



Title: **Needs & Redistribution Technical Working Group**

Paper: NR TWG 17/04 Discussion paper regarding the approach to Area Cost Adjustment and rurality in the Fair Funding Review by the Department for Communities and Local Government

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Venue: **Southwark Council - 160 Tooley Street, London, SE1 2QH**

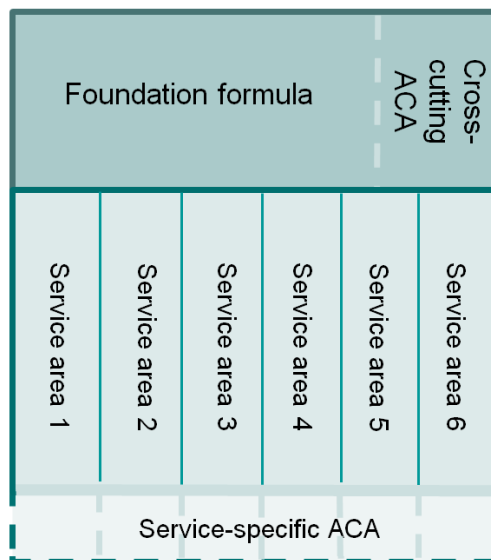
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## **POLICY DEVELOPMENT: NOT A STATEMENT OF GOVERNMENT POLICY**

### **Introduction**

- 1) The cost of providing the same sets of public services varies between local authorities for a number of reasons. One reason is because of particular area characteristics, such as numbers of children, or cumulative length of road – these are cost drivers and are accounted for in Relative Needs Formulas (RNFs). Another reason is because of differences in the costs of inputs which local authorities need to buy. Area Cost Adjustments (ACA) form part of a needs assessment and adjust local authority allocations to account for the latter differences. Currently, the ACA reflects two sources of differences in costs between areas:
  - a. Differences in labour costs (the ‘Labour Cost Adjustment’); and
  - b. Differences in business rates paid on local authority premises (the ‘Rates Cost Adjustment’)
- 2) The Fair Funding Review has the opportunity to explore designing a new ACA which incorporates other inputs, including factors which have previously been accounted for as cost drivers in RNFs - such as rurality or sparsity.
- 3) After considering responses from the Call for Evidence on the balance between simplicity and complexity, we are developing an approach that begins with a transparent ‘foundation formula’ which could allocate all, of the available funding to each type of local authority. An overall ACA could be applied to a foundation formula. An alternative option would be to consider the case for allocating a proportion of the available funding based on a more service specific approach, which takes into account the specific cost drivers for the service areas concerned. These could sit alongside a foundation formula and under this approach an ACA could be applied separately to each service area, as well as to the foundation formula.

- 4) A depiction of a service-specific and cross-cutting ACA, alongside a ‘foundation formula’ and several potential service specific formulas within a new relative needs assessment, is illustrated in the diagram below (note the diagram is for illustrative purposes and no inference should be drawn from the size of individual block elements). Applying the ACA separately to each service area would allow each area to be appropriately tailored.

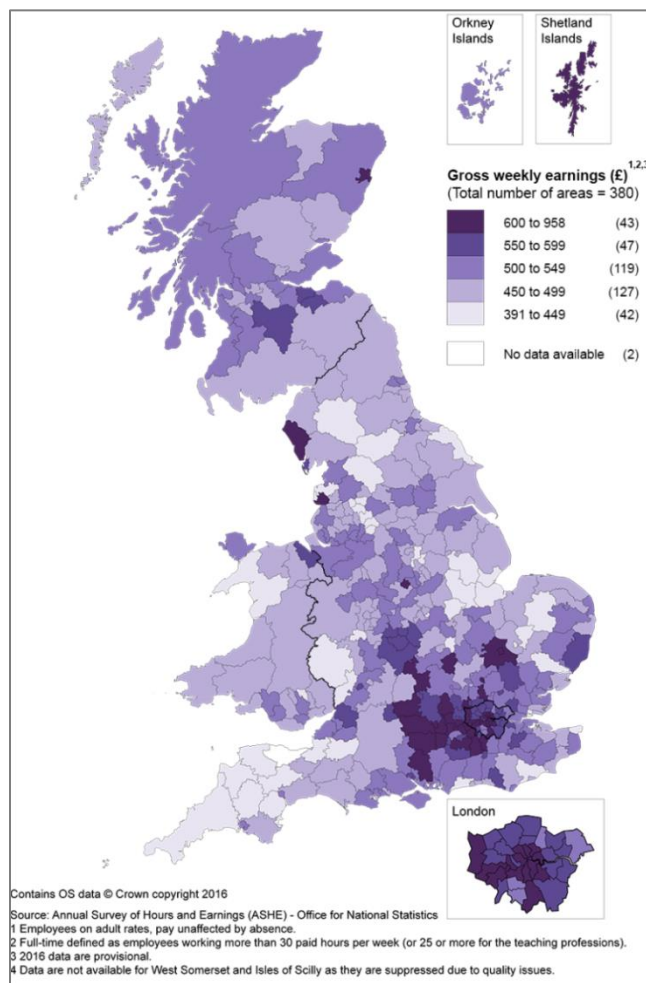


- 5) This paper invites suggestions for how to approach this issue, and as a starting point suggests some principles through which to consider the relative strength of different options, for consideration by DCLG ministers:
- a. **Significance:** Local authority expenditure on an input must be sufficiently large, so that an adjustment for costs measurably changes allocations. For example, in 2015/16 employee costs made up 43% of total local authority expenditure in England.
  - b. **Variation:** The price of a factor must have a sufficient level of variation between local authorities. For example, in England in 2012, the rateable value of office space in Westminster was £487 per square metre whereas Redcar and Cleveland had a rateable value of £38 per square metre for office space.
  - c. **Data availability:** There must be sufficiently detailed data available at the right level of geography.
  - d. **Avoiding perverse incentives:** The ACA should not create incentives for local authorities to spend more than they would otherwise on a particular input, compared to the allocation of spending which allows them to deliver services at lowest cost.
- 6) This paper consists of the following sections:
- a) Labour Costs
  - b) Business Rates – Rates Cost Adjustment (RCA)
  - c) Other non-labour expenditure
  - d) Capital Assets

- e) Raw materials
- f) Rural areas
- g) Deprivation
- h) Weighting
- i) Regression
- j) Next Steps

**a) Labour Costs**

7) The current Labour Cost Adjustment (LCA) is based on what is sometimes called a ‘general labour market’ approach. An example of differences in weekly earnings by local authority area can be found on the map below from the Office of National Statistics. This shows that the median gross weekly earnings (£) by place of work are greatest in London and its surrounding areas and lowest in the South West, Yorkshire and the Humber and East Midlands. The underlying rationale for the LCA is that local authorities have to compete for staff with other potential employers. Hence, in order to secure and retain various categories of staff of a given quality, they will need to pay the local ‘going rate’. This is measured by comparing labour market evidence in each ACA area. Current ACA areas are English counties based on historic 1991 boundaries. The counties neighbouring London are divided into fringe and non-fringe areas. The fringe areas are defined as those districts where teachers are eligible for London fringe payments. Outer London has also been divided into two sections (West Outer London and the Rest of Outer London)



### Private/Public sector wages

- 8) The LCA currently draws its data on wage rates from the full Annual Survey of Hours and Earnings (ASHE). The ASHE is a 1% sample of all employees in employment. In the past there has been debate about whether to include both public and private sector wages (the current approach) or private sector wages only.
- 9) A previous Technical Working Group suggested that private sector wages should solely be used as they reflect underlying labour market pressures more closely and variations in public sector wages are compressed by national pay agreements. However, local government has to compete with central government and other public bodies in the labour market so we propose to keep public sector wages in the analysis. If ASHE data is used in an ACA calculation, we would propose including information on non-wage compensation from ASHE (e.g. employer pension contributions) in order to make public sector and private sector compensation more comparable.

### **Question 1 - Should we continue to use both public and private sector wages within the Labour Cost Adjustment?**

#### *ASHE vs other sources of data*

- 10) Working Groups in previous years have considered which data source would be best to use in the LCA. It has been suggested that the Labour Force Survey (LFS) could be used instead of ASHE as it contains more data on individual characteristics. ASHE information is provided by employers and the sample size equals around 180,000 job records per year. Unlike the ASHE, the LFS is a household survey with a quarterly sample of 40,000 households. Each household is interviewed quarterly over five consecutive quarters. Due to the fact that LFS is self-reported by households, has a lower sample size and has a lower response rate on earnings, the ASHE survey data may represent a more robust way for estimating the LCA.

### **Question 2 - Do you agree with this approach?**

- 11) Both the LFS and ASHE use historic data. In order for an allocation based on the ACA to be sustainable over time, reasonable expectations about changes in wages – especially announced policies affecting the national minimum wage – could be reflected between updates to the formula. Using several years of historical data to forecast trends in wages and including policy impacts might be one way to resolve this.

### **Question 3 - How should we factor in changes to national living wage etc. when the underlying data is historical?**

#### *Controls to find the relative cost of labour*

- 12) Differences in average compensation vary between areas for a number of reasons. One reason is differences in the structure of employment – some areas have a high proportion of people working in banking and finance, whilst others

have a high proportion of people working in agriculture. To correctly identify the underlying “going rate” for each area, such differences need to be accounted for.

- 13) This is currently achieved through the use of regression analysis. A regression is run on hourly earnings excluding overtime payments against a set of variables including the area where each individual works, their age, gender, occupation and industry. The coefficients on the different area variables represent the relative “going rate” in each area after allowing for differences that are due to other factors. This approach is widely accepted in economic theory. As highlighted above, we will consider using a broader definition of compensation, for example including pension contributions, in a new regression.

#### **Question 4 - Is this the right approach to use?**

##### *Lower limit of the LCA*

- 14) A lower limit in the LCA accounts for the existence of National Pay Scales. National pay scales have not completely taken away local discretion in setting pay and remuneration. Nevertheless they compress geographical pay variations in local government. As such, setting and applying a lower limit in the LCA can therefore mimic and provide a better reflection of the actual geographical variations in labour costs faced by authorities. In particular, the lower limit recognises the lower wage flexibility of the public sector. That is, local authority employees will have relatively low wages in high wage areas, and relatively high wages in low wage areas – but local authorities still have to pay at least the nationally agreed wage to their employees. The lower limit is currently set by judgement, aiming to strike a balance between employees on national pay scales and the fact that authorities contract out services to the private sector. Using a lower limit is also an alternative way to adjust for the historical nature of ASHE data, by taking proposed changes to national minimum wage into account.
- 15) The majority of employees on the national pay scales are teachers, police and fire fighters. Since teachers’ and police officers’ employee costs have been taken out of the local government finance settlement (police and schools funding is now treated separately), there is a question about whether a lower limit is still as important.

#### **Question 5 - Do you think the lower limit should remain in the analysis?**

##### *Geography*

- 16) LCA factors have previously been calculated for each English county area based on historic 1991 boundaries. Counties neighbouring London are divided into fringe and non-fringe areas. The fringe areas are defined as those districts where teachers are eligible for London fringe payments. Outer London has also been divided into two sections (West Outer London and the Rest of Outer London) in line with evidence suggesting there is variation in wage pressures across Greater London. Metropolitan and unitary authorities which are within a wider administrative county are given the same factor as other authorities in the same county.
- 17) The critical trade-off with the ACA geography is how to best reflect local labour markets and produce results that are robust and stable. Technical working groups

in previous years have considered which level of geography is most appropriate. Using a greater number of smaller areas may represent local conditions more accurately (though not necessarily, if labour markets are broader than each area). However, a smaller geography will mean that fewer observations are available for that geography, which in turn means that the LCA factors obtained are arguably less robust (again, this is not always the case – if smaller geographies are more homogeneous than larger ones, then the LCA factors obtained may be more accurate).

18) We propose that district-level geography would be insufficiently granular and LCA factors calculated at this level would not be robust. In addition, a greater number of LCA factors would not be statistically significant. Travel-to-work areas vary in size with some travel-to-work areas containing a smaller population than some district level authorities. This could increase the statistical uncertainty around any results.

19) A suggestion from a previous working group was to calculate a separate factor for each upper tier authority. It was previously felt that an upper tier level grouping was simple, had a reasonable level of robustness, and more accurately reflected local labour markets in some areas. However, moving to an upper tier grouping from the current methodology (county-level with splits for fringe and outer London) would reduce the robustness of the ACA factors as there would be a smaller sample size for each group and a greater chance of ‘cliff-edges’ between local authorities which may require geographical smoothing to resolve. Geographical smoothing reduces potential dramatic changes between neighbouring areas whose labour markets may not be independent but could be treated differently due to them lying in different ACA areas.

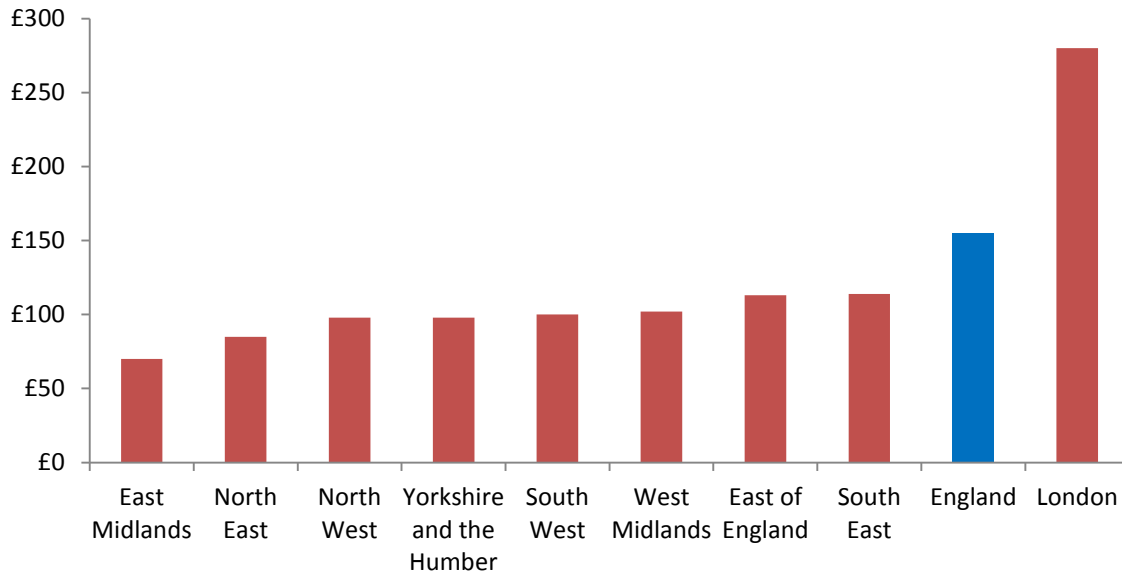
20) The areas used in the current approach are thought to be sufficiently large to proxy geographical smoothing and due to the larger sample size in each area is considered more robust than using upper tier authorities. If we were to use county level we would analyse previous groupings of fringe and non-fringe and the outer London split to see if they are still applicable and if not, how these would be best split.

**Question 6 - Should we continue using county level data for the LCA or should we move to an upper tier approach?**

**b) Business Rates – Rates Cost Adjustment (RCA)**

21) A further example of a cost outside local authorities’ control is the rateable value of office properties. The graph below shows the regional differences in average rateable value for office space. This shows that the average rateable value of office property in London is much higher than the England average whereas areas such as East Midlands and the North East have an average rateable value below the England average and so will pay less in business rates.

Mean rateable value per square metre of office floorspace, 2012



Source: <https://www.gov.uk/government/publications/business-floorspace-rateable-value-per-square-metre-summary-by-region-and-sector>

22) The Rates Cost Adjustment (RCA) is currently based on the differences in rateable values per square metre between authorities. The adjustment is applied to the proportion of the expenditure on each block of service which relate to business rates.

### **c) Other non-labour expenditure on office space**

23) We should also explore whether there are other differences in input costs which should, and can, be reflected. Some examples of other non-labour expenditure includes the cost of occupying land and buildings (rents and rates), the purchase of vehicles and equipment, and the supply of goods and services, including water, gas and electricity. One argument against controlling for a range of costs is that this may incentivise non-efficient behaviour. For instance, if a local authority has more expensive building space than required, and is compensated for that, there may be a reduced incentive to source more efficient space.

#### *Including commercial rents*

24) The RCA does not currently use data on rents, however a previous proposal from an earlier review was made to introduce a Rents Cost Adjustment as there are regional variations between rents, broadly similar to that for rates. Data on market rents could be taken from the Valuation Office Agency. One argument against using rents is that they represent a smaller proportion of expenditure than rates.

25) Instead of having a separate Rents Cost Adjustment, one option would be to increase the weight given to rateable values. This is to adjust for the fact that buildings which are owned and used by the local authorities could otherwise be earning a rent. An authority which uses office space it owns therefore faces an “opportunity cost” as great as the rent which could be charged for the space, and therefore should be compensated in the same way as an authority renting space. An option for adjusting for this is to use the share of business rates plus rents plus

imputed rents (an estimate of the rent a building owner would be willing to pay to live/work in their own property) out of total expenditure to weight the RCA instead of using the share of business rates out of total expenditure. By including imputed rents, authorities that have purchased accommodation on an invest-to-save basis are not penalised, compared to including rents alone.

**Question 7 - Should a Rents Cost Adjustment be used as well as a Rates Cost Adjustment?**

**Question 8 - Should the weighting given to rateable values be increased to reflect rent?**

*Water*

26) Water is a non-labour expenditure which could be adjusted for as part of the ACA. There is substantial variation in regional water charges, although the picture is complicated by the fact that some companies supply water, whilst others supply both water and sewage. Expenditure on water amounts to a very small proportion of total local authority expenditure therefore there may be little effect from including this in the model.

*Insurance costs*

27) Insurance costs are more expensive in cities. However, factors specific to individual authorities play a large part in accounting for the variation in premiums, such as the past insurance history of the authority, the steps taken to reduce the exposure of assets to risk, and the extent of self-insurance.

*Electricity and gas*

28) Electricity and gas are also expenditure areas which could be adjusted for in the ACA. However, due to the increased competition of the electricity and gas market the regional variation has decreased. This means that the need to adjust for this is reduced.

**Question 9 - Should we include any other non-labour expenditure in the model?**

**d) Capital assets other than office space**

29) Local authorities need capital assets besides office space in order to run services (e.g. residential buildings, libraries, roads etc.). There are two main costs which could vary depending on location: the cost of buying an asset and the cost of maintaining the asset.

30) There is little data on local authority assets, their cost and location. This is further complicated when local authorities share assets to run a more efficient service. The cost of maintaining an asset could be proxied using data on depreciation of assets. This information can be found on Revenue Outturn forms for each local authority, although the depreciation of office space may not be easily separated from other costs (and hence might be double-counted if depreciation is included in addition to the ACA). A further problem with using depreciation of an asset to proxy maintenance costs is that some local authorities report negative depreciation in some periods i.e. their assets increase in value over time or are disposed of for more than the booked value.



**Question 10 - Should we include capital assets in the Area Cost Adjustment and if so what data could we use?**

**e) Raw materials**

- 31) Different local authorities may also pay different amounts for the raw materials needed to deliver a service e.g. asphalt in highways maintenance (this normally has to be sourced locally due to high transport costs, so local authorities are bound by local prices). The cost of buying these raw materials may vary for a number of reasons e.g. getting a better deal with contractors, choosing a different quality of material, distance the material has to travel to get to the local authority, buying in bulk etc.
- 32) Some of the reasons behind the differences in the cost of raw materials are due to local authority decisions and some are due to factors outside the local authorities' control. These latter changes should be controlled for to account for differences in raw material cost due to the area. The lack of data about how raw materials vary between local authorities after taking into account authorities' obligations to get the best deal using the most appropriate material for local needs means controlling for differences in cost is difficult.

**Question 11 - How can differences in cost of raw materials due to area be reflected?**

**Rural areas**

- 33) In 2014 LG Futures 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 report recognised that there are specific challenges in rural areas, which have also been discussed by this technical working group. Previously these have been accounted for in a relative needs assessment by including Defra's sparsity indicator as a 'cost driver' within certain service blocks.
- 34) Rurality may affect local authority service delivery in a number of ways; some of these affect the unit cost of delivering services and some of these may affect the number, or types, of services delivered. Similarly this approach could be extended to other geographic types such as coastal areas and islands. As the ACA is primarily focussed on differences in unit costs between different geographies, we believe only these should be considered in the ACA.
- 35) There are a range of aspects relating to geography that may affect the cost of delivering services across different local authorities. These may include differences in productivity and differences in the prices of inputs needed to deliver services. There are at least two different reasons why geography might affect local government service input prices and productivity, these are:
- a. Service providers in isolated, sparse or very dense areas may have increased 'down time' between delivering each service to users compared to other areas. For example, if households are very far apart, or there is a lot of congestion, there may be a larger proportion of time spent travelling

between households rather than delivering some services e.g. waste collection.

- b. If the cost of service delivery from a particular delivery point or hub has a fixed cost element (investment which is required and constant regardless of the number of services delivered e.g. rent for office space), then there exist potential 'economies of scale'. That is that the savings from concentrating service delivery at a particular hub outweigh the costs of increased travel from there to the point of delivery. As a result, providers in very isolated and sparse areas may have higher than average unit costs.

36) Any potential rurality adjustment would need to consist of a measure of rurality and a method for relating this measure to the cost of delivering services.

37) Measures for rurality which could be considered include pre-existing measures, such as Defra's rurality classifications, or creating a new measure specifically to be used in the ACA. A new measure would likely involve: using a detailed geography, such as lower super output areas; some measure of density/remoteness/sparsity, such as population density; and some measure of journey times within the larger geographies discussed under the LCA above.

38) Once a measure of rurality is obtained it has to be related to differences in the cost of delivering services across local authorities. As there is limited information on local authority level factor prices, there are two options that could be considered for the geographic cost adjustment. One option involves combining a measure of rurality based on journey times with Travel Time Survey data to measure how differences in the cost of staff travel time ('down time') vary with the degree of rurality. This assumes, however, that data is available at a suitable geographic level and is of sufficient quality. Another option would be to estimate the relationship between the measure of rurality and historic local authority expenditure data. However, given limited data availability it may be difficult to separate differences in expenditure related to rurality or isolation from differences due to other factors e.g. demographics.

39) We believe factors such as demographic differences correlated with rurality are best considered by a relative needs formula which is designed to adjust for varying levels of need.

**Question 12 - Do you think rural areas should be included in the Area Cost Adjustment?**

**Question 13 - Do you agree or disagree with the options outlined above?** That is the general approach of measuring rurality and the specific options such as using the Travel Time Survey or historic local authority expenditure to calculate the final adjustment.

**Question 14 - Do you think there are further aspects relating to rurality that should be accounted for?**

### **Deprivation**

40) Currently deprivation is included as a cost driver within separate Relative Needs Formulae (RNFs). It could be argued that deprivation should be included in the ACA, however there are several drawbacks to this approach. Firstly, the purpose of

the ACA is specifically to adjust for geographical differences in the cost of providing any given service, and it is therefore appropriate to multiply RNFs by the ACA. Deprivation primarily affects the number of services a local authority needs to provide and therefore has an additive effect on need. This objection applies whether a 'foundation' formula approach is used or not.

- 41) Secondly – in the case that a 'foundation' formula and service-specific RNFs are developed - measures of deprivation are service-area-specific, and an overall single deprivation adjustment would imply wrongly that all service areas are affected by all types of deprivation that are included.

### **Weighting**

- 42) There are different approaches to finding the proportion of total service expenditure used to weight the factors. One approach is to use the national proportion of total service expenditure attributable to labour/business rates to weight the LCA/RCA and the other is to find the average proportion of total service expenditure attributable to labour/business rates for each local authority to weight the factors. The results obtained will be different depending on which of the two approaches are used. The current approach uses the national share to weight the LCA and RCA respectively. This implies that authorities have an incentive to use the most efficient (cheapest possible) combination of inputs to deliver services in their area - by spending less than the average authority on locally expensive inputs.

- 43) Weighting factors using a proportion of national total service expenditure gives authorities with historically larger expenditure a disproportionate impact on the shape of the ACA; while an average of the local authority proportions of total service expenditure would give a greater impact to "extreme" authorities who spent an atypical amount on a particular input. It should also be noted that data on local authority proportions of total service expenditure are less readily available than data on national shares.

**Question 15 - Should we use national or local authority level proportions to weight the ACA if we continued to weight using the proportion of total expenditure?**

### **Regression**

- 44) An alternative approach is to use regression analysis to weight each factor. This could be done by including the LCA and RCA as explanatory variables in wider regression analysis. This approach has the advantage of not needing to estimate the proportion of total costs which are employment/rates costs for each service block (or overall, if a 'foundation' formula approach is used), but would require more complex regression techniques than have been used previously.

**Question 16 - Do you think a regression should be used to weight factors within the area cost adjustment?**

**Question 17 - How do you suggest including additional factors such as capital assets, rents etc. if included in the model?**

## **Next Steps**

- a. Engage with academics and technical experts
- b. Speak to experts on rural statistics (Defra)
- c. Produce technical papers which outline more concrete options for consideration
- d. Reflect responses on the issues of ACA raised by Technical Working Group and the wider sector in future papers

## **Annex A - Sources**

Local Government Finance: Review of the Area Cost Adjustment, Report by Professor Robert F Elliot, David McDonald & Roy MacIver. (University of Aberdeen, 1996)

SWG-08-11 Calculating Area Cost Adjustment factors based on upper-tier authorities

SWG-09-02 Data source for calculating the LCA factors

SWG-09-03 Calculating the ACA using data on private sector wages only

SWG-09-05 Supplementary information for SWG-08-11 and SWG-08-12