under this system came from either capital grants (Supported Capital Expenditure (Capital)) or via the Local Government Finance Settlement as revenue payments (Supported Capital Expenditure (Revenue)).

4.3.18. Revenue payments continued to be provided until 2011, at which point Government support for capital projects was made exclusively in the form of capital grants.

4.3.19. The purpose of the Capital Financing relative needs formula is to ensure that local authorities with borrowing commitments that were agreed to be funded through the local government finance settlement have that cost recognised in their relative needs assessment. This remains a pressure on some authorities and therefore has very specific cost drivers:

   i) **Outstanding debt** – The remaining proportion of debts still outstanding based on the initial value of the relevant debts and assumed capital repayments, and

   ii) **Interest Rates** – An assumed rate of interest that may be chargeable on the outstanding debt until the principal is fully repaid.

Question 17a): **Do you agree these are the key cost drivers affecting the cost of legacy capital financing?**

Question 17b): **Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting legacy capital financing?**

Other service areas

4.3.20. The Government believes that the service areas outlined above are the areas where the case for a more specific funding formula is strongest. However there may be other areas which need to be considered.

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[11] Basic Credit Approvals (BCAs) and Supplementary Credit Approvals (SCAs).

4.3.21. Alongside this consultation document, historic documentation is available online[12] which sets out the relative need formulas and data that were used in the 2013/14 relative needs assessment. This information may help you to consider whether there are other areas not highlighted in this consultation document which may need specific treatment in a new funding formula.

Question 18a): **Are there other service areas you think require a more specific funding formula?**

Question 18b): **Do you have views on what the key cost drivers are for these areas, and what the most suitable data sets are to measure these cost drivers?**

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[12] Local Government Finance Report 2013/14 - http://webarchive.nationalarchives.gov.uk/20131203161335/http://www.official-documents.gov.uk/document/hc1213/hc09/0948/0948.pdf

Calculation of 2013/14 Formula Funding - http://webarchive.nationalarchives.gov.uk/20131203161401/http://www.local.communities.gov.uk/finance/1314/CalcFFs.pdf

5. Weighting funding formulas and cost drivers

5.1. Summary

5.1.1. The previous chapters have considered which cost drivers should be included in the assessment of local authorities' relative needs. This chapter describes how those cost drivers could be combined and weighted within a relative needs formula. It also considers the role statistical techniques can play in determining those weights. In particular, this chapter:

- discusses the potential approaches to weighting specific service areas that may be included in the formula,

- outlines the important role that statistical techniques play in weighting the common cost drivers and potential specific cost drivers for service areas, and

- describes the main analytical techniques available for quantifying the weightings of cost drivers.

5.2. Weighting of funding between services

5.2.1. If more than one relative needs formula is developed, it will be necessary to decide the proportion of the overall funding that is to be allocated by each formula. In the past, control totals for the different elements in the relative needs assessment formula have been set by Government as part of the Spending Review process. This approach was one of the specific issues that several respondents to the Call for Evidence believed should be changed in order to reduce the level of judgement involved in funding allocations.

5.2.2. An alternative to the use of judgement in determining the weighting of different formulas would be to base these on the proportion of spending local government as a whole currently commits to different services. This could be supplemented with some trend analysis or time series modelling to set control totals that reflect the pressures that we expect local government will face in the coming years. It would also be possible to use a blend of these two approaches. As this is a relative needs assessment, these control totals would have to be constrained to the level of funding available through the local government finance settlement.

Question 19:   How do you think the Government should decide on the weights of different funding formulas?

5.3. The role of statistics in weighting cost drivers

5.3.1. Chapter 2 described how the relative needs of local authorities, even for quite specific services, can depend on a number of different cost drivers or indicators. For example, the cost of maintaining roads may depend on the length of road being maintained, the type of road, the amount and type of traffic that use the roads and forecast weather conditions.

5.3.2. Statistical techniques offer an evidence-based approach for determining which cost drivers have a significant impact on a local authority's 'need to spend' and which, therefore, should be included in a funding formula. These techniques also enable the relative importance of a cost driver in determining the 'need to spend' to be quantified. Without these techniques, judgement would necessarily play a far larger role in determining funding allocations, which was a specific concern raised by several respondents to the Call for Evidence.

5.3.3. Many different statistical techniques have been used across Government to help construct funding formulas, the most commonly used of which is regression modelling. Other approaches such as principal component analysis, factor analysis and cost functions can in theory also be used to identify and define the relationship between a set of variables or cost drivers, and a measure of need. However, as outlined later in this chapter, some of these techniques are more complex than others, and some are dependent upon the availability of appropriate data.

## 5.4. Using regression models to determine the weightings of cost drivers

5.4.1. Regression models work by measuring how a dependent variable (the concept that you are interested in predicting) changes in relation to a series of independent variables. A relative needs assessment for local government attempts to predict the 'need to spend', which represents the dependent variable in this case. The independent variables that affect the 'need to spend' are the cost drivers. There is not one measure of a local authority's 'need to spend' and the most commonly used proxy has been 'spending per head'.

5.4.2. A regression model will quantify the average relationship between each cost driver and the 'need to spend' across all local authorities. This is expressed as a coefficient for each cost driver. This coefficient can be interpreted as the change in 'need to spend' for every additional unit of each cost driver. For example, on average and taking into account the effects of other cost drivers, how much extra

needs to be spent on each additional person or on each additional mile of road, and so on.

5.4.3. Chart 5.1 below presents a simple example using a single cost driver - population. The clear circles in the chart represent the level of expenditure for different councils with different population sizes. The straight line shows the relationship between expenditure and population size. The point where the straight line touches the y axis (expenditure) is the basic amount all authorities would receive - in this example 80. The gradient of the straight line then tells you the additional amount you get for each additional person in a population; in this example that amount is 1.1.

5.4.4. What this means is that each council would be funded in the same way regardless of their expenditure the previous year, and their allocation is directly determined by their local characteristics for the relevant cost driver. So in the example below, if your population was 50 your funding would be 80 + 1.1 x 50 = 135. The dark circles on the straight line show the level of funding each council would receive the following year.

Chart 5.1 A simple regression model
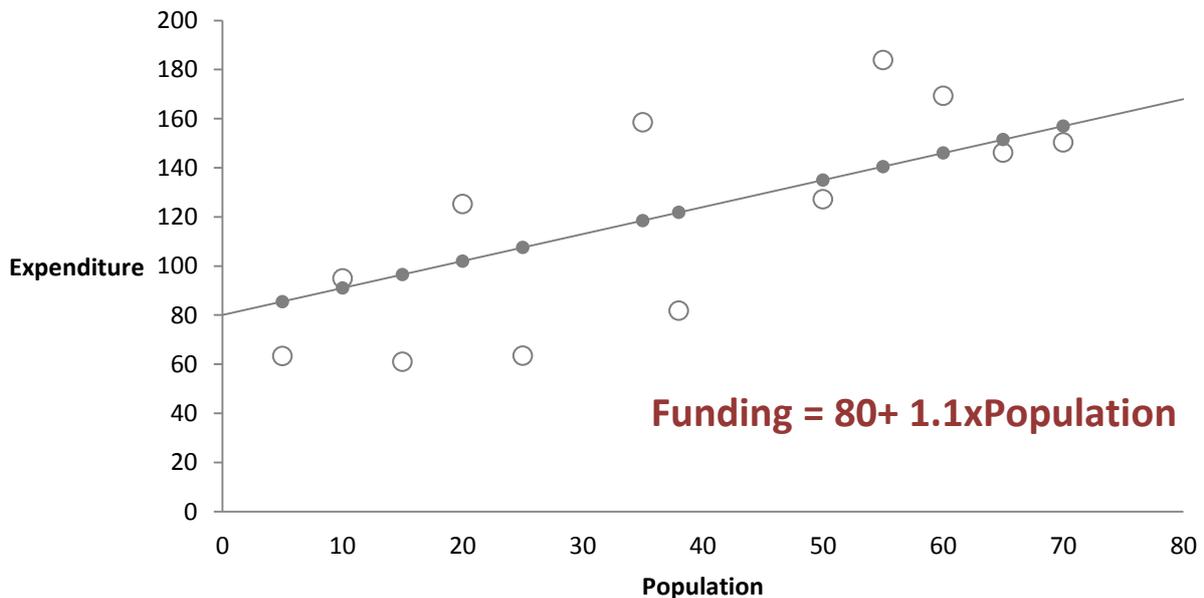
5.4.5. The simple example shown in chart 5.1 only explains a small part of the variation in spending as lots of the data points are a long way from the straight line. Adding more variables would explain more of the variation, but would also complicate the model. It is possible to use statistics to define a threshold for including additional cost drivers. This threshold means that variables which do not change the position of the straight line by more than this threshold amount will not be included in the model.

5.4.6. It is important to note that the statistical technique that is selected does not in itself result in a good model. A good regression model does not imply a causal relationship between the independent and dependent variables. This is a problem shared by all statistical techniques under consideration, and is why the Government recognises that consultation with the sector to identify relevant cost drivers in earlier chapters of this document, is as important, if not more so, than the selection of an analytical technique.

5.5. Limitations with expenditure based regression models

5.5.1. Regression models work best when they are measuring the relationship with a well-defined dependent variable. Ideally the dependent variable for a local government relative needs assessment would be the need of local authorities. However there is no data set that measures this concept. Historically expenditure has been used as a proxy for need; however there are limitations with this approach. If historic expenditure is not a good proxy for the relative needs of local authorities to spend money in the future, then the outcomes of the model will also not be good predictors of future need.

5.5.2. Four distinct issues are sometimes cited that could mean historic patterns of spending do not accurately reflect the actual relative needs of different communities. These issues are:

i) *Level of service provision* – Local authorities have considerable discretion over the way in which they provide services. It is possible that differences between authorities' level of expenditure may reflect local authorities providing different levels of support for different services,

ii) *Efficiency* – Local authorities facing the same levels of demand and providing the same quality of services can spend different amounts on those services. This difference is due to how efficiently councils are providing those services,

iii) *Historic funding levels* – Local authorities have a duty to set a balanced budget and therefore their spending in a given year is limited to the amount of funding that they are able to raise in that year. It is sometimes argued that simple regression models based on expenditure continue to allocate funding to those areas that have received greater funding in the past,

iv) *Unmet need* - If there are pockets of unmet need that affect particular local authorities or types of local authorities differently, then current levels of expenditure may not reflect the underlying demand for particular services. In NHS allocations this is reflected by a health inequalities adjustment in which 10% of the total allocation is driven by standardised mortality ratios. A common example that is cited with local government services is local bus services,

where the fact a local bus service is not currently operated does not necessarily mean that there is no 'need' for such a service.

5.5.3. Regression models look at the average relationship between expenditure and different cost drivers in order to determine the weighting of the variables. The results of a regression model will see those local authorities that are highly efficient receive a higher level of funding than their level of expenditure would indicate that they need. In chart 5.1, efficient local authorities would be considered to be those that are depicted as being below the straight line. These efficient authorities would continue to receive the level of funding equivalent to the level of the straight line (the average) for their population size.

5.5.4. This feature of using regression also addresses the issues relating to the level of service provision. The regression model will fund local authorities according to the average level of spending for a set combination of cost drivers. However local authorities will still be able to determine how much they choose to spend on a particular service.

5.5.5. The link between historic expenditure and the level of funding that authorities received in the past is closely connected with the issue of unmet need and these represent a limitation to simple regression modelling.

5.6. Controlling for historic levels of funding

5.6.1. To address problems relating to the influence that historic levels of funding have on levels of spending, more advanced analytical techniques may be helpful. Some examples of these techniques are outlined below and they broadly work by looking at the relationships between spending and cost drivers *within* an individual local authority, which means that any relationships will be unaffected by the level of funding that council received at the time. These techniques all rely on having access to data below the local authority level.

5.6.2. **Small area modelling** - This technique works by collecting expenditure data from local authorities about the amount of spending in smaller areas within their boundaries, such as wards or small statistical areas known as Lower Super Output Areas, which have around 1,500 addresses in them. This increases the sample size and exploits variation in spending, and how that is associated with indicators of need, within each local authority as well as between local authorities. It also enables the use of statistical controls (fixed effects) for each local authority, which capture and remove between-local authority variation in spending due to non-need factors (e.g. local commissioning practices, local area characteristics etc.).

5.6.3. **Multi level modelling** - This technique works by combining information about smaller areas that fall within a local authority area, with authority level statistics to create a so-called hierarchical data set. By incorporating detailed information about the level of expenditure within smaller areas within an authority you can identify the relationship between different cost drivers independent of the level of funding for the authority as a whole.

5.6.4. Both of the techniques mentioned above require a large amount of detailed information to be collected about the level and distribution of spending within local authorities. There are only a limited number of service areas where this detailed information is available and it would take a long time to collect it.

5.6.5. A possible alternative approach which does not depend on having detailed data would be to include in the cost drivers a measure of historic funding received by the local authority. This would effectively produce regression models that showed the relationship between spending and cost drivers where all local authorities received the same level of funding per head. This approach may also help address the issues associated with unmet need. As long as the cost drivers selected in the model accurately reflected the key factors that affect 'need to spend', controlling for historic spending should mean that local authorities are allocated funding according to their relative needs. However because this technique does not rely on large amounts of data it may be less analytically robust than more traditional methodologies.

5.6.6. The Government is proposing to explore the potential for using the techniques described above or others which emerge from this consultation, from academic engagement or during the development process, in order to address limitations within the simple regression models currently used.

5.7. Alternatives to expenditure based regression models

5.7.1. Some of the alternatives to using regression models linked to expenditure are described below.

Outcome based regression models

5.7.2. Rather than looking at the relationship between cost drivers and past expenditure, the regression models could instead look at the relationship between cost drivers and an alternative proxy for local authority relative need. Outcome variables, such as the quality of roads or the proportion of waste that is recycled, could be considered as potential alternatives to past expenditure and would see local authorities funded according to their success in delivering these outcomes.

5.7.3. There are some limitations to this approach. The diverse nature of the services delivered by local authorities may mean it is not possible to identify a single outcome variable to describe a range of local authority activity. This would mean that this approach would not be suitable for implementing the foundation formula described in chapter 3 or the more specific funding areas described in chapter 4, which have multiple outcomes that could be considered. Choosing how to prioritise one outcome over the others would likely come down to judgement. This approach may also have some perverse implications as it would imply that local authorities achieving poorer outcomes should receive more funding in order to enable them to improve their performance.

Factor Analysis and Principal Component Analysis

5.7.4. These analytical techniques are designed to simplify complex data sets down to just the most important factors that explain the relationships within the overall dataset. For example, if we start with a long list of local authority cost drivers, these techniques will remove all the cost drivers that are related to one another, leaving only the most important variables. These techniques could be used to identify a smaller number of key cost drivers without requiring the use of a dependent variable, such as expenditure or outcome that is required by a regression model.

5.7.5. These techniques are particularly complex and require large assumptions about the nature of the relationship between the cost drivers that are being modelled. It would therefore be necessary to assume that the underlying factor that connected the cost drivers was the 'need to spend' of local authorities. These complex techniques are also highly sensitive to outliers in the datasets.

Unit Cost Functions

5.7.6. This is an approach to building funding formulas that is based on quantifying the precise costs involved in providing services to individuals. These unit costs are then multiplied up by the size of the client group for those services in each local authority. The 'bottom up' nature of this approach means it requires a vast amount of data about the activity of local authorities and standardised measures of service delivery. This detailed information is not available on a consistent basis for the majority of local authority services.

Question 20: **Do you have views about which statistical techniques the Government should consider when deciding how to weight individual cost drivers?**

6. Equalities impacts of the options presented in this consultation paper

6.1.1 The Public Sector Equality Duty requires Ministers to have due regard to the need to eliminate discrimination and other conduct prohibited under the Equality Act 2010, advance equality of opportunity and foster good relations between persons who share protected characteristics and those who do not.

Question 21: **Do you have any comments at this stage on the potential impact of the options outlined in this consultation document on persons who share a protected characteristic? Please provide evidence to support your comments.**

About this consultation

This consultation document and consultation process have been planned to adhere to the Consultation Principles issued by the Cabinet Office.

Representative groups are asked to give a summary of the people and organisations they represent, and where relevant who else they have consulted in reaching their conclusions when they respond.

Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department for Communities and Local Government will process your personal data in accordance with DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

Individual responses will not be acknowledged unless specifically requested.

Your opinions are valuable to us. Thank you for taking the time to read this document and respond.

Are you satisfied that this consultation has followed the Consultation Principles? If not or you have any other observations about how we can improve the process please contact us via the complaints procedure.

Annex A – Summary of questions

Question 1): What are your views on the Government's proposals to simplify the relative needs assessment by focusing on the most important cost drivers and reducing the number of formulas involved?

Question 2): Do you agree that the Government should use official population projections in order to reflect changing population size and structure in areas when assessing the relative needs of local authorities?

Question 3): Do you agree that these population projections should not be updated until the relative needs assessment is refreshed?

Question 4): Do you agree that rurality should be included in the relative needs assessment as a common cost driver?

Question 5): How do you think we should measure the impact of rurality on local authorities' 'need to spend'? Should the relative needs assessment continue to use a measure of sparsity or are there alternative approaches that should be considered?

Question 6): Do you agree that deprivation should be included in the relative needs assessment as a common cost driver?

Question 7): How do you think we should measure the impact of deprivation on 'need to spend'? Should the relative needs assessment use the Index of Multiple Deprivation or are there alternative measures that should be considered?

Question 8): Do you have views on other common cost drivers the Government should consider? What are the most suitable data sources to measure these cost drivers?

Question 9): Do you have views on the approach the Government should take to Area Cost Adjustments?

Question 10a): Do you have views on the approach that the Government should take when considering areas which represent a small amount of expenditure overall for local government, but which are significant for a small number of authorities?

Question 10b): Which services do you think are most significant here?

Question 11a): Do you agree the cost drivers set out above are the key cost drivers affecting adult social care services?

Question 11b): Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting adult social care services?

Question 12a): Do you agree that these are the key cost drivers affecting children's services?

Question 12b): Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting children's services?

Question 13a): Do you agree that these are the key cost drivers affecting routine highways maintenance and concessionary travel services?

Question 13b): Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting routine highways maintenance or concessionary travel services?

Question 14a): Do you have views on what the most suitable cost drivers for local bus support are?

Question 14b): Do you have views on what the most suitable data sets are to measure the cost drivers for local bus support?

Question 15a): Do you agree that these are the key cost drivers affecting waste collection and disposal services?

Question 15b): Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting waste collection and disposal services?

Question 16a): Do you agree these remain the key drivers affecting the cost of delivering fire and rescue services?

Question 16b): Do you have views on which other data sets might be more suitable to measure the cost drivers for fire and rescue services?

Question 17a): Do you agree these are the key cost drivers affecting the cost of legacy capital financing?

Question 17b): Do you have views on what the most suitable data sets are to measure these or other key cost drivers affecting legacy capital financing?

Question 18a): Are there other service areas you think require a more specific funding formula?

Question 18b): Do you have views on what the key cost drivers are for these areas, and what the most suitable data sets are to measure these cost drivers?

Question 19):   How do you think the Government should decide on the weights of different funding formulas?

Question 20):   Do you have views about which statistical techniques the Government should consider when deciding how to weight individual cost drivers?

Question 21):   Do you have any comments at this stage on the potential impact of the options outlined in this consultation document on persons who share a protected characteristic? Please provide evidence to support your comments.