

BRIEFING NOTE FOR THE COUNTY COUNCILS NETWORK (CCN)

FAIR FUNDING REVIEW – CONSULTATION PAPER – DECEMBER 2017

1. The Fair Funding Review (FFR) consultation paper has many features that CCN can support, although the final outcome of the review is far from certain.
 - a. **Flatter formula.** In terms of overall structure, the Government’s preference is for a Foundation Formula. It is envisaged that there will be a Foundation Formula to provide a simplified funding methodology, and for there to be separate funding formulae for specific services. A flatter formula will tend to help rural authorities, and so the greater weight that is placed on the Foundation Formula, the greater the rural share of funding.
 - b. **Rurality.** Rurality (and sparsity) is referenced numerous times and it is proposed that rurality will be treated as one of the primary indicators, alongside population and deprivation. By giving rurality such prominence, ministers are showing the importance they attach to funding rural authorities, and this reflects recent ministerial statements.
 - c. **Urban indicators not mentioned.** Some specific indicators that are not favourable to counties appear to have been left out, or receive very little prominence. Density, ethnicity and daytime population play a very important role in the current funding distribution, and are particularly strong for urban authorities. Their exclusion – or a lower weighting – will be very beneficial to rural authorities.
 - d. **Potential for greater ministerial judgment.** The paper also opens up discussion about continued ministerial discretion in determining future funding formulae. Generally, a simpler funding formula will require more ministerial judgement. Whilst there are technical concerns about the extent of ministerial judgement, counties are well-placed to use their relationship with ministers to maximise their future share of funding.
2. **Overall, this gives county authorities and CCN and very strong platform to build on.**
3. A note of caution, however: the development of the new formula is at a very early stage, and there is much that could happen that could adversely affect county authorities. Developments in the formulae for the major needs blocks are not very far advanced, and there is no clear indication of how they will be developed, or even the broad direction of travel. It is likely that multi-level modelling will play a role in adult social care and Children’s Services, and there is no guarantee that this will favour county authorities.

4. Most importantly of all, this paper only deals with methods for assessing “needs”, and does not yet propose options for dealing with resources (council tax) and damping. For many county authorities, these will be potentially crucial issues, with resource in particular being a significant risk for those with very high taxbases. These will be the subject of future consultation papers.

Commentary on principles

5. The consultation paper sets out a sensible list of principles.
 - Simplicity
 - Transparency
 - Contemporary
 - Sustainability
 - Robustness
 - Stability
6. Every review always starts off with a similar list of principles, but the crux of the review will be about the trade-offs between the principles.
7. There are a few interesting comments within this section that are worth drawing out further:

“anticipate future demand” – this is an important statement, especially for those authorities with the fastest growing populations. Authorities with large and rapidly growing older populations will want to exploit this in particular.

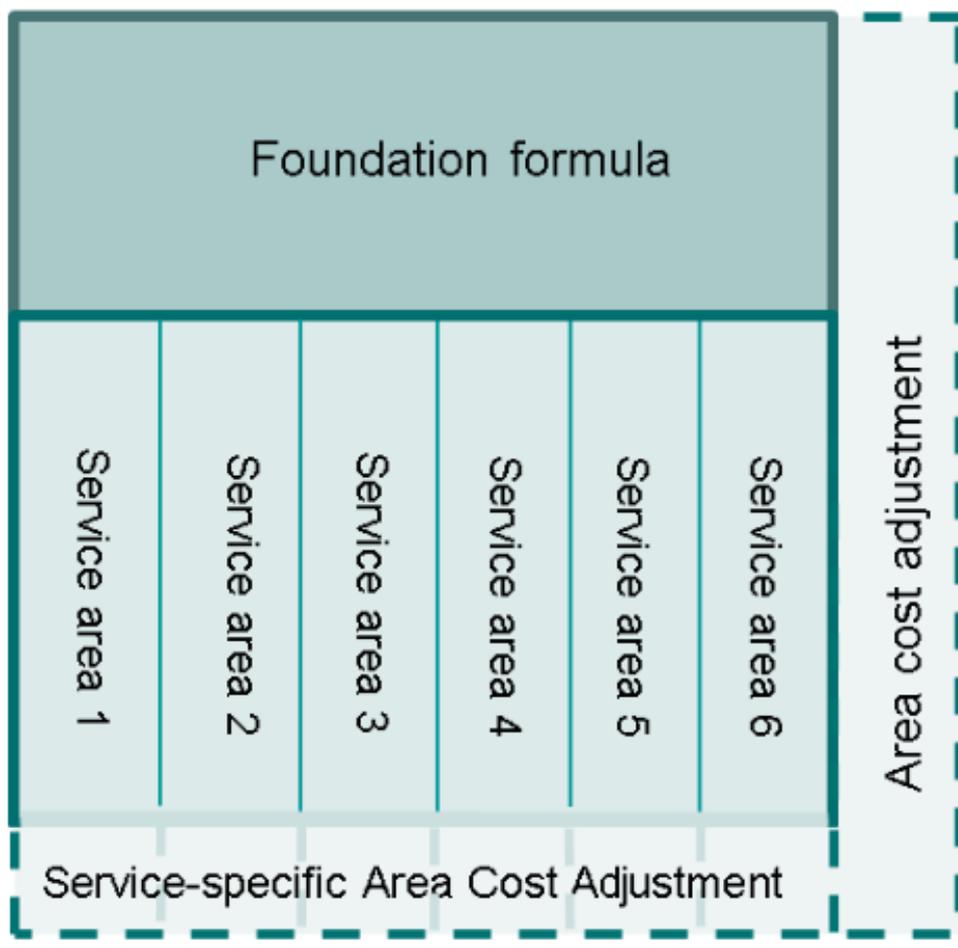
“relatively small number of forward looking cost drivers with a transparent process for establishing the weightings between them” – the Government is certainly looking for a simpler formula based on fewer indicators and drivers.

Chapter 2 – Measuring Need

8. Most authorities want a “simpler approach” but many have argued that “simplification should not be achieved at the expense of accuracy”. Some level of complexity is inevitable in a funding formula that seeks to reflect “needs” across a diverse country. These statements do not really tell us anything new about the future formula. Government – and most of local government – will strive for a simpler formula, but will always realise that some level of complexity is essential to create something that is fair and credible.

9. In terms of structure, the approach that seems to be most favoured by DCLG is the Foundation Formula (**Figure 1**). This would be a single formula to allocate funding to each type of authority based on a number of cross-cutting or “common” cost drivers. Other specific services or “needs” could be added on top of the Foundation Formula, but the assumption must be that this approach is simpler and excludes some services that currently have their own formula.
10. An approach using the Foundation Formula would result in an increase in ministerial discretion. We assume this is because such a formula would not necessarily be correlated with any external variables (such as expenditure, service volumes). In our view, there are some serious problems with such an approach, if it is taken too far. Firstly, it would lack credibility because the Government could not show how it reflects the outside world, either in terms of local government spending or service volumes. Secondly, it would not form the basis of a robust, sustainable system: it is likely to reflect ministerial opinions too much, and could not easily be updated periodically to reflect new data. It would be less predictable and less stable as a result because it would be subject to the views of the ministers that are in power when the formula is updated.

Figure 1 – Proposed Foundation Formula and Specific Service Formulae



11. County authorities, however, might take the view that they will benefit from greater ministerial discretion, and that it will give them a higher share of funding in 2020-21. If so, a simpler formula with significant ministerial discretion will potentially be beneficial, if only for the next FFR. County authorities are certainly one group for whom ministers might want to show that they have used their discretion on their behalf. There is a risk in this approach but if you have the ear of the minister, then use it!
12. Upper tier authorities will receive funding from a combination of the Foundation Formula and specific service formulae. District councils, on the other hand, might find that most or even all their funding comes via the Foundation Formula. Lower-tier district services are likely to be within the Foundation Formula. The possible exceptions for districts are waste collection and capital financing.

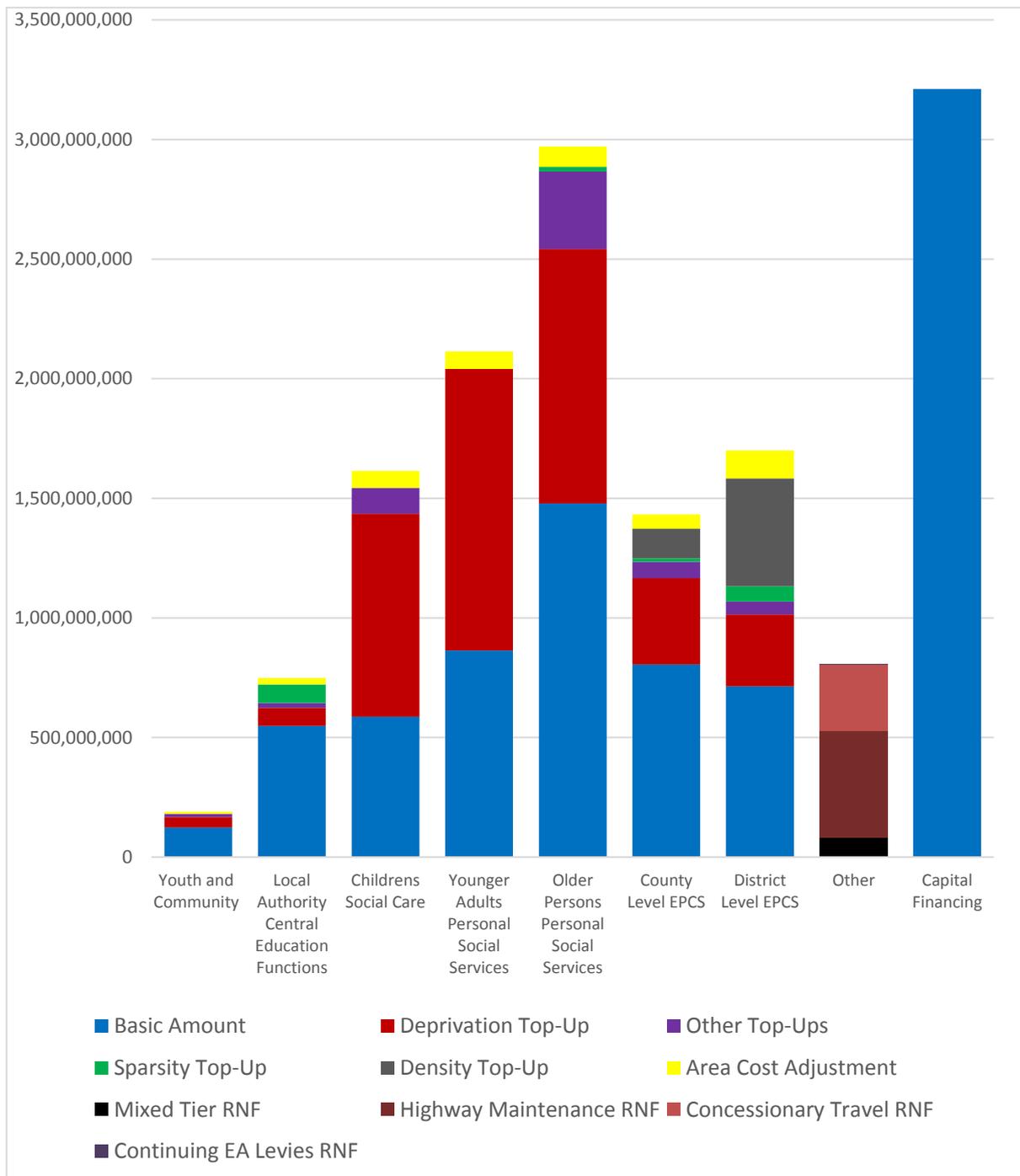
Question 1 – What are your views on the Government’s proposals to simplify the relative needs assessment by focusing on the most important cost drivers and reducing the number of formulas involved?

13. *On balance, county authorities will tend to benefit from a simpler formula. More complex formulae tend to have a larger number of different indicators to measure different types of need, or to measure need in different ways.*
14. *We have expressed concerns about the amount of ministerial discretion that might be retained in the proposed Foundation Formula. But for county authorities this could represent an opportunity to maximise funding and to ensure ministers deliver on the promises they are making to rural authorities.*
15. *For county authorities, a Foundation Formula with a separate “rurality” top-up would represent a very good outcome, particularly if there is no density top-up.*
16. *Most CCN authorities would benefit from a flatter formula. Counties such as Surrey, Essex, Hampshire, Kent, Hertfordshire and West Sussex would be particular beneficiaries from a flatter distribution of funding. These authorities have a very large share of the Resource Equalisation block, and a correspondingly small share of Needs.*
17. *Other CCN authorities are in a similar position, although the benefit of a flatter distribution would be less extreme. Some authorities – such as Cornwall, Shropshire, and Herefordshire – would still benefit, albeit by less than those authorities with the largest taxbases. These tend to be the most rural authorities, with higher assessed needs per head, and lower taxbase per head.*

Chapter 3 – Common Cost Drivers

18. DLCG has worked with the technical working group and other Government departments to identify a “number of common cost drivers which there is good reason to believe have a significant effect on the cost of providing multiple services”. DLCG expects “these common cost drivers to be responsible for most of the variation in local authorities’ ‘need to spend’”.
19. Based on the 2013-14 settlement, we have estimated the cash value of the Basic Amount and Top-ups. **Chart 1** shows the estimated overall cash value for each service block, and the breakdown within that block. Some key points:
- *The relationship between the Basic Amount and the Top-ups.* Usually the Basic Amount distributes about half of the funding, but it is much higher in some service blocks (LA Central Education Functions) and much lower in others (Children’s Social Care).
 - *Largest top-up in each service block.* This is usually the Deprivation top-up, except for EPCS (both county and district) and LA Central Education Functions.
 - *Density and sparsity top-ups.* Sparsity appears in four blocks (LA Central Education Functions, Older Persons PSS, County Level EPCS, and District Level EPCS), and density in only two (both EPCS blocks). Overall, however, density distributes far more than sparsity.
 - *Area Cost Adjustment* is fairly consistent across all the blocks, but it tends to be very focussed on London and the South-East.
20. *In our final report we will show the funding that each CCN authority receives from each top-up within the funding formula.*

Chart 1 – Basic Amount and Top-ups for 2013-14 Settlement (£)



i) Population

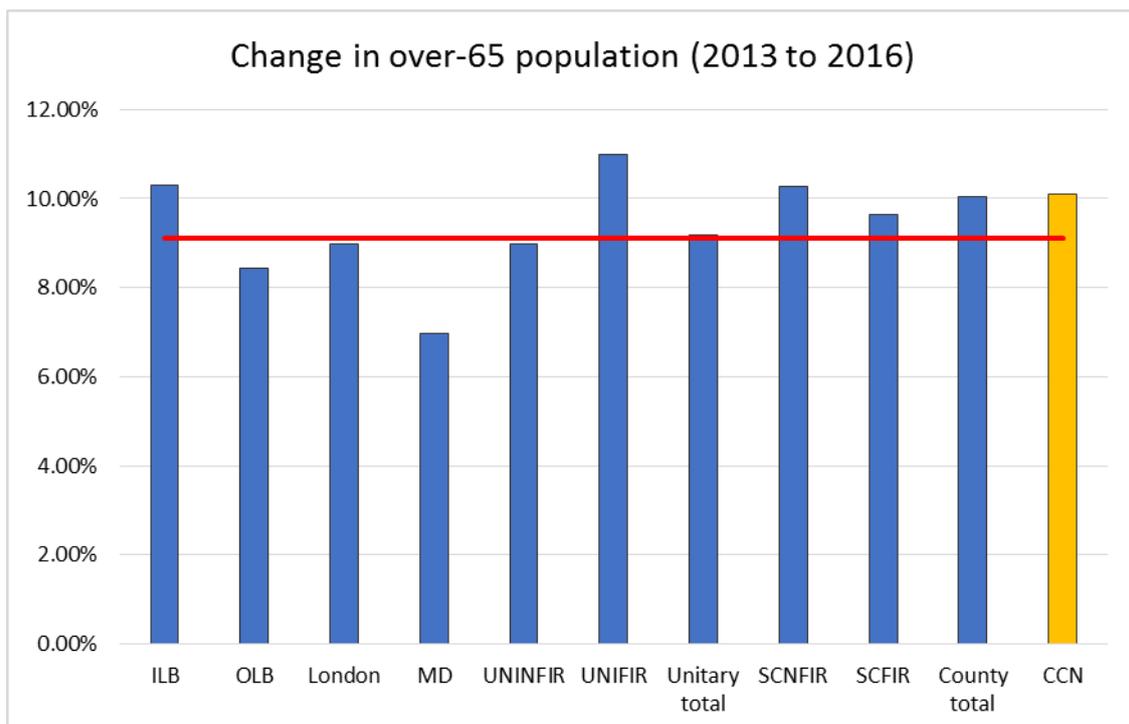
21. This is the single most important indicator in the funding system now, and will be in the future as well. Overall population can be used to distribute funding for universal services (e.g. waste collection, libraries) and segments of the population (e.g. older people eligible for adult social care).
22. A key consideration is whether population estimates or projections should be used. Mid-year estimates tend to be about two years out-of-date when they are used in funding formulae. Projections are able to project forward population trends, although they are not forecasts. Both datasets are produced by ONS.
23. This is likely to be a key battleground in the FFR. Population growth rates are highly divergent. Population growth was 0.9% for England as a whole, compared to 0.2% in the North East and 1.6% in London.¹ Growth in the number of older people is particularly important because this is the biggest area of expenditure (and funding) in local government. The difference between using backward-looking estimates and projections will be considerable.
24. We will provide some further evidence on the variation in population change for rural authorities. As can be seen, however, two of the authorities with the largest population reduction are authorities with very sparse populations.

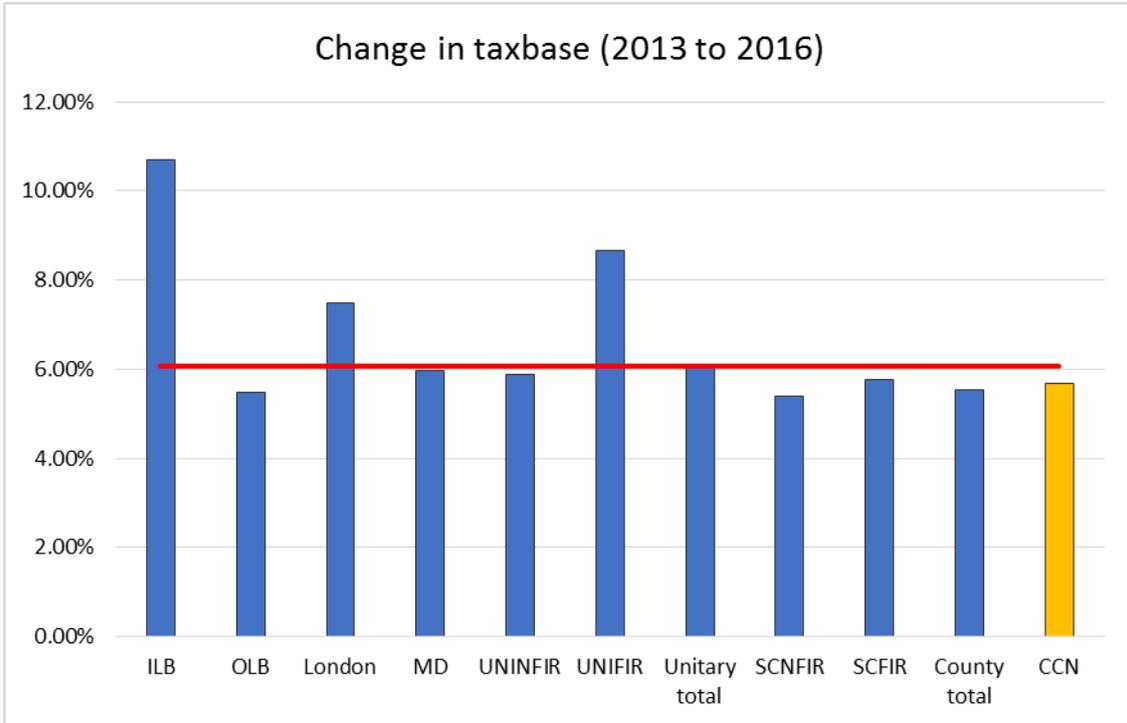
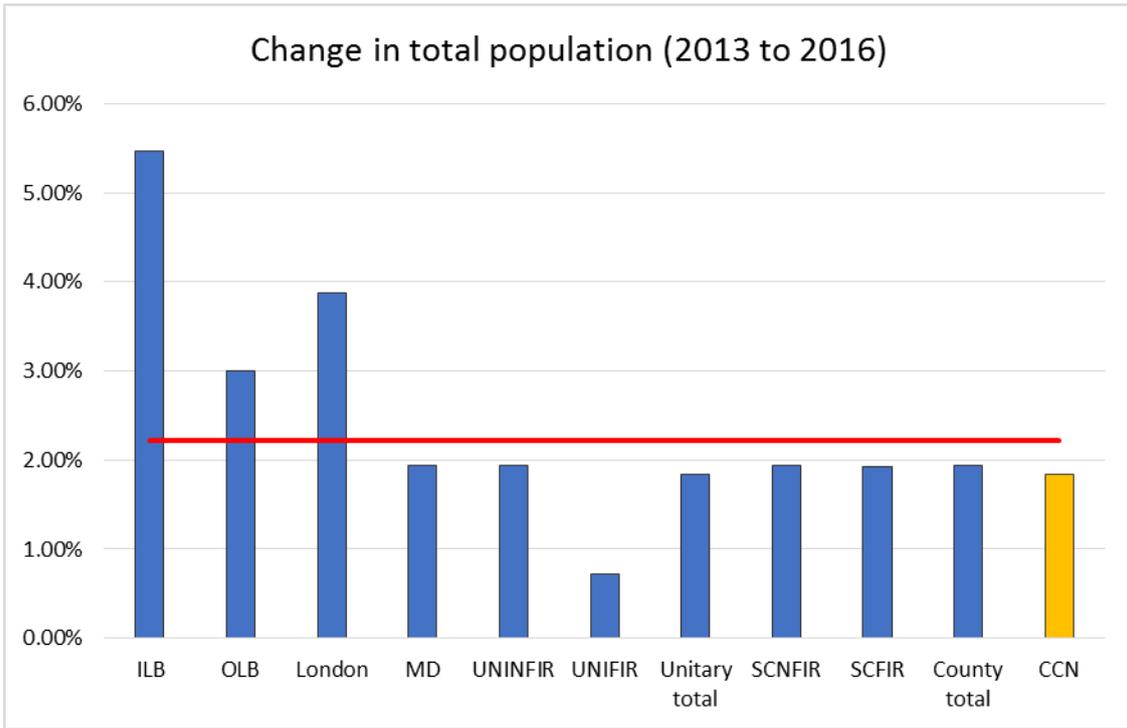
Question 2 - Do you agree that the Government should use official population projections in order to reflect changing population size and structure in areas when assessing the relative needs of local authorities?

25. *Given the growth in population, particularly in over-65s, and the variation in growth rates, some form of projections are likely and probably desirable as well. For rural authorities, particularly those with low-growth or even population reductions, this might cause a significant problem. We will need to undertake more research to understand the effects more fully. One issue might be that overall population growth is below average in rural areas, but the growth in older populations (which receive more funding per head) is exceeding the national average.*
26. *There will be some rough justice caused by using projections because they are not forecasts. Authorities would want to see much greater transparency about how the projections are derived by the ONS, together with a reconciliation between mid-year estimates and projections so that there can be some learning about the accuracy of the projections. If CCN seeks to challenge this approach, then the technical shortcomings of the projections would be one form of attack.*

¹ The City of London (+8.5%), Tower Hamlets (+4.0%) and Westminster (+3.9%) have the highest growth of any local authority. Blackpool (-0.7%), Copeland (-0.3%) and Richmondshire (-0.4%) have the highest population reduction. ONS Mid-Year Estimates 2015.

27. A counter argument to using projections is that they simply project forward past growth trends, and would fund authorities for past growth and not necessarily future growth. This is a valid argument and one that could be used by authorities who have below average growth both overall and in the key client groups (especially over-65s). FAS members will get an analysis of population estimates and projections compared with relevant averages in the coming weeks.
28. As has been reported recently, the growth rates in the over-65 population is much greater in county areas than other parts of the country. The chart shows that the growth rates within CCN authorities – 10.1% between 2013 and 2016 – is greater than in other classes of authority (with the exception of Inner London boroughs).
29. Overall population growth has been less strong in county areas, with CCN authorities having the lowest overall population growth. London’s growth in population has been very strong; other parts of the country have had much lower growth, which is actually only marginally above that in county areas. CCN will still want to use the latest population projections or forecasts, however, because the funding per over-65 is much greater than it is for the overall population.
30. In addition, taxbase growth is lower on average than in other parts of the country, although again the growth in London significantly outstrips that in the rest of the country.





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

31. Local government received a four-year settlement in 2016-17 that was not updated for data or any other changes. Whilst this provided absolute certainty for authorities' financial planning, it did not reflect changes in demography or demand. There is a strong argument that it is better to update the key datasets (e.g. population) every year. Funding allocations would change, but the annual variation is unlikely to be very significant and could be predicted with some certainty at authority level. An annual update of population projections would solve, to some degree, the problem of authorities receiving funding based on "inaccurate" projections. Again, though, this might not be favourable to rural authorities.

ii) Rurality

32. It is notable that rurality is given such high billing in the consultation paper, and also in recent ministerial statements. Lobbying by rural authorities has been successful in recent years, and ministers are fully aware that they have to show that they are responding positively to this important lobbying group.

33. DLCCG's summary of the research that was undertaken and the research that is available betrays some uncertainty, and this something that CCN will want to clear-up and address. There is full awareness from DCLG of the political importance of rurality in the current and future formulae, but the consultation paper refers to "limitations" in the research. It is not entirely clear whether the DCLG is calling for more research or only a rethink about the most appropriate indicators for the funding formula:

"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."

34. Sparsity-related funding was increased in the 2013-14 settlement (although a large portion of the increase in assessed "need" was damped away).² The weighting for sparsity was increased in the formula, particularly for super-sparse areas. The weightings at that time used judgement based on the evidence that had been produced.

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?

² Rural Services Delivery Grant (RSDG) was introduced in 2013-14 to compensate rural authorities for the effect of the damping.

35. Rural authorities will want to give very strong support to rurality being one of the core indicators in the Foundation Formula. Ministers are clearly minded to continue with funding for rurality (sparsity), and it appears very likely to remain as a common cost driver.
36. There was a suggestion that sparsity should be included in the Area Cost Adjustment because sparsity results in higher unit costs. Pixel argued – on behalf of SPARSE – that this approach would be inappropriate because sparsity results in both higher unit costs and higher service pressures and demand.³
37. DCLG has also asked about alternative methods of measuring the needs of rurality and sparsity. It is interesting that DCLG has tried to widen the measure to encompass rurality, which in theory has a wider scope. Finding alternative measures is not easy (there are maybe some in the Index of Multiple Deprivation in the “Access to Services” domain) and it is very likely that the indicator used will measure population sparsity/density in some way.
38. Other issues rural authorities might want to consider:
- The relative weighting of sparse and super-sparse populations. This would change the distribution of funding within the cohort of rural authorities.
 - Funding for unmet needs. Rural authorities tend to provide fewer services in sparsely-populated areas, and residents have to travel further to access services.
39. A further point, not raised in the consultation paper, is that RSDG will be transferring in to the funding formula in 2020-21. RSDG uses a different methodology from any of the existing RNF blocks. We assume that the new distribution will be consistent across the new funding formula. One of the problems with the current RSDG distribution is that it does not provide the same level of funding per resident of a sparse area. Instead it takes into account the overall population sparsity across the whole area. This is an anomaly which ought to be ironed-out.
40. Further work. There is clearly a strong cross-over between rurality and county authorities but we need to understand where the two interests might not intersect, or where there are county authorities that are not particularly rural (e.g. Surrey).

iii) Deprivation

41. The deprivation top-ups are “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 <https://www.local.gov.uk/sites/default/files/documents/NR%20TWG%2017-07%20Funding%20for%20higher%20unit%20costs%20associated%20with%20sparsity%20and%20rurality%20by%20the%20RSN.pdf>

42. The Government is also considering whether income-related benefits are the best way of measuring “deprivation”. The Index of Multiple Deprivation (IMD) is one possibility because it captures factors beyond income and employment. Any alternative measures would have to be consistently applied across the country and are likely to be very limited in number. Some formulae would need to be thoroughly reviewed anyway because they rely on benefits that either no longer exist or have changed radically (e.g. Disability Living Allowance).

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?

43. Rural authorities will generally prefer to reduce the weight given to deprivation within a future formula, although few will argue that it should disappear altogether. A flatter formula with less funding for deprivation will benefit most county authorities. County authorities with below-average deprivation (almost all, with the exception possibly of Durham and Lancashire) would actually benefit from reducing the funding that is distributed through a deprivation top-up (or even removing it altogether).

iv) Other specific cost drivers

44. The Government intends that population, sparsity and deprivation will be the most important in a future Foundation Formula. Clearly, though, there are others that are either already in an RNF, or which reflect specific needs or service pressures.

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?

45. There are some very significant exclusions from the list of common cost drivers. Some of these are measures that very heavily favour urban authorities (density, additional population, ethnicity) and provide very little funding to county authorities; others will provide significant funding to many county authorities, and there will be concern that these top-ups or cost-drivers are not developed further in this paper.

- *Density. Density is a very significant top-up and is very important indeed for inner-city authorities, particularly those in London and in the major conurbations. There is very little research on the costs associated with density (in contrast to the research on sparsity).*
- *Additional population top-up (net in-commuters and day visitors). The purpose of this top-up is to compensate for the additional costs incurred by authorities receiving large numbers of in-commuters and/or visitors. It is sometimes referred to as “daytime population”. Those authorities with the highest top-ups are typically those in the very centre of conurbations (e.g. Manchester City*

Council within Greater Manchester; central London boroughs, particularly Westminster, within London). This is effectively an indicator that funds commuters travelling from county areas (and suburban areas) to urban centres.

- *Ethnicity top-up. In previous funding reviews, ethnicity received a lot of attention, and was the subject of numerous research papers. Urban authorities tend to receive the majority to funding from the ethnicity top-up.*
- *Top-ups for Usage and Winter Maintenance (Highways Maintenance only). We assume that these top-ups or something similar will continue in a specific formula (see Appendix 1). County authorities will want to scrutinise this top-up because road length will be the most important factor. Some county authorities – such as Cumbria, Northumberland and Durham – have very high levels of winter maintenance.*
- *Top-ups for Coastline, Property and Societal Risk, and Community Fire Safety (Fire only). Again we assume these top-ups or similar will continue (see Appendix 1). There is probably more scope, though, for fire authorities to review and determine the top-ups and indicators that are used. Many of these authorities are rural.*
- *Fixed Cost Amount. A fixed amount of funding is available for every authority to represent the fixed costs of operating an authority (e.g. corporate and democratic functions). It is of particular benefit to smaller authorities and to district councils. Again many of these are rural authorities.*
- *Concessionary Travel. This is a significant funding stream and is allied to actual bus usage and costs. For those currently incurring significant costs, there is a strong argument for this top-up to continue. Others might argue that the current funding simply perpetuates the current variations in bus services, and it would be better to allow every authority to decide how much it spends.*
- *Flood defence. Important to authorities with recent flooding problems or high flood risk (e.g. Cumbria, Somerset).*
- *Coast Protection. As above.*
- *Continuing EA Levies. As above.*

iv) Area Cost Adjustments

46. The current Area Cost Adjustment (ACA) compensates authorities with higher labour costs and higher business rates.

- **Labour costs.** Measured by average hourly earnings excluding overtime, controlling for differences in the age, gender, occupation and industry of workers between local areas

- Rateable value of office space. Adjusted for transitional relief.

47. The DLCG is considering whether the ACA should be widened to include other running costs, and whether rurality/ sparsity should be included (on the grounds that sparsity can lead to higher unit costs).

Question 9 – 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?

48. *The consultation paper provides a very superficial view of how the ACA could work in future. It is sensible that the DCLG is looking at widening the ACA to cover other running costs, and possibly to include sparsity.*

49. *Our view on sparsity (provided on behalf of SPARSE) is that sparsity should remain outside ACA, although there is a case that the unit cost element of sparsity could be included within the ACA.*

50. *Again, some of the most important issues are left unmentioned. It is assumed that labour costs will be estimated based on what is known as the General Labour Market Approach (i.e. based on the prevailing wages in the private sector). The alternative – Specific Cost Approach – is not referenced but could be more beneficial for lower-cost areas, many of which are rural. Under the current methodology, Cornwall is deemed to have the lowest ACA.*

v) Treatment of small but locally significant duties

51. Specific funding would be provided for specific duties or costs. They would probably be very varied nationally and not necessarily well correlated with any top-ups or indicators used in the Foundation Formula. The example given here is of flood defence.

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?

52. *We would suggest that county authorities are canvassed to identify any other specific services or duties provided by county authorities that should be funded separately.*

Chapter 4 – Service Specific Cost Drivers

53. Not all services can be properly funded through the Foundation Formula. Some services will need their own service block that uses specific indicators that reflect the specific distribution of need within that service. Whilst a reduction in the number of specific blocks is certain, it is apparent that the bulk of funding will continue to be distributed using specific service formulae.

54. In the consultation paper the DCLG suggests that specific service formulae will be required for children's and adults' social care (accounting for 45% of total local government spending in 2016-17), as well as highways maintenance and capital financing. Fire and rescue would also have its own specific block. We are really only left with some or all of EPCS once these services are removed.
55. The number of specific service blocks does matter. More blocks will allow for a more nuanced approach to specific services or small groups of services, and for the use of more indicators. Fewer blocks will tend towards a flatter distribution of services, and possibly also towards greater ministerial discretion.
56. A summary of the proposed indicators is shown in **Appendix 1**. It is evident that most of the proposed indicators would fall into the Foundation Formula groupings (population, sparsity and deprivation) but specific formulae would still be required. The Foundation Formula and specific formulae would use different weightings for common indicators. Some form of sparsity-related indicator is suggested for each major service block, although it is the weighting of those indicators in each block that will be important.

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?

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?

57. In response to these questions, the overall structure and proposals are reasonable and cover most of the indicators that we would expect.

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?

58. The major exclusions are:

- *Daytime visitors and in-commuters (daytime population). The costs associated with higher daytime population are specific to a relatively small number of authorities, and would not fit comfortably in a Foundation Formula. There are no reliable measures of visitor numbers and so the onus is going to be on previous beneficiaries to suggest reliable replacement measures.*
- *Overnight visitors. Particularly important for holiday destinations where visitors tend to stay overnight (e.g. Cumbria, Cornwall, seaside towns, other tourist destinations). Again, though, there are no up-to-date and reliable datasets.*
- *Ethnicity. As we noted above, this is currently an important part of the formula but updated research is probably necessary to establish whether it is still a relevant indicator.*
- *Density. Again an important exclusion. It could be included in the Foundation Formula (note that it is currently only used in the two EPCS blocks, which in themselves would form the core of the new Foundation Formula). It would potentially be included in Waste Collection and Disposal because density can result in higher costs.*

59. As previously discussed, urban authorities are the greatest beneficiaries from indicators for ethnicity, density and additional population. However, some county authorities have the highest rates of overnight visitors (as a proportion of population). Cornwall, Devon,

Norfolk and Cumbria all have very high rates of overnight visitors, and will want to make sure that relevant indicators are used in the new formula.

Chapter 5 – Weighting Funding Formulas and Cost Drivers

60. The final chapter outlines the approaches that the Government could take in actually producing funding formulae. This chapter only goes as far as to outline the possible options and does not give a preference for any of them.
61. Decisions will have to be made about the resources that are distributed by the Foundation Formula and by each specific funding formula. One option is to weight each element according to the actual local government expenditure on that service. The other option is to allow ministerial judgement on the size of each block (or to have a blend between the two approaches).

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

62. *Principle and good practice strongly suggest that funding blocks should be set with reference to the actual local expenditure on the relevant services. To allow too much ministerial judgement would reduce the credibility of the new formulae, and would make it more difficult for authorities to predict how funding formulae would be updated after 2020-21. At this point, it is unclear whether using actual expenditure to weight formulae will benefit rural authorities; it is a technically sensible approach, however.*
63. The chapter then goes on to outline the different statistical approaches that could be used to inform the new formulae. Some form of statistical analysis is likely, and in some formulae is inevitable. Regression analysis will most likely be used, although there are other techniques proposed. The main criticism of regression is that it simply perpetuates the past spending patterns which in themselves are the result of past funding decisions. As we will see, there are techniques to minimise the influence of past spending patterns, and which might make regression more palatable. The bulk of the current RNFs already use some form of modified regression, so this is nothing new.
64. If less reliance is placed on statistical analysis, though, the greater will be the role of ministerial judgement. Whether your authority favours more or less ministerial judgement probably depends on whether you think ministers are likely to favour your “type” of authority.
65. The main statistical techniques are:
- Regression analysis. There is a good description in the consultation paper about how regression works, and some of the disadvantages of the approach.

- Small Area Modelling/ Multi-level Modelling. These are similar and more advanced forms of regression analysis. Data is collected at a small area (such as Super Output Area, with a population of about 1500). The methodology can analyse the differences between authorities, and within authorities (i.e. between the SOAs). Its purpose is to capture those variations in cost that are caused by need, and those that are caused by local spending decisions or policies.
- Outcome-based Regression Models. Regression analysis is undertaken not against expenditure but looks at the relationship between cost drivers and an alternative proxy for relative need.
- Factor Analysis and Principal Component Analysis. Analytical techniques are used to identify the most important variables and their relationships to cost drivers. This is a complex process and requires judgements about relationships between variables and cost drivers.
- Unit Cost Functions. Similar to zero-based budgeting, the funding formula would be built up based on estimates of the known costs of delivering a service. This would require a lot of groundwork but it is not unfeasible. (Many school funding formulae were built-up successfully in this way.) It is more likely to favour lower-need authorities.

66. Regression is likely to be much more useful for the specific funding formulae (e.g. Children's and Adult Social Care), whereas the Foundation Formula is likely to require much more judgement, albeit possibly informed by regression. Large and detailed datasets are required for small-area and multi-level modelling. This is a significant and costly exercise, and is only appropriate for the larger service blocks.

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

67. *County authorities certainly want to avoid any statistical techniques that are based on past expenditure. Spending – and funding – is higher in urban areas and simple regression will only perpetuate these variances.*

68. *Multi-level and small-area techniques help to eliminate the effects of past spending or policy. In technical terms, rural authorities can support these techniques. The problem with them is that the outcomes from the modelling is almost impossible to determine in advance: it could favour some or all rural authorities, or it could do the opposite.*

69. *In general terms, county authorities are most likely to receive a higher share of funding from: flatter formulae, simpler formulae, and those based on ministerial discretion and judgement rather than any statistical techniques.*

Adrian Jenkins/ Dan Bates

Funding Advisory Service (FAS)

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Appendix 1 – Proposed indicators for specific formulae

	Adult Social Care	Children’s Services	Highways Maintenance	Waste Collection and Disposal	Fire and Rescue	Capital Financing
Population	Number of adults by age groups	Number of children (under 18 years of age)	Road length	Number of households	Projected population	
Sparsity	Longer travel distances, which reduces the number of visits that can be completed in a day	Distance to schools		Travel times	Population density, population sparsity	
Deprivation	Number of adults with income and wealth that meet the means test	(a) Number of children for whom parents receive Disability Living Allowance (b) proportion of families facing multiple challenges associated with deprivation		No indicators suggested but potential for additional costs is noted		
Other characteristics	(a) Number of people with higher levels of impairment, and (b) Number of people who live alone		(a) Traffic flow (b) Forecast snow days / predicted grit days and (c) Concessionary bus boardings	Types of property	(a) Coastline, (b) Risk index (c) Control of Major Accident Hazards (COMAH) sites, (d) Property and Societal Risk and (e) Community Fire Safety	Outstanding debt and interest rates