Research Report DFE-RR014

Diploma Costs and Funding at Key Stage 4

Mouchel Management Consultants

Department for Education

This research report was written before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

Contents

Executive Summary

Project Objectives and Methodology

In September 2009, the Department for Children, Schools and Families (DCSF) commissioned Mouchel Management Consulting to undertake a Study into the Costs and Funding of Diplomas at Key Stage 4. This research built upon previous work undertaken by Mouchel in 2008[1]. The key objective of the research was to develop a more detailed understanding of funding models; consortia delivery costs (including a specific focus upon transport costs and practice); the scope for efficiencies; and the likely system costs out to 2013. The research was also intended to assist the DCSF in coming to a view on the funding requirement for Diplomas in 2010-11.

From the 2008 research, Mouchel already had significant knowledge of costing work being undertaken in a number of authorities. The required sample of 30 authorities (around one in five nationally) was therefore chosen on a 'purposive' basis to include both authorities who had participated in previous research and who were planning further costing work, and authorities who had not previously been involved in the Diploma research. The intention was to provide a reasonable basis for extrapolation of findings nationally (although it was not intended that the sample could be considered to be representative from a statistical perspective).

The research involved structured face-to-face interviews with local authority 14-19 leads, transport officers and children's services finance officers primarily, in addition to seeking wider views from schools and colleges, where possible. Initial visits took place to all 30 authorities, with more detailed follow-up work on costing and transport then taking place with a smaller sample of eleven and five authorities respectively.

Conclusions

In summary, the key conclusions from the research were as follows:

- **Diploma funding models.** A wide variety of Diploma funding models continue to be used by authorities. There are, therefore, a range of approaches to the allocation of Diploma Formula Grant (DFG), Practical Learning Opportunities (PLO) and Age-Weighted Pupil Unit (AWPU) funding.

- **Changes to funding models.** Five authorities (17%) specifically identified that they had changed their funding models between 2008-09 and 2009-10. Two authorities had moved from a devolved to a centralised funds flow model. One authority now required an AWPU contribution from its schools. One authority had agreed a common funding rate for all providers. One authority now funds only the incremental variable costs of additional pupils, rather than the average per pupil cost, which included an element of fixed costs, and was therefore higher.

- **Allocation of Diploma Formula Grant.** In terms of DFG, 37% of authorities (11) held this funding centrally, for subsequent allocation to the provider; 37%

[1] http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RR076.pdf

(11) allocated DFG funding to consortia to manage; 17% (5) allocated DFG funding to the home school; and 10% (3) had a mixture of the above approaches i.e. with specified percentages of funding being retained centrally, allocated to providers, and allocated to the home school.

- **Top-slicing of Diploma Formula Grant.** Seven authorities (23%) specifically identified that they had top-sliced the DFG to make contributions towards: the costs of collaboration and central costs; additional preparation activity; initial purchase of equipment; employer engagement; 'pump priming' smaller class sizes in the initial stages of Diplomas; a contingency, in the event that efficiencies are required in future by DCSF; and separation of the sparsity weighting of DFG to pay for transport-related costs.

- **Allocation of Practical Learning Opportunities funding.** As with DFG, authorities have used a range of different methods for the allocation of PLO funding: 57% of authorities (17) devolved the PLO funding to schools; 23% (7) held PLO funding centrally; 10% (3) allocated PLO funding to consortia; and 10% (3) had a mixture of arrangements in place e.g. different percentage allocations being provided to schools, consortia, or held centrally.

- **Age-Weighted Pupil Unit contribution.** It was identified that 40% of authorities (12) did not request any AWPU contribution from schools; 27% (8) requested an AWPU contribution which represented the difference between the cost of provision and available resources; 27% (8) requested an AWPU contribution at or around a one day per week equivalent AWPU contribution to Diplomas; and the remaining 6% of authorities (2) had a mixture of arrangements in place, reflecting different approaches between consortia and varying levels of AWPU contribution.

- **Costing of Diplomas.** In terms of work that had taken place to cost Diplomas, of the sample of 30 authorities: 23% (7) had costed Diplomas bottom-up, costing individual components of Diploma delivery e.g. equipment, at a more detailed level; 17% (5) had costed Diplomas bottom-up, although at a less detailed level e.g. just separating costs into teaching and non-teaching; 23% (7) had not costed Diploma provision, but had instead relied upon rates e.g. per hour, per day, as previously paid for vocational provision; and the remaining 37% (11) had not undertaken any costing of Diploma provision. Where no costing work had been undertaken, the approach used to allocate funding to providers for the provision of Diplomas was either based upon existing vocational provision rates or by directly passing across the amount received for DFG to providers.

- **Assumptions over costs included.** Where bottom-up costing work had been undertaken, authorities made very different assumptions about the costs to be included. Of the eleven authorities selected to work with in more detail on delivery costs:

    - 64% (7) included only 'direct' delivery costs and the remaining 36% (11) also included 'central' infrastructure costs;

- Only 18% (2) had costed transport, with the remaining 82% (9) not having undertaken any transport costings;

- 55% (6) costed individual Diploma lines; the remaining 45% (5) only costed a 'generic' Diploma.

In some authorities, there were also different approaches to costing in the various delivery consortia. In general, however, authorities tended to cost only the 'incremental' elements of Diploma provision which take a place away from the home school.

- **Individual cost components.** Although individual authorities made different assumptions over the costs that they included, the full range of costs considered were: teaching; technical support; transport; equipment/ consumables; trips/visits; infrastructure; exam fees; premises; employer engagement/work experience; Continuing Professional Development; and the full cost of bought-in provision, including college overheads.

- **Diploma costs identified.** As authorities had assumed different numbers of guided learning hours (GLH), and different class sizes, the more detailed costing work undertaken with the ten authorities with more advanced cost models sought to express their costs on common bases: (i) actual hours, actual learners; (ii) actual hours, 15 learners; (iii) 150 hours, actual learners; (iv) 150 hours, 15 learners. The average costs for a Diploma learner per annum on these differing bases were £1,513; £1,338; £1,098; and £951 respectively. DFG is currently provided at an average of £1,000 per pupil across Levels 1 and 2, before sparsity or area cost add-ons are factored into the DFG. DCSF has not specified the cost elements which the DFG is intended to cover, and a number of the costs included by authorities in the above figures could be met from funding streams other than DFG.

- **Transport costs**. Authorities' transport costing data was generally not strong and the results of our analysis therefore need to be treated with great caution. A very wide range of unit costs were identified and there were some unexpected outcomes in terms of the relationships of rural, semi-rural and urban transport costs. Expressed in costs per learner terms, rural costs varied from £0 to £346, with an average value of £84; semi-rural cost varied from £26 to £346, with an average of £151. The rural/semi-rural categorisation produced a number of surprising results, and we therefore believe that the overall rural/semi-rural average of £109 would provide a more reliable basis for cost estimation. Urban costs per learner varied from £0 to £300, with an average value of £43 per Diploma learner. This average is heavily influenced by three authorities which have implemented extremely expensive solutions to 14-19 transport and attributed it in whole to Diploma provision. Exclusion of the high cost urban authorities brings the urban average down to £21 per learner. Subject to the issues relating to the quality and consistency of the data, the data consensus is that transport costs exceed the sparsity allowance in most of the authorities/consortia for which transport cost data exists. This is not true of every authority or consortium, but taking averages across the sample, this does

appear to be the case in overall terms. In summary, therefore, the data pointed strongly towards a conclusion that transport costs exceed the sparsity weighting in rural and semi-rural areas, with an average shortfall, taking the two groups together, of £68.

- **Cost pressures.** One of the largest potential future cost pressures identified related to infrastructure costs e.g. the costs of collaboration and assessment, which can currently be funded through the Local Delivery Support Grant (formerly known as the Consortia Support Grant). The second most significant area of cost pressures are those surrounding transport, which are set to increase in line with Diploma roll out against a backdrop of reducing Local Authority budgets. This is likely to remain an issue until both critical mass is reached and Local Authorities develop ways to manage this element more effectively. Class sizes were also identified as a specific cost pressure, particularly in the context of the low level of learner numbers that has been experienced in the early stages of Diplomas. Authorities argue that it would be unsustainable to support such small class sizes in the longer term, and some authorities/providers have addressed this issue by commissioning a minimum level of provision from colleges, or by setting minimum class size numbers. This is intended to address issues of financial and/or educational viability, although clearly, any such decisions need to be considered in the context of a Diploma entitlement, take-up of Diploma lines, and make allowances for the qualification being in the very early stages of delivery.

- **Efficiencies.** Efficiencies potentially arise when a critical mass of Diploma learners develops, allowing schools to displace existing provision, and when elements of Diplomas are undertaken outside the home school, allowing schools to redeploy the resources freed up by the departure from school of a group of students. Given the current level of learner numbers, a significant majority of authorities did not believe that a critical mass of Diploma learners would arise until at least 2013. Additionality of provision is therefore still the norm. Pre-conditions for efficiencies to be achieved were considered to be:

  (i) **Achieving critical mass at lower level** – greater certainty about the future of the Diploma qualification; embedding of Diplomas; displacement from the same option group; increase to 14 Diploma lines.

  (ii) **Full substitution** – replacement of existing subjects; reduction of the qualifications 'landscape'; reducing the perception of the Diploma being a significantly more difficult qualification; rationalisation of options; smaller Diploma class sizes.

  (iii) **Improved strategic planning/joint working** – joint working between schools; greater flexibility of staffing resources.

- **Good practice.** A number of areas of good practice in relation to Diploma costs and funding were identified, which could be considered by authorities more widely. These included: developing a better understanding of the costs of Diploma provision compared to existing provision; forecasting the potential

longer term learner numbers and total costs of Diploma provision; review of Diploma funding models to ensure that these remain fit for purpose as learner numbers increase; developing the local authority strategic planning role; giving consideration to the circumstances under which efficiencies may be achievable and contingency planning in the event that levels of DFG and CSG reduce in future.

- **Transport good practice.** Evidence of good practice with regard to transport management and costing was less evident. Solely from a transport perspective (recognising that there may be pedagogical arguments against it) we would advocate: delivering the outsourced elements of Diploma Study during a single, sometimes extended day; consideration of students travelling directly to their host establishment, rather than via their home school; staggered school start/finish times; greater integration of Diploma transport arrangements into wider authority transport provision; development of enhanced ticketing products, particularly in more urban areas. In some instances there may be pedagogical reasons that hinder the implementation of the single day delivery model.

Recommendations

Based upon the findings of the research, a number of key recommendations have been identified:

- **Funding models.** Authorities should continue to keep their existing funding models under review, to ensure that these remain fit for purpose, as Diploma learner numbers grow.

- **Diploma costs.** Authorities should quantify the full costs associated with Diploma provision (direct delivery, transport and infrastructure) to ensure that they are aware of the cost implications, should any potential reductions be made to the funding streams associated with Diplomas. This should include comparing the costs of Diploma provision with existing educational provision.

- **Class sizes.** Authorities should consider the sustainability of smaller class sizes and whether strategic work at authority or consortium level should be undertaken to identify the most viable class size (taking into account the stage of delivery) and scope for increasing the viability of class sizes.

- **Transport.** Authorities should bring Diploma transport into the mainstream of their transport planning and procurement. Whilst Diploma Transport Co-ordinators do exist in many local authorities, they are generally not fully integrated within LA Transportation Units. A more holistic approach will help to drive out economies of scale as learner numbers increase

- **Efficiencies.** It is **not** recommended that DCSF seeks to implement reductions in funding in 2010-11 based on the ability of schools to achieve efficiencies, as the preconditions for achieving efficiency gains are not yet evident. However, it is suggested that DCSF should continue to monitor the scope for efficiencies in later years, particularly as learner numbers increase,

as Diplomas become a mainstream curriculum area (potentially replacing other qualifications), with DFG potentially reducing accordingly.

- **Diploma Formula Grant for 2010-11.** Taking both Diploma delivery and transport costs into account, in overall terms, it would appear that, on average, Diploma Formula Grant, including the sparsity weighting, covers costs. The sparsity weighting element is handled in a variety of ways, from full devolution 'en-bloc' to micro management. Given the importance of maintaining and improving current levels of Diploma take-up, it is therefore suggested that, for 2010-11, DCSF should continue to allocate DFG funding to authorities at similar levels to those as for 2009-10 and consider the implications of the finding that transport costs appear to exceed the current sparsity weighting.

- **Good practice.** Authorities should consider the areas of good practice identified as part of the research, and whether these have the potential to improve their knowledge and awareness of Diploma costs and funding.

1 Introduction

1.1 Background

From September 2008, the first five Diploma lines – Construction and the Built Environment; Creative and Media; Engineering; Information Technology; and Society, Health and Development – were made available to learners. From September 2009, a further five Diploma lines – Business, Administration and Finance; Environmental and Land-based Studies; Hair and Beauty Studies; Hospitality; and Manufacturing and Product Design – became available.

Four further Diploma lines will commence from September 2010, with three further lines commencing from September 2011. From 2013-14, Diplomas will be an entitlement for 14-16 year olds (the first 14 lines) and 16-18 year olds (all 17 lines).

Based upon returns submitted by local authorities to DCSF in November 2009, there are currently 36,441 pre- and post-16 learners undertaking the ten current Diploma lines. More detailed analysis of pre-16 Diploma learners is shown in Appendix 1.

Diplomas are being delivered through local consortia, made up of authorities, schools and providers. Providers, in this context, refers to all institutions involved in delivering elements of the Diploma i.e. schools, colleges, work-based organisations.

1.2 Project Objectives

In September 2009, the DCSF commissioned Mouchel Management Consulting to undertake a Study into the Costs and Funding of Diplomas at Key Stage 4. This research built upon previous work undertaken by Mouchel in 2008[2].

The key objective of the research was to develop a more detailed understanding of funding models; consortia delivery costs (including specific focus upon transport costs and practice); the scope for efficiencies; and the likely system costs out to 2013. The research was also intended to assist the DCSF in coming to a view on the funding requirement for Diplomas in 2010-11.

1.3 Methodology

DCSF and Mouchel agreed a sample of 30 local authorities to contact as part of the research; including a number of 'substitute' authorities, with similar characteristics to the original sample, in the event that some authorities were unable to contribute to the research.

From the 2008 research, Mouchel already had an awareness of the range of costing work being undertaken in a number of authorities. The sample of 30 authorities (around one in five nationally) was therefore chosen on a 'purposive' basis, including both authorities who had participated in previous research and who were planning further costing work, and authorities who had not previously been involved in the Diploma research. The intention was to provide a reasonable basis for extrapolation of findings nationally (although it was not intended that the sample could be

2 http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RR076.pdf

considered to be representative from a statistical perspective). The sample was selected to incorporate a range of characteristics, as summarised in Appendix 2.

For the purposes of identifying the rurality of authorities, Mouchel used the rural/urban local authority classification to select sample authorities. This classification was introduced in 2005 as a Department for Environment, Food and Rural Affairs (Defra) initiative. Metropolitan boroughs, unitary authorities and London boroughs are categorised into six urban/rural classifications, with county councils being categorised into two further classifications. Further details of this methodology are provided in Appendix 3.

The 30 authorities that contributed to the research are listed in Appendix 4, including further information about their level of rurality, number of Diploma lines running in 2009 and pre-16 Diploma learner numbers in 2009.

Mouchel wrote to both Directors of Children's Services and 14-19 contacts at each local authority in the sample, informing them of the purposes of the research, and requesting a face-to-face meeting to discuss key funding issues in relation to Diploma provision. This focused upon funding models; Diploma delivery costs; transport costs and operating arrangements; potential efficiencies; any wider issues; and good practice, as identified in the project objectives above. Wider views were also sought, where possible e.g. from consortia representatives, transport officers, and children's services finance officers.

An initial set of questions was provided to participants in advance of the meeting, with structured discussion of the questions taking place at meetings. In addition, examples of Diploma models/costing work that had been developed/undertaken by participants were requested, to be explored subsequently, in further detail.

Following on from the initial round of visits, Mouchel identified a smaller number of authorities to work with on costing issues at a greater level of detail. In general, these were the authorities that had undertaken costing work at a more detailed level.

Wherever possible, the more detailed work pursued both of the main themes of the study – Diploma delivery costs and Diploma transport costs – with the same authorities. However, it became clear that transport was fundamentally an issue for the more rural authorities, and the follow-up work on transport therefore focused on those authorities which had undertaken transport costing work, which tended to be the more rural authorities.

In terms of Diploma delivery, more detailed costing work took place with ten authorities: Birmingham; Buckinghamshire; Cambridgeshire; East Sussex; Hertfordshire; Liverpool; Luton; Reading; Stoke-on-Trent; and Surrey. Only one authority (unitary) had costed both existing provision (i.e. the costs of delivering a qualification that would be replaced by the Diploma) and Diploma provision, thereby identifying the net additionality associated with Diplomas, if replacement took place. The outcome of this authority's work has also been identified separately, although clearly, this must be considered in the context that only one authority's data was available in this manner.

In relation to transport, the more detailed work took place with five authorities: Cambridgeshire; Dorset; Hertfordshire; Lancashire; Surrey. This report provides a summary of the key issues identified from the research, which are discussed under the following headings:

- Diploma funding models;
- Diploma delivery costing work by authorities;
- Funding issues and cost pressures;
- Efficiencies;
- Wider Diploma issues;
- Transport practice and costs;
- Good practice;
- Conclusions and recommendations.

2 Diploma Funding Models

2.1 Allocation of Funding Streams

The DCSF has previously recommended that, "14-19 partnerships should consider pooling funds at KS4, both for Diploma grant and, if necessary, contributions from earmarked Dedicated Schools Grant (DSG), at partnership level"[3]; however the Department has not prescribed any one basis of allocation, but has instead left this to local discretion.

As previously identified in Mouchel's 2008 research, therefore, a range of funding mechanisms continue to be in place to allocate funding to providers. The principal means of funding Diploma provision for ongoing delivery (set-up costs are funded through the Local Delivery Support Grant), are: Diploma Formula Grant (DFG), Practical Learning Opportunities (PLO) funding and the use of schools' Age-Weighted Pupil Unit (AWPU) within the DSG. The mechanisms used by authorities for the allocation of these funding streams are described below.

Diploma Formula Grant (DFG). DCSF has provided a specific formula grant to local authorities towards the additional Diploma delivery costs for learners that cannot be met through schools' use of existing DSG funding. For 2009-10, this average level of funding per Diploma place (for Levels 1 and 2) at Key Stage 4 was around £1,000 per pupil before sparsity or area cost add-ons are factored into the DFG.

The research identified a number of approaches used to allocate the DFG, as follows:

- 37% of authorities (11) held DFG centrally, for subsequent allocation to the provider;
- 37% of authorities (11) allocated DFG to consortia to manage;
- 17% of authorities (5) allocated DFG to the home school;
- 10% of authorities (3) used a mixture of the above approaches i.e. specified percentages being retained centrally, allocated to providers, and allocated to the home school.

It should be noted that central management was far more prevalent for non-county authorities. County councils tended to allocate DFG to individual consortia.

3 DCSF website, 14-19 funding, Frequently Asked Questions.

Seven authorities (23%) specifically identified that they had undertaken top-slicing of DFG to fund areas such as:

- The costs of collaboration and central costs e.g. school uniforms; tracking systems; costs of the 14-19 team;
- An enhancement fund, to pay for additional development activity that providers intend to undertake;
- Initial purchase of equipment;
- Employer engagement;
- 'Pump priming' smaller class sizes in the initial stages of Diplomas;
- A contingency, in the event that efficiencies are required in future by DCSF;
- Separation of the sparsity weighting of DFG to pay for transport-related costs.

Practical Learning Opportunities funding (PLO). This is provided through the Dedicated Schools Grant (DSG) baseline as a non-ring-fenced allocation, based upon 11-16 pupil numbers. The DCSF's expectation for this funding is that, "LAs and schools are expected to use these allocations to support practical learning opportunities and Diplomas as they are rolled out in each area, subject to the Gateway process. We expect an increasing proportion of these funds to be spent on Diplomas as local provision expands."[4]

As with DFG, authorities have used different methods for the allocation of PLO funding, as summarised below:

- 23% of authorities (7) held PLO funding centrally;
- 10% of authorities (3) allocated PLO funding to consortia;
- 57% of authorities (17) devolved PLO funding to schools;
- 10% of authorities (3) had a mixture of arrangements in place e.g. different percentage allocations being provided to schools, consortia, or held centrally.

Age Weighted Pupil Unit (AWPU). The DCSF has stated that, "pre-16, we would expect the calculation of funding to be paid per Diploma student to be determined as follows: How much of the Diploma programme can (i) be delivered through mainstream funding in the home school i.e. through the AWPU, and (ii) how much requires additional resource, to be delivered in the home school or elsewhere." [5]

4 DCSF: Guidance to Local Authorities and 14-19 Partnerships/Consortia on Diploma Specific Formula Grant: 2009/10

5 DCSF website, 14-19 funding, Frequently Asked Questions

The research therefore explored authorities' approaches to requesting AWPU contributions towards the cost of Diploma provision, with the following approaches being used:

- 40% of authorities (12) did not request any AWPU contribution from schools;
- 27% of authorities (8) requested an AWPU contribution from schools, which effectively represented the 'balancing item' between the cost of provision and resources deemed to be available to fund Diplomas;
- 27% of authorities (8) requested an AWPU contribution at or around 20% i.e. reflecting an assumption of a one day per week AWPU contribution to Diplomas;
- 6% of authorities (2) had different arrangements in place in different consortia areas, with the percentage AWPU contribution having the potential to vary considerably between consortia.

Other sources of funding. In addition to the main sources of funding identified above, a small number of authorities had contributed wider local authority resources to the provision of Diplomas. Examples included matched authority contributions to transport costs; local authority resources that can be 'bid' for by consortia; and top-sliced funding from the overall Dedicated Schools Grant allocation to support the provision of Diplomas.

2.2 Changes to Funding Models

The research also considered whether any changes had been made to authority funding models between 2008-09 and 2009-10, and the reasons behind such changes. Five authorities confirmed that they had changed their models, with the key changes being:

- **Centralisation of funding flows**. Two unitary authorities identified that they had changed their funding models by centralising funding flows. The first had previously passed on the DFG in full to schools. However, confusion had arisen around which provider should be paid for what components, with the result that some providers had not been paid in full. For 2009-10, therefore, pooled arrangements were put in place, with DFG being paid to a Diploma line budget holder (School Business Manager in the lead school). Diploma delivery forms are also completed between the home institution and the Diploma line budget holder, to identify what the home institution will pay.

  The second authority previously passed DFG to schools, with delivery centres invoicing the home school directly. However, the authority felt that it did not have full oversight of resources, that there was inconsistent treatment of expenditure items, and that there was a lack of clarity on reporting lines. For 2009-10, therefore, the authority has adopted a centralised approach, whereby the authority manages funding flows and calculates a single net payment due to delivery centres.

- **Inclusion of AWPU funding**. One authority only had one Diploma line running in 2008-09, with provision by a sixth form college, which was provided with DFG allocations for relevant learners, and which ran the course on this funding only. For 2009-10, as more lines have been offered, each provider instead receives around one day equivalent AWPU per pupil, plus 25% of DFG.

- **Sparsity weighting**. Two authorities have moved to devolve the Sparsity weighting to consortium level, having recognised that they have insufficient power over the consortia to ensure certain cost saving measures are implemented. They have the foresight to recognise that some difficult decisions will be needed as Diploma roll out progresses. Devolvement of budgets places the onus on the consortia to make these changes or find alternative solutions. Another LA divided the Sparsity weighting evenly and wholly between its consortia in 2008/09. Whilst in 09/10 this is apportioned more appropriately according to consortia rurality.

- **Single funding rate**. Another authority did not previously have an agreed rate for funding providers, with a range of different rates therefore being in place across the different consortia. The authority is now moving towards a single rate for funding providers, based upon agreement of the costs of delivering specific components of the Diploma.

- **Separating fixed and variable costs**. Another authority commissions significant college provision of Diplomas. For 2008-09, the authority previously identified the average per pupil cost of a Diploma, and funded the college for any additional pupils at this overall average rate. However, for 2009-10, the fixed and variable costs of provision were identified separately. This has meant that, if an additional pupil is added to a course, only the variable costs need be funded, as the fixed costs do not change.

Mouchel's 2008 research identified the potential for significant complexity in funding flows as Diploma learner numbers increase, and it is therefore interesting to note that two authorities have moved towards more centralised models of funding to obviate this problem.

It should also be noted that a number of authorities confirmed that they were keeping their funding approaches under review, and would revise these as necessary as Diploma provision develops.

3 Diploma Delivery Costing Work by Authorities

3.1 Authorities' Approaches to Diploma Costing

At the time of Mouchel's 2008 research, most authorities had not yet undertaken detailed costing work on Diplomas, although a number indicated that they were planning to do so. A key aspect of the 2009 research, therefore, was to identify the extent to which this costing activity had developed.

The rate at which providers were funded for Diploma provision was initially explored, and, as in Mouchel's 2008 research, a range of methodologies for funding providers were identified, including:

- **Authority-wide rate**. This involved agreement being reached between the partnership and providers in an authority, so that all providers are paid the same amount across the authority for the same level of provision. Where such a rate is negotiated centrally, this could also potentially lead to economies of scale, particularly as Diploma learner numbers increase.

- **Market-led rate.** Here, providers could charge whatever amounts they believed were acceptable to schools for Diploma provision; this could result in schools in different consortia or different parts of the authority paying different amounts for the same type of provision. Depending upon the level of competition/provision available within an area, this could influence the rates set by providers e.g. lower rates if sufficient competition, or higher rates, where provision is restricted.

  A particular example was identified where a county council had developed a template similar to an Invitation to Tender. This listed individual support activities and allowed consortia to specify their Diploma learning requirements by area and for providers to cost this up. The intention was that consortia could then use this template as a basis for negotiation with providers and also decide whether it would potentially be preferable/cheaper to undertake any elements themselves.

- **Guidance on rate.** Under this approach, guidance would be issued (usually by the local authority) on how a potential rate could be determined, with providers having a degree of flexibility within this guidance.

There were a number of ways in which the above rates had been derived, and this was usually a function of the extent to which costing work had been undertaken. In terms of the derivation of the rate at which providers would be paid, the main methods considered were the use of:

- **Diploma Formula Grant** amounts, as notified by the DCSF to LAs;
- **Negotiated rate**, often set between the provider's view of costs and the amount that schools were prepared to pay for provision;
- **Previous practical provision rates** e.g. as used for courses such as BTECs;
- **Learning and Skills Council funding** methodology;
- **'Bottom-up' costings**, based upon identifying the actual costs for specific Diploma components delivered by providers.

The research focused upon the extent to which bottom-up costing had been undertaken by authorities for the actual costs of Diploma provision. Of the sample of 30 authorities, it was identified that:

- 23% of authorities (7) had costed Diplomas bottom-up, costing individual components of Diploma delivery e.g. equipment, at a more detailed level;
- 17% of authorities (5) had costed Diplomas bottom-up, although at a less detailed level e.g. separating costs into teaching and non-teaching, rather than identifying individual components of Diploma delivery as above;
- 23% of authorities (7) had not costed Diploma provision specifically, but had instead relied upon rates e.g. per hour, per day, as previously paid for vocational provision;
- 37% of authorities (11) had not undertaken any costing of Diploma provision. Where no costing work had been undertaken, the approach used to allocate funding to providers for the provision of Diplomas was either based upon existing vocational provision rates or by directly passing across the amount received for DFG to providers.

A key objective of the research was to attempt to identify how much Diploma provision costs, regardless of the level of funding available. Following the initial round of visits, therefore, ten authorities were selected to work with to explore their costs in further detail. These authorities were: Birmingham; Buckinghamshire; Cambridgeshire; East Sussex; Hertfordshire; Liverpool; Luton; Reading; Stoke-on-Trent; and Surrey.

One unitary authority had undertaken their costing work in a different manner, specifically costing both existing provision and Diploma provision, therefore identifying the additionality associated with Diplomas. Their costing work has therefore been considered separately to the other ten authorities.

Where bottom-up costing work had been undertaken, authorities made very different assumptions about the costs to be included. Of the eleven authorities selected to work with in more detail on delivery costs:

- Seven included only 'direct' delivery costs and the remaining four also included 'central' infrastructure costs;
- Only two had costed transport, with the remaining nine not having undertaken any transport costings;
- Six costed individual Diploma lines; the remaining five only costed a 'generic' Diploma.

3.2 Authority Costing Assumptions

A range of different assumptions were made by authorities. These included:

- **Incremental costing.** Authorities had generally costed Diploma provision on an 'incremental' basis, based upon the components of the Diploma that were not provided by the home school. This led to very different assumptions about the number of guided learning hours (GLH) provided. For example, some authorities costed only the Principal Learning and Project elements of the Diploma, whilst others costed the Principal Learning; Project; Additional and Specialist Learning; Personal Learning and Thinking Skills and IT Functional Skills elements.
- **Assumptions about 'direct' and 'central' costs**. As identified above, authorities had made very different assumptions about the nature of activities that would be included in their Diploma costings. For example, some only costed 'direct' elements, such as teaching, technical support, equipment, whereas others costed more 'central' costs e.g. management.

  The rationale for authorities which had costed both direct and central costs was a wish to try to identify the total costs of Diploma provision, irrespective of whether this may currently be funded through, for example, DFG, CSG or AWPU, so that if any of these funding streams changed, they still had an awareness of the total cost implications. Authorities also took different approaches as to where responsibility lay for costs such as exam fees. Most defined them as a home school responsibility, but a very small number assumed that the provider paid for them. Given the degree of autonomy that many consortia have over their funding models, there were differences between consortia over which Diploma activities were included, even within a single authority.
- **Transport costs.** Similarly, authorities treated transport costs differently, with some not yet having built transport into their costings, although they recognised that these costs were relevant to the overall costs of Diploma provision. Only two of the eleven authorities (both predominantly urban county councils) had

specifically considered transport costs in their funding models, and these averaged £82 per learner.

- **Specific or generic Diploma.** As identified above, 55% of authorities which had undertaken costing had attempted to cost different Diploma lines individually, but the remaining 45% had only costed a 'generic' Diploma. Identification of the true costs of each Diploma line was therefore constrained. In addition, teaching represented the most significant cost element of the Diploma. Therefore, even where an individual line had been costed, the cost per learner tended to be influenced more by class sizes than the genuinely additional costs for the line.

- **School and college costs.** As colleges do not receive any mainstream funding for Diploma delivery, they therefore need to recover their full costs. Schools, however, only need to recover the additional costs of provision as they have mainstream funding through DSG. The relative balance of school and college provision therefore affect the costings.

- **Refinement of costings.** A number of authorities accepted that their costings were still relatively broad in nature and that there was scope to further refine them, with the intention being that these costs (and funding models) will be kept under review as Diploma provision develops.

3.3 Individual Cost Components

The range of areas for which authorities had identified Diploma costs is summarised below, based upon follow-up work with the ten authorities. As noted previously, only 23% of the authorities identified individual cost components in this manner.

It should be noted that the DCSF has not specified the individual cost elements which DFG is intended to cover, other than that these should represent the additionality of Diploma provision over and above existing provision. A number of the costs identified by LAs as incremental could also be funded from the Dedicated Schools Grant or CSG. However, where authorities have identified a cost as part of their funding model, it has been included below, regardless of where such costs might properly be funded from.

It is important to note, therefore, that these costs represent authorities' views on the actual costs of Diploma provision, rather than the 'additionality' over and above existing provision (although clearly, if no changes at all are made to existing provision, then Diploma provision is fully additional). One unitary authority had costed both existing provision and Diploma provision, with the difference representing their views on the additional costs of Diplomas, and this costing work is considered further at 3.6 below.

- **Teaching.** The direct costs of Diploma teaching were based on an hourly rate multiplied by the number of GLH. Some authorities have used differing rates for college-based or school-based provision, although in many cases, a combined rate was used. Teaching costs generally averaged between £39

and £55 per hour, although different assumptions were made by authorities about the number of GLH provided outside the home school.

- **Technical support.** Support costs were also based upon an hourly rate multiplied by the number of GLH, with the hours delivered usually representing a percentage of the teaching time. On average, technical support represented 25%-50% of teaching hours, with rates ranging between £9 and £28 per hour.

- **Equipment/consumables.** Some authorities identified these separately, although in most cases, they were treated as a single item. Consumables include books, paper etc., whereas equipment represents larger items e.g. protective clothing, Hair and Beauty kits. Average costs were £163 per learner, although some authorities identified significantly higher equipment costs for the Hair and Beauty and Environmental and Land-based Studies lines.

- **Trips/visits.** The cost of trips and visits which form part of the Diploma learning experience (not travel to providers). Four of the ten authorities identified trips/visits as a separate cost component, averaging £82 per learner.

- **Infrastructure.** These costs covered areas such as management, collaboration and assessment. Three of the ten authorities identified these costs separately, averaging £155 per Diploma learner.

- **Exam fees.** The costs of examinations were identified by three of the ten authorities as a separate component. These varied by Diploma component, but averaged £116 for Principal Learning per learner.

- **Premises.** These represented any additional cost of premises e.g. temporary classrooms. Only two of the ten authorities separately identified premises costs, averaging £27 per Diploma learner.

- **Employer engagement/work experience.** Three of the ten authorities identified costs associated with carrying out employer engagement/work experience activities, in addition to the costs of paying employers themselves e.g. to attend events. These costs averaged £45 per Diploma learner.

- **Continuing Professional Development.** The cost of backfilling/paying for cover for teachers undertaking CPD activities. Only two of the ten authorities identified these costs specifically, averaging £46 per Diploma learner.

- **College overheads.** As colleges do not receive mainstream funding for Diplomas, they therefore need to recover their full costs of provision. Although authorities had not generally separated out the costs of college and school-based provision, it should be noted that the need to recover full college costs can have a significant impact upon total costs.

- **Transport.** These costs represent transport associated with learners travelling to attend provision. These costs were not generally built into authorities' Diploma costing models, with only two of the ten authorities specifically

identifying them (although the majority of authorities recognised that these were an additional cost).

3.4 Mouchel's Approach to Working with Authorities

Given the above differences in authorities' methodologies, our approach to considering the potential cost of Diploma provision was as follows:

- **Basis for assumptions.** More detailed discussion took place with the ten authorities selected for follow-up work. This identified (i) exactly which items had been included in their costings, (ii) their assumptions over how many GLH of teaching and technical support these costs related to, (iii) how many Diploma learners these costs related to.

- **Efficient class sizes.** In order to provide a firm basis for comparison, costs were restated on the basis of 15 learners, as an indication of the comparable costs at 'efficient' class sizes.

- **Number of GLH.** As with class size numbers, costs were restated on the basis of provision for the same number of GLH. Given that the DCSF has stated that, "on average, the amount of learning requiring additional funding equates to about 150 guided learning hours per annum as defined in the LSC methodology"[6], equivalent costs at 150 GLH were calculated.

- **Comparison of costs against Diploma Formula Grant.** In all cases, costs for individual Diploma lines and levels were compared against the relevant funding provided through DFG, to identify the level of 'surplus' or 'deficit'. Although the sparsity weighting of the DFG is separately identifiable, it is not, in any way, ring-fenced, and this can be used to support overall delivery (in the same way as the main element of DFG can be used to support transport). However, in order compare like-with-like, where authorities had excluded transport costs, the sparsity weighting was also excluded.

6 DCSF website, 14-19 funding, Frequently Asked Questions.

3.5 Range of Total Costs Identified

Based upon the above analysis, the Table below shows the average cost of Diploma provision for the 10 authorities with whom follow-up work was undertaken, based upon different activity assumptions, as described in further detail below.

Average Cost of Diploma Provision per learner per annum – all figures shown in £

	Actual Hours Actual Learners		Actual Hours 15 Learners		150 Hours Actual Learners		150 Hours 15 Learners	
Authority	**Cost**	**Surplus/ (Deficit)**	**Cost**	**Surplus/ (Deficit)**	**Cost**	**Surplus/ (Deficit)**	**Cost**	**Surplus/ (Deficit)**
1	2,137	(812)	1,945	(619)	1,786	(461)	1,652	(327)
2	2,130	(837)	1,887	(594)	1,586	(293)	1,214	79
3	1,937	(661)	1,937	(661)	1,081	195	1,081	195
4	1,741	(376)	1,625	(259)	893	472	828	537
5	1,495	(352)	1,052	91	962	181	662	481
6	1,490	(50)	1,169	271	1,020	420	795	644
7	1,385	(137)	1,231	14	1,385	(137)	1,231	14
8	1,128	157	893	392	882	404	700	585
9	1,000	274	1,000	274	846	428	846	428
10	684	498	638	544	535	647	499	683
Average	**1,513**	**(230)**	**1,338**	**(55)**	**1,098**	**186**	**951**	**332**

A summary explanation of the figures shown in the Table is provided below.

- Four levels of costs have been calculated in each of the columns, as follows:

  (i) **Actual hours, actual learners.** The costs based upon the total number of GLH provided and actual class sizes – this is the highest cost identified.

  (ii) **Actual hours, 15 learners.** The costs based upon the total number of GLH provided and an assumption of 'efficient' class sizes – this shows decreasing costs, as actual class sizes are, on average, generally at less than 15 currently.

  (iii) **150 GLH, actual learner numbers.** This enabled different assumptions by authorities about delivery hours to be expressed on a consistent basis of 150 GLH. As authorities had generally costed significantly more than 150 GLH, these figures are considerably lower than those in (i).

  (iv) **150 GLH, 15 learners.** These represent the lowest costs, given the assumption of consistent (lower) GLH and efficient class sizes.

- The surpluses/(deficits) represent the average of surpluses/(deficits) for individual Diploma lines and levels, where information was available at this level of detail.

- Significant differences in costs generally reflect the inclusion of different cost components. As an illustration, Authorities 1, 2 and 3 have all included a number of 'central' costs such as management; infrastructure; and exam fees. It could also reflect the need to recover college overheads, which would not necessarily be required to the same extent for schools.

- Where costs are the same for 'actual learners' and '15 learners' (Authorities 3 and 9), this reflects the fact that the authority already commissions provision on the basis of 15 learners, therefore, its actual learner level is 15.

- Where costs are the same for 'actual hours' and '150 hours' (Authority 7), this reflects the fact that the authority only funds providers on the basis of 150 GLH and its actual GLH are therefore 150.

- Authority 10's costs are relatively very low. It recognises that its teaching costs of £30 per hour are currently too low and that, in future, these will be increased. The costs are therefore currently understated and it is not believed that, in practice, Diplomas can be delivered for this cost, although information has been included for completeness.

In summary, it can be seen that the costs and 'surplus/deficit' per Diploma learner per annum for the four levels of costs are:

(i) **Actual hours, actual learners** – cost £1,513, 'deficit' £230

(ii) **Actual hours, 15 learners** – cost £1,338, 'deficit' £55

(iii) **150 hours, actual learners** – cost £1,098, 'surplus' £186

(iv) **150 hours, 15 learners** – cost £951, 'surplus' £332

There is, however, considerable variation at individual authority level around these averages.

Teaching makes up the largest component of these costs. Teaching costs average around £47 per hour. Given the additionality of provision, Diploma teaching is not currently 'mainstreamed'. However, if it was possible for Diploma teaching to fully replace existing teaching provision of a subject, this would reduce the above costs by around £470 per learner per annum (based on £47 per hour for 150 hours for 15 learners).

3.6 Costing the Net Additionality of Provision

One unitary authority had undertaken work to compare the costs of existing provision against Diploma provision, thereby identifying the additional costs of Diplomas. This work had been taken place as part of the development of a costing model, commissioned by Cambridge Education Associates, given that this authority had carried out previous detailed work on an Activity-Led Funding formula for schools.

It should be noted that this information is presented for illustrative purposes, and clearly, given that only one authority had undertaken costings in this manner, firm conclusions cannot be drawn in terms of wider generalisation for other authorities. The authority has itself recognised that there is scope to amend the assumptions used within the model, which would influence costs. There are a number of assumptions inherent within the Diploma costing model, with the key assumptions being:

- All learners will be taking the Higher level Diploma (Level 2);
- There will be full take-up of Diplomas;
- All Principal Learning, Project and Additional & Specialist Learning is delivered in the providing institution;
- The total number of taught hours per week used in the costing model is nine (of which 1.5 are outside the school day);
- Non-contact teaching time is 33.8% (for both existing and Diploma provision);
- The average salary cost for a teacher (for both existing and Diploma provision is £37,185);
- The average salary cost of classroom support for existing provision is £18,705 and for Diploma provision is £21,151 (as higher level classroom support is deemed to be required for Diplomas;
- The average salary cost of an administrative assistant is £19,059 and two hours of additional administrative time per week is required per Diploma line;
- Schools fund their traditional lessons in the same way that the local formula funds them.

The overall approach used to develop the costing model was:

- A group size was determined, for both existing provision (19 learners) and for each Diploma line (12 or 15 learners, depending on the line);
- Classroom assistant time was determined as a percentage of teaching time for both existing provision (26.4%) and for each Diploma line (50% or 75%, depending on the line);

- For each Diploma line, the additional non-staffing costs were compared with the equivalent funding for Key Stage 4 in the local funding formula to identify the net additional costs for Diplomas;

- The key non-staffing cost categories are: stationery/materials, furniture/ equipment; books/publications; trips/visits; exam fees; additional premises running costs; and protective clothing/uniforms. Transport costs have not been included, as these have been minimal to date.

- The gross cost of Diploma teaching was compared with the funding for Key Stage 4 teaching. The difference is the additional cost of Diploma teaching, if replacement of existing provision occurred. The total additional cost of Diploma provision is the additional teaching cost plus the additional non-staffing costs.

A summary of the costings for the first cohort for the academic year 2009-10 is shown in the Table below. The surplus/(deficit) represents the difference between the net cost of Diploma provision and the DFG for Level 2 provision.

Additional Diploma costs per learner per annum in 2009-10 (all figures in £)

Diploma line (all Level 2)	Gross cost of Diploma teaching	Gross cost of existing teaching	Net cost of Diploma teaching	Net cost of Diploma non-teaching	Total net cost of Diploma provision	Surplus/ (Deficit)
BAF	1,092	(658)	434	424	858	**134**
Construction	1,472	(658)	814	550	1,364	**(86)**
Creative & Media	1,092	(658)	434	484	918	**39**
Engineering	1,472	(658)	814	550	1,364	**(86)**
Hair and Beauty	1,365	(658)	707	550	1,257	**32**
Hospitality	1,365	(658)	707	550	1,257	**32**
IT	1,092	(658)	434	246	680	**421**
SHD	1,092	(658)	434	424	858	**243**

The additional net costs associated with Diploma provision can be seen to vary between £680 and £1,364, depending upon the specific line (average cost of £1,070 and average surplus of £91) per Diploma learner per annum.

It should be noted that this is based upon an assumption that Diploma provision can be met by existing teaching resource – 'full substitution'. Given that full substitution has not yet taken place, this is not happening in practice.

Clearly, the above costings are based on a range of assumptions and, as these change, so too will the costs. For example, the class size assumptions for Diplomas (12 or 15 learners, depending upon the line), are relatively low, and that these could potentially be increased (18 learners are already being achieved for IT). The authority also accepts that the additional non-staffing costs are relatively 'generous'.

The intention, therefore, is that this costing model will continue to be reviewed, as Diploma provision develops. However, it provides a useful illustration of the way in which authorities could consider the level of additionality associated with Diplomas.

4 Transport Practice and Costs

4.1 Approach

Our initial review of Diploma costing in the sample authorities identified a range of transport costing practice and data. On the whole, this was of insufficient quality to provide reliable conclusions on transport costs, and we therefore undertook to do more detailed work with a smaller sub-set of authorities which appeared to have made interesting progress towards addressing current and future transport costs. However, we also followed up with the wider sample to explore the costing work and data that they had undertaken, and where we felt the data was useable, we included it in our estimates of average transport costs.

4.2 Authorities' Approaches to Costing Transport

As noted above, in order to gain a greater insight into the way in which authorities are providing and costing the transport elements of Diploma provision, it was agreed that more in-depth work would take place with a smaller sub-set of the initial sample of 30 authorities. On the basis of our initial meetings with the full sample of authorities, which covered both tuition-related and transport-related issues, Cambridgeshire, Devon, Hertfordshire, Lancashire, Surrey and Worcestershire were selected to form the basis of this follow-up work. The further work covered the ways in which transport needs were being addressed/managed, the costs that were being incurred, the problems that the authorities have been encountering and the ways in which they have sought to resolve them.

The results of this further work form the main basis of the findings below, although there was also an array of relevant practice that has been drawn from the initial discussions with the wider group of 30 authorities.

It is important to note that none of the wider sample had a wholly comprehensive record of Diploma transport costs. Many have made an approximation of how much is being paid to provide additional contracted school buses/coaches, but, in all cases, there are a variety of 'hidden' costs that are not currently being built into the costings, and the make-up of these vary between the different consortia/authorities.

4.3 Responsibility for Transport

The responsibility for Diploma transport was found to vary considerably:

- In some authorities, the additional transport arrangements relating to Diplomas are dealt with by individual consortia, or even at individual school level, in isolation from wider authority transport planning/management;
- Other authorities reported that their 14-19 transport staff had a 'good relationship' with their respective Passenger Transport Unit, or Home to School transport team;
- Some authorities have introduced a '14-19 Transport Coordinator', but these personnel are not generally located within an integrated transportation unit, which may hinder the potential for their effectiveness;

- None of the sample authorities appear to have a wholly integrated, authority-wide approach in place, or a fully comprehensive approach to the planning, sourcing and provision of transport.

All of the sub-set of authorities with which we did further work recognised that their current approach to providing Diploma transport is unsustainable, even in the short term, and they are seeking to address these shortcomings in a variety of sometimes innovative ways. Other authorities devolve responsibility and/or funding for transport to consortium level, with little or no data being provided by the consortium to the authority.

4.4 Efficiency of Transport Practice

Authorities are at different levels of the roll-out of Diplomas, with varying degrees of take-up. This has had an impact upon the extent to which they have undertaken work to address transport requirements, and, although some have reviews currently underway, none were identified as having given this area truly comprehensive consideration. This has two broad implications:

- Unit transport costs are likely to be higher than they would otherwise be, if authorities were to embrace Diploma transport provision within their wider approaches to providing transport;

- The costs currently identified by authorities are likely to be substantially below the true costs of provision, because they have not included a number of 'hidden costs'. These 'hidden costs' include:

    - Use of existing school minibuses (the costing of which often appears to omit vehicle depreciation costs; maintenance costs; driver wages; provision of a supervisor on link journeys);

    - The cost of a 14-19 transport coordinator (in whole or in part);

    - General consortium administration costs;

    - Purchase and ongoing support of IT systems;

    - Set up/maintenance costs for smartcard/student travel discount schemes;

    - Parental contributions.

It is difficult to assess what this means in terms of the realism of the reported costs. On the one hand there is clear potential for greater efficiency as Diploma transport becomes a more established part of the education landscape and of the education transport requirement. On the other we are likely to see a more realistic, all encompassing cost level being reported, as an array of currently hidden costs are included in the cost calculations.

It would therefore be extremely beneficial for authorities to review all associated elements of education transport thoroughly, in order to understand not only the true costs of the various component parts, but also to identify the potential for more

efficient operating practices. There are many approaches that the authorities could adopt to improve on their current methods significantly, including application of the DCSF toolkit ('Access to the 2013 Diploma Entitlement: a toolkit to support local planning').

In addition to the generally incomplete way in which the transport costs are being viewed, measured and managed, there are other significant elements which are causing wide variances in the costs incurred. The two principal examples of this are:

- The number of days (or half-days) over which Diploma provision takes place. Where provision is based on two half-day sessions, rather than one whole day, the transport costs generally double. For some schools the situation is worse, as Diploma provision is provided over three half-days. One consortium currently has students being transported between three tuition sites in one day – with the inherent transport costs incurred.

- Where (as appears to be very common) students are expected to travel via their home school to the provider, with a similar return requirement – again, in many cases this is significantly increasing the amount of travel time and cost incurred. The cost implication of this is exacerbated by the interpretation that many authorities have in respect of their duty of care to pupils during the school day, which means that supervision is often also provided.

Three of the wider set of thirty authorities have adopted an approach which assumes that transportation costs to all non-standard learning (i.e. not just Diplomas) is the responsibility of the parent, and, as such, do not seek to quantify the transport costs. They also recognise, however, that this is open to challenge. There are also urban authorities, such as those in London, that do not consider transport costs at all, as under-16s are provided with free travel.

Another key element which may continue to be an issue for authorities, is the difficulty of access to the Diploma delivery sites. For some subjects, in some areas, transportation to the physical location of tuition is unavoidable, if the full range of Diplomas is to be offered. However, there may be scope in some cases for more innovative measures to be employed to reduce or remove the need for additional travel. Examples of this include peripatetic teaching; the increased use of video conferencing and utilisation of other funding streams, such as Building Schools for the Future, for the provision of additional in-house facilities. For many students, however, attendance on Diploma courses will mean that additional travel is required in some form and, many authorities have identified this as an integral part of the Diploma learning experience.

4.5 Key Modelling Assumptions

As noted above, the way in which transport cost data is held, and the cost elements that this covers, varies greatly at authority/consortium level. Therefore, in order to derive a useable set of base cost data for transport, the initial data has had to be converted to a consistent format using a number of fairly basic assumptions.

The sample authorities have all been categorised in urban, semi-rural and rural according to their 'degree of rurality', using DEFRA data. However, this disguises the actual levels of rurality at individual consortium level. For example, a rural authority will rarely be truly totally rural – there is likely to be at least one significant urban area within it. The reverse can be true of largely urban authorities. We have also pointed out that authorities are in different positions with regard to Diploma roll-out, and have tackled the process in different ways. Consequently, if a 'rural' authority is thus far only delivering Diplomas in a single, relatively urbanised locality, the additional Diploma transportation costs may be very low. It would not therefore be reasonable to assume that a low current transport cost was truly indicative of a rural authority's overall situation.

Whilst a figure for each of the three broad categories of authority has been calculated, there are a number of issues which need to be understood and which bear heavily on the usability of the data for informing national policy conclusions:

- For the purposes of data modelling we have sought to acquire data at consortium level wherever possible and to apply the broad 'urban/semi rural/rural' categorisation to this level of data. Thus, some authorities will have been able to provide sample costs that contribute to all three categories – urban, rural and semi-rural. Other authorities were unable to provide figures at consortium level, and authority-wide data has therefore been used.

- Where authorities/consortia deliver the Diploma over one, two or in some cases three days, we have assumed that these respective days each attract a similar level of transportation costs. We have then divided the current estimated transport costs by the number of days over which Diploma transportation is required, in order to reach a single day scenario – the assumption which underpins DCSF's funding. This is by no means a perfect solution, but it represents a reasonable method by which to align the data collected and for comparisons to be made.

- Two urban authorities have introduced initiatives that cause a significant increase of transport costs, such as 24/7 subsidised public transport for young persons. Arguably, the resulting cost should not be directly or wholly attributed to the Diploma. One urban authority requires all students to travel to new specialist Diploma delivery centres resulting in high transport costs. Conversely, in some semi-rural areas there are long standing arrangements regarding transport provision/sharing within a consortium, which are currently able to accommodate a modest amount of Diploma students on existing transport – these are not (yet) being considered as additional costs.

4.6 Range of Transport Costs Identified

A very wide range of unit costs were identified by authorities for the transport element of Diploma provision. We initially categorised authorities into three general classifications of urban, semi-rural and rural, but it became clear that individual consortia may have urban characteristics, even if they were situated in a rural or semi-rural authority. This would arise if a consortium drew its students from a single large town. Where consortium level data was available (which was not in every case) we asked the authorities themselves to allocate the consortia to the three categories.

It also became clear that the reported costs were in some cases counter-intuitive. For example:

- Reported costs from semi-rural authorities were higher than rural authorities;
- The costs of three urban authorities were higher than a number of rural and semi-rural authorities;
- Whereas in generality the semi-rural and rural authorities reported costs which were much higher than their allotted level of Sparsity Weighting, a minority reported costs which were much lower than the funding level.

Taking into account our comments on the quality of the costing methodologies, the range of reported costs, and the sometimes surprising numbers reported, we attach a high level of caution to the transport cost data. In particular, we recommend that the safest approach to the rural and semi-rural authorities is to treat them as a single entity, and we have therefore generally reported costs for this group of authorities in this way.

The detailed cost data is presented in the table below. It should be noted that where possible we have broken the authority-wide data down to individual consortium level. All authority and consortium identities have been anonymised.

Two ‘cost per learner’ columns are presented. Cost per Learner 1 is a calculation based on unadjusted data supplied by each authority. Given that consortia teach Diplomas over one, two and in one case three days, these data are not comparable. Cost per Learner 2 represents an estimate of the transportation costs assuming a single tuition (transportation) day by dividing the Cost per Learner 1 data by the relevant number of days over which tuition is provided (and therefore over which transport costs are incurred).

The ‘Sparsity Balance/Student’ column takes into consideration the actual Sparsity Weighting each authority receives, and compares this to Cost per Learner 2. A negative figure therefore represents a shortfall in the current level of sparsity funding, assuming a single tuition/transport day.

All the data conclusions assume this single tuition/transport day.

LA Type	LA	Cons-ortium	Tuition Days	Total Transport Costs (£)	Number of Diploma Students	Students Travelling	Cost per Learner 1 (£)	Cost per Learner 2 (£)	Sparsity Balance/ Student (£)
Rural	1	1	1	13,167	92	43	143.12	143.12	-67.14
Rural	5	2	1	13,840	40	40	346.00	346.00	-£262.93
Rural	6		1	10,000	107	99	93.46	93.46	18.22
Rural	7	1	3	4,000	98	10	40.82	13.61	91.47
Rural	7	2	2	13,349	104	89	128.36	64.18	40.90
Rural	7	3	2	22,600	124	92	182.26	91.13	13.95
Rural	7	4	2		204				105.08
Rural	7	5	2	8,924	250	40	35.70	17.85	87.23
Rural	8		2	8,000	67	28	119.40	59.70	37.38
Rural	9		2	105,600	3458	154	30.54	15.27	81.94
Semi-Rural	1	2	1	37,308	215	61	173.53	173.53	-97.55
Semi-Rural	7	6	2	2,500	49		51.02	25.51	79.57
Semi-Rural	10	1	1	10,034	29	29	346.00	346.00	-262.93
Semi-Rural	11		2	100,000	520	208	192.31	96.15	-61.28
Semi-Rural	12		2	47,070	287	123	164.01	82.00	-50.70
Semi-Rural	13	1	1	4,000	22		181.82	181.82	-162.29
Urban	1	3	1	51,177	1062	167	48.19	48.19	27.79
Urban	2		1	246	200	6	1.23	1.23	39.96
Urban	3		1						
Urban	4		3	71,250	159	151	448.11		11.59
Urban	5	1	2						
Urban	13	2	1	14,000	127		110.24	110.24	-90.71
Urban	13	3	2		39				19.53
Urban	13	4	2		12				19.53
Urban	13	5	1	11,000	148		74.32	74.32	-54.79
Urban	13	6	2	10,000	68		147.06	73.53	-54.00
Urban	13	7	2	2,000	43		46.51	23.26	-3.73
Urban	14	1	1						
Urban	14	2	1						
Urban	14	3	1						
Urban	14	4	1						
Urban	14	5	1						
Urban	15				73				
Urban	16		2	1,800	473	9	3.81	1.90	34.84

LA Type	LA	Cons-ortium	Tuition Days	Total Transport Costs (£)	Number of Diploma Students	Students Travelling	Cost per Learner 1 (£)	Cost per Learner 2 (£)	Sparsity Balance/ Student (£)
Urban	17		1	5,957	243	161	24.51	24.51	-24.51
Urban	18		1	60,000	200	200	300.00		
Urban	19		2	50,000	339	339	147.49		

Bearing in mind the qualifications we have made on the quality of the methodologies and data, and the adjustments we have made to achieve a degree of comparability, the cost data (assuming a single day of travel) is as follows:

- Rural – based on ten data sets, the cost per learner varied from £0 to £346, with an average value of £84 per Diploma learner.

- Semi-rural – based on six data sets, the cost per learner varied from £26 to £346, with an average of £151 per Diploma learner.

- Taking rural and semi-rural authorities as a single group, the average cost per learner is £109.33.

- Urban – based on 21 data sets, the cost per learner varied from £0 to £300, with an average value of £43 per Diploma learner. This average is heavily influenced by three authorities which have implemented extremely expensive solutions to 14-19 transport and attributed it in whole to Diploma provision. Removal of these three authorities from the equation, gives a cost per learner that varies from £0 to £110, with an average value of £21 per Diploma learner. It is noted that where an urban transport cost per learner is considered to be 'zero', this generally means that the LA is assuming that transportation costs lie with the parents or another third party.

We also calculated the shortfall between unit sparsity weighting and unit transport costs, again expressed as a per learner number. Taking the rural and semi-rural authorities as a single group (as discussed above), and using authority-wide data for those authorities which provided us with data at individual consortium level, this suggests that rural and semi-rural authorities spend an average of almost £68 per learner more than their average level of sparsity weighting.

The figures quoted above exclude data obtained from a separate exercise undertaken on behalf of the Rural Access to Learning Group (RALG), a group of authorities exploring transport costs in their communities. This data was provided to us in high level terms, anonymised, and without supporting information on methodology. We have therefore not included it in our core analysis.

4.7 Potential Future Unit Costs

For authorities/consortia to be better able to prepare themselves for future increases in Diploma learners, there are a number of key elements that need to be incorporated into current working practices, and shortfalls in management, policy or procedures that need to be addressed and overcome.

Most of the sample authorities do not currently have a long term strategy for managing transportation within overall Diploma delivery. Current activity is largely reactive, and often lacks the co-ordination and applied transport management expertise to ensure that opportunities for cost reductions are optimised. This is not sustainable as Diploma learner numbers increase. Implementation of a cycle of policy setting, service planning, and procurement followed by management / control of the sector should underlie future strategies.

A productive first step would be for authorities to clarify their policy with regard to Diploma transport, in relation to other forms of authority funded / managed transport provision – and thereafter to ensure that provision aligns with these policies. This would cover key areas such as whether Diploma students travel directly from home to their place of learning, or are required to travel via their home institution. Allied to this is clarifying whether there is a need to provide supervision on such transportation.

In many cases consortia are not dealing with a sufficiently large number of Diploma students to enable them to negotiate meaningful contracts with transport operators. The authorities however should be able to take significant steps in this direction, providing they consider Diploma transport as part of their entire transport provision – enabling more integrated contracts to be placed, irrespective of ultimate funding streams. This approach would give the authority a greater knowledge base on which to form budgetary judgements.

Authorities need to be more open to the full range of transportation options. Some are good at this, others less so. In part this is due to the relative inexperience/knowledge of the personnel charged with planning, procuring and administering the 14-19 Diploma transport arrangements. In some authorities this is the 14-19 Access and Transport Coordinator, whose personal positions are not aided by uncertainty around the long term existence of these roles and by wider authority reviews which are likely to affect transport budgets; both of which appear to be under way in a number of authorities.

Better and more co-ordinated planning and procurement will be essential, as there are two authorities who have stated their belief that there are simply insufficient numbers of vehicles available within their area to be able to provide the number of additional trips that full Diploma roll out is likely to require, given current delivery formats.

5 Funding Issues and Cost Pressures

5.1 Funding Streams

Diploma Formula Grant. The main concern raised was the potential for both take-up and quality to reduce if DFG funding was to reduce significantly from existing levels. The annual funding announcement and lack of certainty around the continuation of funding for two-year courses was also raised as an issue in this regard.

Whilst the majority of authorities felt that the current level of funding covered costs, it was argued that any significant reduction in the level of DFG would be highly likely to affect schools' willingness to engage with Diplomas, with adverse impact on the success of the Diploma programme.

Local Delivery Support Grant. For every Diploma line a consortium has approved for first teaching from September 2009, the consortium's local authority received £30,000 to help the consortium build delivery capacity. The allocation method has since changed, with allocations for 2010 now being based upon the total number of 14-19 year olds in an area (£8.86 per head) and the number of Diploma lines being offered in an authority for the first time (£40,000 per line).

One of the largest potential future cost pressures identified related to infrastructure costs, which are likely to be funded through CSG. As with DFG, concerns were raised over the continuation of CSG funding.

Wider funding pressures. There is currently considerable uncertainty over the potential changes in public sector funding that will result from the next Comprehensive Spending Review, covering the period 2011/12 - 2013/14, including the extent to which schools' funding may or may not be 'protected'. These pressures were raised by a number of authorities, in the context of more limited resources being available to schools in future to support new qualifications, particularly if these are deemed to be more expensive than existing forms of provision.

5.2 Cost Pressures

A range of cost pressures were discussed in interviews and, for completeness, these have all been included below. Given that certain issues were raised more frequently by authorities than others, the extent to which the issue was raised by different participants has also been identified. Specific cost pressures included:

- **Class sizes.** Nearly all of the authorities participating in the research identified smaller class sizes as being a specific cost pressure, in the context of lower learner numbers in the early stages of Diplomas. Authorities defined 'small' class sizes differently, with some taking these to mean any class sizes which did not cover their costs financially, and others considering far smaller numbers, which were at the limit of educational viability, in terms of the quality of the educational experience. Courses were identified as having been run for as low as four learners, due to initially expected learners dropping out, although five was generally considered to be an absolute minimum.

This has resulted in the need for top-slicing/cross-subsidisation arrangements, in order to 'pump-prime' smaller Diploma classes. For colleges, in particular, it was felt that, although such arrangements may operate as a 'loss leader' in the short term this would be unsustainable in the longer term.

In some cases, schools' desire for autonomy was identified as having had an impact on class sizes e.g. where schools, although geographically close, preferred to act as independent providers for their own pupils, rather than sharing provision. In such cases, the use of a funding model can be a useful tool in demonstrating the financial impact of such choices.

Some authorities/providers have addressed this issue by commissioning a minimum level of provision from colleges, or by setting minimum class size numbers. Colleges were identified as being more likely than schools to consider the economic viability of a course. In other cases, Level 1 and Level 2 courses had been run together, Hair and Beauty being an example which was specifically identified.

Participants also identified that, more generally, there were additional teaching costs arising from Diplomas in comparison with 'traditional' provision, given that group sizes will, on average, be smaller.

Finally, some authorities identified that in some cases larger groups than may be ideal have been run, to avoid 'stepped' fixed costs e.g. an additional teacher, associated with running another class. For example, a single class of, say, 22 may be run, rather than two classes of 11.

- **Transport.** Transport costs – the excess of actual costs per learner over the sparsity weighting allocation – were identified as a cost pressure by around a third of authorities, and these pressures have been described more fully in Section 4. However, it should be noted that Diploma learner numbers are currently relatively low, with ad-hoc transport arrangements being in place in a number of cases. As learner numbers increase, transport costs are expected to become a greater pressure.

- **Line of learning leads, domain and lead assessors.** Funding of these posts was raised as a significant specific cost pressure by around a quarter of authorities. Lead assessor salaries of c£50,000, and secondment costs for line of learning leads of £3,500-£6,000 (per line), were identified. In addition, authorities felt that much of this activity was currently being undertaken on the basis of goodwill, which may not be sustainable over the longer term, and were concerned that the posts would not be affordable if funding was terminated or reduced.

- **Staff cover/costs of collaboration.** The cost of backfilling staff and the costs of undertaking collaborative work were raised as a specific issue by around a quarter of authorities. These relate to the additional costs associated with partnership working, and the composite nature of the Diploma qualification; for example, Diploma development work; coordinating an increased number of

options meetings between colleagues; Continuing Professional Development; staff training; and succession planning.

- **Employer engagement and work experience/placements.** These costs, funding posts to engage with employers, arrange work experience and also paying employers to attend Diploma events, were raised as a specific issue by around a fifth of authorities.

- **Pastoral care.** Three authorities identified the costs of posts in relation to pastoral care as a specific pressure; for example, to undertake tracking; monitor attendance; and safeguarding activities.

- **Exam fees and related administration costs.** Identified by two authorities as a cost pressure, given the complexity of exam procedures for Diplomas specifically.

- **Functional skills.** Identified by two authorities as a cost pressure specific to Diplomas as compared to traditional provision, with, for example, a vocational teaching and learning consultant having been engaged in one authority to assist in improving the attainment of functional skills.

- **Information, Advice and Guidance (IAG).** The costs of providing IAG were specifically identified as a pressure by two authorities in the context of Diplomas, although clearly, IAG is a cost which could be associated with wider educational provision.

- **Risk assessments/CRB checks.** Two authorities identified that they paid for the costs of a company to assess risk for each of their external providers.

- **Capital funding.** Capital funding concerns were not generally raised in discussion, although there is clearly a need for authorities to consider the specific facilities required for Diploma delivery in conjunction with their overall secondary school capital strategy. In addition, the link with potential transport requirements will need to be made, depending upon the location of facilities. As Diploma learner numbers increase, existing capacity to deliver Diplomas may become more of an issue, which authorities will need to monitor closely.

  The costs of facilities development and technology were identified by three authorities as a pressure, and difficulties experienced in setting up skills centres (including private sector engagement/investment, given the current economic climate) were raised by two authorities. The loss of LSC capital funding was further identified by one authority, particularly as it was yet to benefit from the Building Schools for the Future programme.

5.3 Early Commencement of Diplomas and Impact upon Costs

DCSF was interested in identifying to what extent early commencement of Diplomas was taking place; for example, starting Diplomas at Key Stage 3 or starting Level 3 Diplomas at Key Stage 4, and how this may potentially impact upon costs. Very few examples were identified where this was taking place or had been considered. The main issues identified with the earlier commencement of Diplomas were the:

- Additional demands that would be placed upon these learners;
- Complication of planning, through the need to manage the logistics of delivery, with the potential for differing timelines for pupils within the same cohort;
- Possibility of having unviable group sizes;
- Need to consider Year 11 subjects that will be undertaken if the Diploma commences in Year 9 and is taken over two years;
- Greater potential need of safeguarding for younger pupils;
- Concern that learners would not be ready for work experience in any case until Key Stage 4, even where a Diploma commenced in Year 9.

Some authorities did report that some learners were taking Maths and English Functional Skills a year early, to provide them with an additional year to achieve Functional Skills, if this was not achieved by the end of Year 10. Only one authority reported that early commencement had taken place where Level 2 Diplomas had been spread over three years for some learners, instead of two years. In this case, the authority identified that schools were effectively paying for this, as no Diploma funding was provided until Key Stage 4.

Whilst it was initially considered that the early commencement of Diplomas could therefore potentially have been a cost pressure, the research identified that this was not an issue for authorities.

6 Efficiencies

6.1 Potential for Efficiencies

In relation to 2008-09 Diploma provision, the DCSF has previously stated that, "Our modelling of costs for Diploma delivery at KS4 for the CSR years assumed that savings could be made when more than 20 students in a given school were taking Diplomas on the basis that at this point it was theoretically possible that an existing class would not be needed, leading to a saving in staff time. However a strong theme emerging from the consultation was that it will not be possible for schools to realise efficiency savings from Diplomas until whole classes are actually being displaced. We recognise that this is unlikely to happen in 08/09 given the relatively small numbers taking Diplomas, and their uneven spread across schools and Diploma lines and levels. For 08/09 therefore the calculation of Diploma grant does not assume a contribution from savings".[7]

More recently, the DCSF has stated that, "We are not assuming any contribution from efficiency savings in 09/10 given our estimate of volumes."[8] However, there is an expectation from DCSF that, in the future, efficiencies will be achievable, with DCSF further stating that, "... we do expect as numbers increase over time there will be savings from provision displaced by Diplomas."[9] The DCSF's expectation, therefore, is that full efficiencies in relation to Diplomas would not all be achieved 'at once', but rather, would be achieved as take-up grew over time.

It is worth clarifying what is meant by efficiency savings in this context. At present, Diplomas are for the most part being undertaken as an additional qualification, with no changes/reductions being made to the existing curriculum. DFG also recognises some of the additionality associated with Diploma provision, with the DCSF having previously stated that, "on average, the amount of learning requiring additional funding equates to about 150 guided learning hours per annum as defined in the LSC methodology"[10].

There are therefore two ways in which efficiency savings could be achieved. The first is through the direct replacement of existing provision by Diplomas, as identified by the DCSF. The second is through learners undertaking provision away from the home school, with the result that the proportion of the AWPU equal to the time spent off-site may not be required by the home school, albeit additional costs may be incurred by the provider. In the latter scenario, full recovery of the AWPU may not be possible as a proportion of the home school's costs will be fixed.

A theme of the research was therefore to consider the pre-conditions that need to be in place for efficiencies to occur in practice, given the DCSF's views that, as a result of current relatively low learner numbers, efficiencies were not achievable for 2009-10. These pre-conditions (critical mass of learners at local level, full substitution and

7 Guidance to Local Authorities and 14-19 Partnerships on Diploma Formula Grant: 2008-09.

8 DCSF: Guidance to Local Authorities and 14-19 Partnerships/Consortia on Diploma Specific Formula Grant: 2009/10

9 DCSF website, 14-19 funding, Frequently Asked Questions.

10 DCSF website, 14-19 funding, Frequently Asked Questions.

improved strategic planning/joint working) and the associated factors that impact upon their achievement are described in further detail below.

(i) Critical mass of learners at local level

Future of the Diploma qualification. One of the overriding factors which authorities identified as having affected take-up was uncertainty over the future of the Diploma qualification. If greater certainty were to be achieved in this regard, this was expected to lead to increased take-up, thereby increasing the likelihood of achieving critical mass.

Embedding of Diplomas. Again, as previously considered, as Diplomas become more 'tried and tested', and achieve greater recognition/acceptance by higher education and employers, take-up is similarly likely to increase.

Displacement from the same option group. It is important to recognise that, in order to achieve efficiencies from a group of, say, 20 learners being displaced, these learners need to be displaced from the same option group. A point raised throughout the research was that, whilst there may be instances where 20 learners are attending a single Diploma class, they were displaced from up to five different option groups. In such cases, there is no potential to achieve efficiencies, if all of the remaining classes are still run.

Increase to 14 Diploma lines. Whilst an increase to the full range of 14 Diploma lines for pre-16 learners will expand the qualifications landscape, it also has the potential to make Diplomas more accepted and may therefore increase critical mass.

(ii) Full substitution

Replacement of existing subjects. In some cases, subjects that could potentially be replaced by a Diploma may be obvious e.g. replacement of GCSE or BTEC Information Technology by the Diploma in Information Technology. In other cases this is less clear. Gaining an understanding of the subjects that Diplomas are replacing will therefore be important in the context of curriculum planning and substitution at individual school level.

Reduction of qualifications 'landscape'. Authorities identified the continuation of the current range of qualifications, particularly BTECs, as one of the most significant issues affecting take-up. Whilst this breadth of qualifications is still being offered the ability of schools to substitute Diplomas for other qualifications will be limited.

Nature of Diploma qualification. A number of authorities observed that BTECs were perceived to offer an 'easier' route for learners, with Functional Skills being particularly challenging to achieve for the Diploma. The removal of such perceptions/barriers will be important in increasing the extent to which substitution takes place.

Rationalisation of options. Authorities identified that for substitution to occur, schools would have to accept a reduction in student choice and that, to date, this had not occurred.

Class sizes. As considered previously, authorities argued that Diploma classes would always, on average, be smaller than GCSE classes. Thus, even if complete substitution was achieved, additional teaching resources would be required as a result of lower pupil:teacher ratios for Diplomas.

(iii) Improved strategic planning/joint working

Joint working between schools. If, in order to achieve efficiencies, the range of options available in individual schools were to be reduced, corresponding increased joint working between schools is likely to be required. This could take the form of neighbouring schools offering specified subjects jointly, rather than all subjects being offered by all schools. Federations may also assist in this context, although this is likely to be a longer term development.

Greater flexibility of staffing resources. Inflexibility in terms and conditions of teaching and support staff was identified as a barrier to achieving more efficient working. A consortium in one unitary authority had established itself as a limited company, in order to achieve greater staffing flexibility, including the freedom to employ staff to work across schools. The increased use of part-time working was also identified as having contributed towards the achievement of efficiencies in a school within a metropolitan borough.

6.2 Approaches to AWPU Contribution

A number of approaches have been adopted as to whether or not, and the extent to which, an AWPU contribution from schools was requested. 40% of authorities did not request an AWPU contribution from schools; 27% of authorities did request an AWPU contribution, which represented the difference between the cost of provision and available resources; 27% of authorities requested an AWPU contribution at or around a one day per week equivalent; and the remaining authorities had a mixture of arrangements in place, reflecting different approaches between consortia and varying levels of AWPU contribution.

The level of AWPU contribution needs to be considered in the context of efficiencies, as it provides a guide to authorities' assumptions about the extent to which savings can be made. For example, if one day a week of Diploma provision took place and one-fifth of the AWPU contribution was transferred from a school to a provider, this implies that all the associated costs of a learner could be saved whilst a pupil is off-site with another provider. Conversely, if no AWPU contribution is made from a school to a provider, there is an implicit assumption that no saving can be made.

Where no AWPU contribution was made, the reason generally provided was that authorities believed that this would have impeded take-up. A number of authorities who had not initially requested any AWPU contribution did, however, indicate that this was unsustainable, and that a contribution would be required in the future, albeit not at full transfer rate, and recognising that this may need to be phased in over time.

Other authorities, however, took the view that schools had been used to contributing towards practical provision previously, and that Diplomas were no different in that regard. One authority required an AWPU contribution slightly higher than one-fifth, given that schools' receive significant additional funding over and above the AWPU. As noted above, approaches to requesting an AWPU contribution were not consistent between different consortia, even within the same authority.

A specific point was raised by a number of authorities in terms of the difference between the basis for funding schools and colleges. Colleges do not receive an AWPU equivalent and if no AWPU transfer is made from school to college, the college would be at a financial disadvantage.

One authority calculated that if a college provided the Principal Learning and Project components of the Diploma, it would undertake 58% of the total GLH but would receive only 26% of the total available funding, if only the DFG was transferred. Other authorities noted that if college provision were to prove to be significantly more expensive than school-based provision because of the need for full cost recovery by colleges, it would be likely that more schools would deliver in-house or through other schools.

A further issue identified was that, if a full AWPU contribution was made by the home school (to another provider school or college), and if it had significant numbers of Diploma learners attending provision at other sites, unless the school was also itself a provider, it would experience a net outflow of pupils and 'loss' in funding.

6.3 Authorities' Views on Efficiencies

The research specifically sought views from participants on the achievement of efficiencies, with the following key points being raised:

- Some authorities were, theoretically, assuming that efficiencies could take place, through the transfer of AWPU. However, in practice, there were very few examples identified where savings had been made through replacing existing provision with Diplomas.

- Authorities expressed the strong view that reducing the level of DFG would affect take-up by schools and that any significant reductions would have a major adverse impact on the Diploma programme.

- There was, however, a general recognition that DFG (and CSG) would not continue indefinitely, with a small number of authorities having made a contingency for potential levels of efficiencies that DCSF may require in future.

- One authority had asked its consortia to prepare three budget plans for 2009-10: (i) if DFG ceased in its entirety, (ii) if there was a 50% reduction in DFG and (iii) if there was a 20% reduction in DFG, as a means of considering their key priorities and which lines would be viable/non-viable, depending upon funding received.

- As considered previously, authorities identified that, by their very nature, Diplomas would always be more expensive than traditional provision, given the costs of collaboration, transport, and smaller class sizes.

- A significant majority of authorities believe that a critical mass of Diploma learners could not be achieved until at least 2013, and that additionality of provision would still be the norm until then.

- One authority had begun to consider how displacement could be achieved, through the use of a 'mapping tool'. This requested information from schools on their learner numbers across all types of qualification, in order to identify, at consortium and authority level, where smaller groups could be combined, to achieve more efficient class sizes and to enhance the learning experience.

6.4 Potential Application of Efficiencies

Given the above factors, our view is that efficiencies are not achievable for 2010-11. As part of the research, consideration was, however, given to the potential issues that may arise from any future requirement by DCSF for efficiencies to be achieved and, therefore, if any reduction in the level of DFG was made.

Authorities are currently at very different stages in implementing Diplomas and, therefore, any application of a national percentage efficiency assumption would result in 'winners and losers', given the very different levels of take-up. Any such efficiency assumptions would therefore be likely to impact disproportionately upon authorities having commenced Diplomas later, as they will have fewer Diploma lines, lower Diploma learner numbers and less potential to achieve efficiencies.

In addition, efficiencies can only take place at individual school level, rather than authority or even consortium level, further increasing the divergence in terms of 'winners and losers'. These issues would therefore need to be carefully considered, prior to any potential efficiency assumption being made in future.

7 Conclusions and Recommendations

7.1 Conclusions

In summary, the key conclusions from the research were as follows:

- **Diploma funding models.** A wide variety of Diploma funding models continue to be used by authorities. There are, therefore, a range of approaches to the allocation of Diploma Formula Grant (DFG), Practical Learning Opportunities (PLO) and Age-Weighted Pupil Unit (AWPU) funding.

- **Changes to funding models.** Five authorities (17%) specifically identified that they had changed their funding models between 2008-09 and 2009-10. Two authorities had moved from a devolved to a centralised funds flow model. One authority now required an AWPU contribution from its schools. One authority had agreed a common funding rate for all providers. One authority now funds only the incremental variable costs of additional pupils, rather than the average per pupil cost, which included an element of fixed costs, and was therefore higher.

- **Allocation of Diploma Formula Grant.** In terms of DFG, 37% of authorities (11) held this funding centrally, for subsequent allocation to the provider; 37% (11) allocated DFG funding to consortia to manage; 17% (5)allocated DFG funding to the home school; and 10% (3) had a mixture of the above approaches i.e. with specified percentages of funding being retained centrally, allocated to providers, and allocated to the home school.

- **Top-slicing of Diploma Formula Grant.** Seven authorities (23%) specifically identified that they had top-sliced the DFG to make contributions towards: the costs of collaboration and central costs; additional preparation activity; initial purchase of equipment; employer engagement; 'pump priming' smaller class sizes in the initial stages of Diplomas; a contingency, in the event that efficiencies are required in future by DCSF; and separation of the sparsity weighting of DFG to pay for transport-related costs.

- **Allocation of Practical Learning Opportunities funding.** As with DFG, authorities have used a range of different methods for the allocation of PLO funding: 57% of authorities (17) devolved the PLO funding to schools; 23% (7) held PLO funding centrally; 10% (3) allocated PLO funding to consortia; and 10% (3) had a mixture of arrangements in place e.g. different percentage allocations being provided to schools, consortia, or held centrally.

- **Age-Weighted Pupil Unit contribution.** It was identified that 40% of authorities (12) did not request any AWPU contribution from schools; 27% (8) requested an AWPU contribution which represented the difference between the cost of provision and available resources; 27% (8) requested an AWPU contribution at or around a one day per week equivalent AWPU contribution to Diplomas; and the remaining 6% of authorities (2) had a mixture of arrangements in place, reflecting different approaches between consortia and varying levels of AWPU contribution.

- **Costing of Diplomas.** In terms of work that had taken place to cost Diplomas, of the sample of 30 authorities: 23% (7) had costed Diplomas bottom-up, costing individual components of Diploma delivery e.g. equipment, at a more detailed level; 17% (5) had costed Diplomas bottom-up, although at a less detailed level e.g. just separating costs into teaching and non-teaching; 23% (7) had not costed Diploma provision, but had instead relied upon rates e.g. per hour, per day, as previously paid for vocational provision; and the remaining 37% (11) had not undertaken any costing of Diploma provision. Where no costing work had been undertaken, the approach used to allocate funding to providers for the provision of Diplomas was either based upon existing vocational provision rates or by directly passing across the amount received for DFG to providers.

- **Assumptions over costs included.** Where bottom-up costing work had been undertaken, authorities made very different assumptions about the costs to be included. Of the eleven authorities selected to work with in more detail on delivery costs:

    - 64% (7) included only 'direct' delivery costs and the remaining 36% (11) also included 'central' infrastructure costs;

    - Only 18% (2) had costed transport, with the remaining 82% (9) not having undertaken any transport costings;

    - 55% (6) costed individual Diploma lines; the remaining 45% (5) only costed a 'generic' Diploma.

    In some authorities, there were also different approaches to costing in the various delivery consortia. In general, however, authorities tended to cost only the 'incremental' elements of Diploma provision which take a place away from the home school.

- **Individual cost components.** Although individual authorities made different assumptions over the costs that they included, the full range of costs considered were: teaching; technical support; transport; equipment/ consumables; trips/visits; infrastructure; exam fees; premises; employer engagement/work experience; Continuing Professional Development; and the full cost of bought-in provision, including college overheads.

- **Diploma costs identified.** As authorities had assumed different numbers of guided learning hours (GLH), and different class sizes, the more detailed costing work undertaken with the ten authorities with more advanced cost models sought to express their costs on common bases: (i) actual hours, actual learners; (ii) actual hours, 15 learners; (iii) 150 hours, actual learners; (iv) 150 hours, 15 learners. The average costs for a Diploma learner per annum on these differing bases were £1,513; £1,338; £1,098; and £951 respectively. DFG is currently provided at an average of £1,000 per pupil across Levels 1 and 2, before sparsity or area cost add-ons are factored into the DFG. DCSF has not specified the cost elements which the DFG is intended to cover, and a

number of the costs included by authorities in the above figures could be met from funding streams other than DFG.

- **Transport costs.** Authorities' transport costing data was generally not strong and the results of our analysis therefore need to be treated with great caution. A very wide range of unit costs were identified and there were some unexpected outcomes in terms of the relationships of rural, semi-rural and urban transport costs. Expressed in costs per learner terms, rural costs varied from £0 to £346, with an average value of £84; semi-rural cost varied from £26 to £346, with an average of £151. The rural/semi-rural categorisation produced a number of surprising results, and we therefore believe that the overall rural/semi-rural average of £109 would provide a more reliable basis for cost estimation. Urban costs per learner varied from £0 to £300, with an average value of £43 per Diploma learner. This average is heavily influenced by three authorities which have implemented extremely expensive solutions to 14-19 transport and attributed it in whole to Diploma provision. Exclusion of the high cost urban authorities brings the urban average down to £21 per learner. Subject to the issues relating to the quality and consistency of the data, the data consensus is that transport costs exceed the sparsity allowance in most of the authorities/consortia for which transport cost data exists. This is not true of every authority or consortium, but taking averages across the sample, this does appear to be the case in overall terms. In summary, therefore, the data pointed strongly towards a conclusion that transport costs exceed the sparsity weighting in rural and semi-rural areas, with an average shortfall, taking the two groups together, of £68.

- **Cost pressures.** One of the largest potential future cost pressures identified related to infrastructure costs e.g. the costs of collaboration and assessment, which can currently be funded through the Local Delivery Support Grant (formerly known as the Consortia Support Grant). The second most significant area of cost pressures are those surrounding transport, which are set to increase in line with Diploma roll out against a backdrop of reducing Local Authority budgets. This is likely to remain an issue until both critical mass is reached and Local Authorities develop ways to manage this element more effectively. Class sizes were also identified as a specific cost pressure, particularly in the context of the low level of learner numbers that has been experienced in the early stages of Diplomas. Authorities argue that it would be unsustainable to support such small class sizes in the longer term, and some authorities/providers have addressed this issue by commissioning a minimum level of provision from colleges, or by setting minimum class size numbers. This is intended to address issues of financial and/or educational viability, although clearly, any such decisions need to be considered in the context of a Diploma entitlement, take-up of Diploma lines, and make allowances for the qualification being in the very early stages of delivery.

- **Efficiencies.** Efficiencies potentially arise when a critical mass of Diploma learners develops, allowing schools to displace existing provision, and when elements of Diplomas are undertaken outside the home school, allowing schools to redeploy the resources freed up by the departure from school of a

group of students. Given the current level of learner numbers, a significant majority of authorities did not believe that a critical mass of Diploma learners would arise until at least 2013. Additionality of provision is therefore still the norm. Pre-conditions for efficiencies to be achieved were considered to be:

(i) **Achieving critical mass at lower level** – greater certainty about the future of the Diploma qualification; embedding of Diplomas; displacement from the same option group; increase to 14 Diploma lines.

(ii) **Full substitution** – replacement of existing subjects; reduction of the qualifications 'landscape'; reducing the perception of the Diploma being a significantly more difficult qualification; rationalisation of options; smaller Diploma class sizes.

(iii) **Improved strategic planning/joint working** – joint working between schools; greater flexibility of staffing resources.

- **Good practice.** A number of areas of good practice in relation to Diploma costs and funding were identified, which could be considered by authorities more widely. These included: developing a better understanding of the costs of Diploma provision compared to existing provision; forecasting the potential longer term learner numbers and total costs of Diploma provision; review of Diploma funding models to ensure that these remain fit for purpose as learner numbers increase; developing the local authority strategic planning role; giving consideration to the circumstances under which efficiencies may be achievable and contingency planning in the event that levels of DFG and CSG reduce in future.

- **Transport good practice.** Evidence of good practice with regard to transport management and costing was less evident. Solely from a transport perspective (recognising that there may be pedagogical arguments against it) we would advocate: delivering the outsourced elements of Diploma Study during a single, sometimes extended day; consideration of students travelling directly to their host establishment, rather than via their home school; staggered school start/finish times; greater integration of Diploma transport arrangements into wider authority transport provision; development of enhanced ticketing products, particularly in more urban areas. In some instances there may be pedagogical reasons that hinder the implementation of the single day delivery model.

7.2 Recommendations

Based upon the findings of the research, a number of key recommendations have been identified:

- **Funding models.** Authorities should continue to keep their existing funding models under review, to ensure that these remain fit for purpose, as Diploma learner numbers grow.

- **Diploma costs.** Authorities should quantify the full costs associated with Diploma provision (direct delivery, transport and infrastructure) to ensure that

they are aware of the cost implications, should any potential reductions be made to the funding streams associated with Diplomas. This should include comparing the costs of Diploma provision with existing educational provision.

- **Class sizes.** Authorities should consider the sustainability of smaller class sizes and whether strategic work at authority or consortium level should be undertaken to identify the most viable class size (taking into account the stage of delivery) and scope for increasing the viability of class sizes.

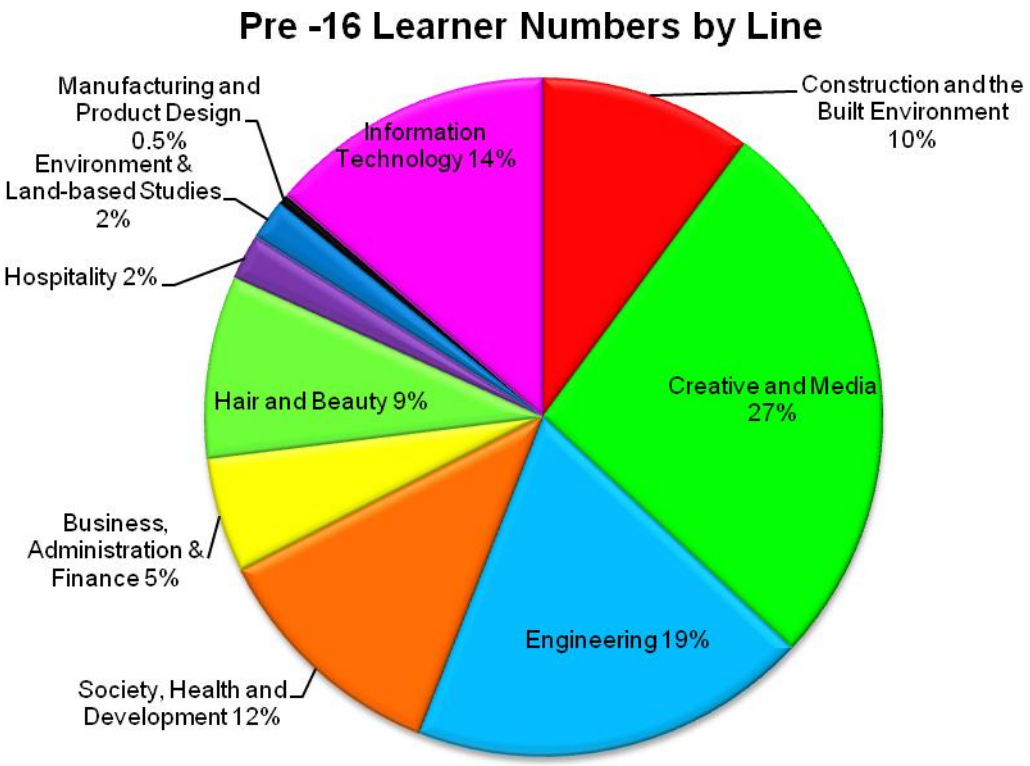
- **Transport.** Authorities should bring Diploma transport into the mainstream of their transport planning and procurement. Whilst Diploma Transport Co-ordinators do exist in many local authorities, they are generally not fully integrated within LA Transportation Units. A more holistic approach will help to drive out economies of scale as learner numbers increase

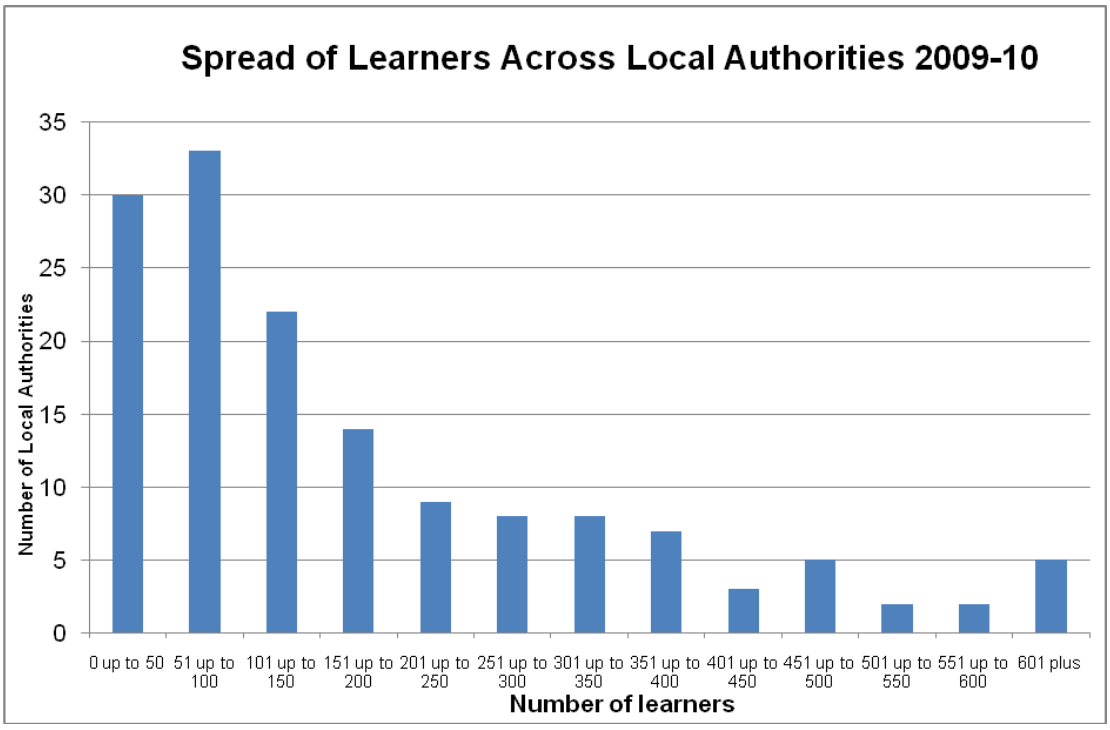
- **Efficiencies.** It is **not** recommended that DCSF seeks to implement reductions in funding in 2010-11 based on the ability of schools to achieve efficiencies, as the preconditions for achieving efficiency gains are not yet evident. However, it is suggested that DCSF should continue to monitor the scope for efficiencies in later years, particularly as learner numbers increase, as Diplomas become a mainstream curriculum area (potentially replacing other qualifications), with DFG potentially reducing accordingly.

- **Diploma Formula Grant for 2010-11.** Taking both Diploma delivery and transport costs into account, in overall terms, it would appear that, on average, Diploma Formula Grant, including the sparsity weighting, covers costs. The sparsity weighting element is handled in a variety of ways, from full devolution 'en-bloc' to micro management. Given the importance of maintaining and improving current levels of Diploma take-up, it is therefore suggested that, for 2010-11, DCSF should continue to allocate DFG funding to authorities at similar levels to those as for 2009-10 and consider the implications of the finding that transport costs appear to exceed the current sparsity weighting.

- **Good practice.** Authorities should consider the areas of good practice identified as part of the research, and whether these have the potential to improve their knowledge and awareness of Diploma costs and funding.

Appendix 1 – Pre-16 Diploma Learner Numbers (based upon local authority returns to DCSF in November 2009)





Appendix 2 – Basis of Local Authority Sample Selection

The 30 sample authorities were selected on a 'purposive' basis, considering factors such as:

- High and low levels of learner number take-up;
- The presence of consortia which will deliver all ten lines in 2009-10 and all 14 lines in 2010-11;
- The presence of consortia which will deliver half or less of the available lines in 2009-10;
- Different models of provision; for example, fully centralised, part-centralised/part-devolved, fully devolved models of funds flow;
- Inclusion of authorities which participated in the previous 2008 study, to identify how they had adapted their initial models and Diploma costings;
- A balance of political leadership across the three main parties;
- Good coverage of the country as a whole, including all nine Government Regions;
- Different levels of rurality.

Appendix 3 – Rural/Urban Local Authority Classification

Source: http://www.statistics.gov.uk/geography/lac.asp

The LA Classification was introduced in 2005 as a Department for Environment, Food and Rural Affairs (Defra) initiative and was developed by the Rural Evidence Research Centre at Birkbeck College (RERC). There are six urban/rural classifications, which are defined as follows for metropolitan districts, London boroughs, unitary authorities and district councils:

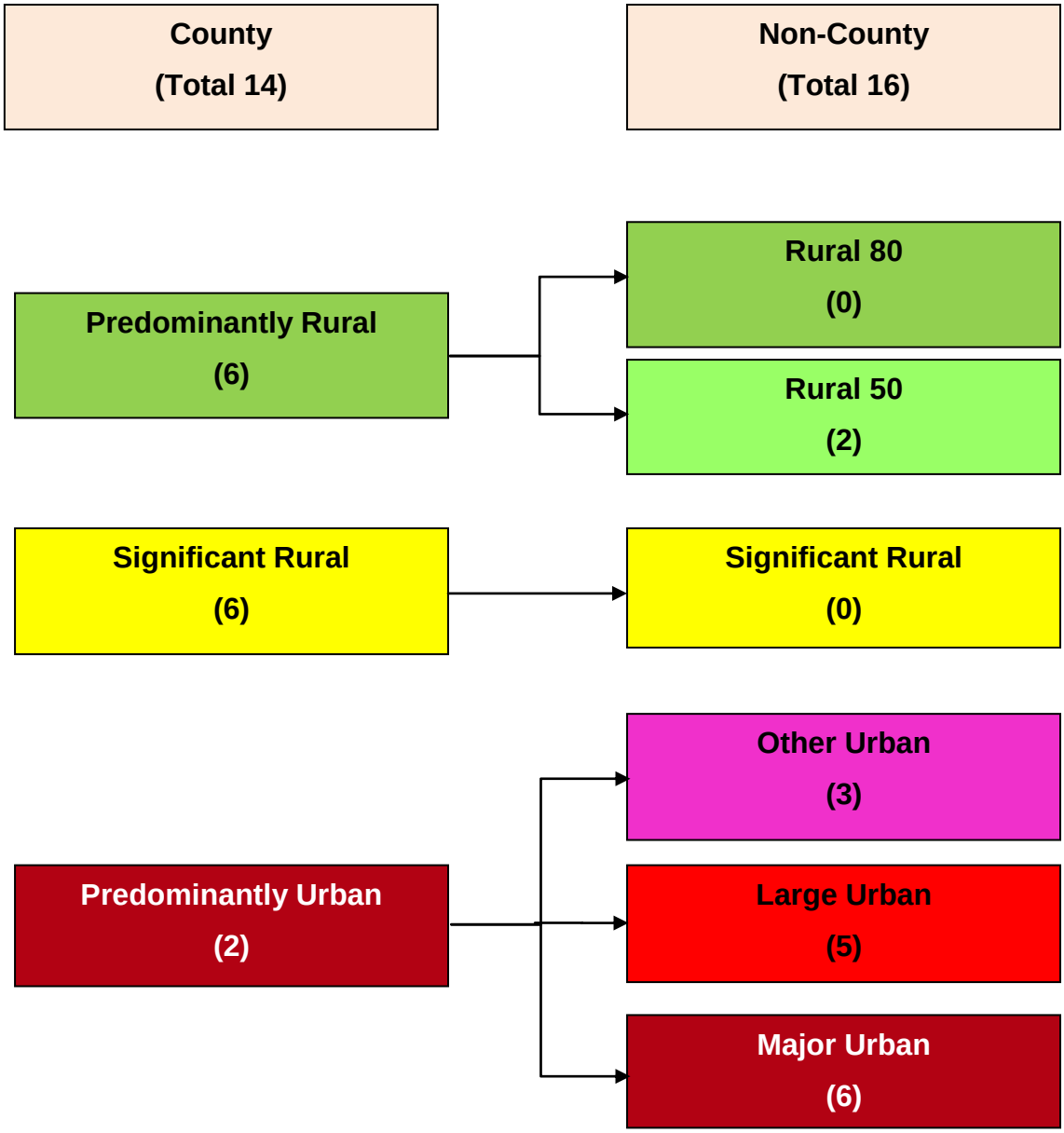
- Major Urban: local Authorities that either have 100,000 people **or** 50% of their population in urban areas with a population of more than 750,000;
- Large Urban: local Authorities that either have 50,000 people **or** 50% of their population in urban areas defined as Large Urban (i.e. with a population between 250,000 and 750,000);
- Other Urban: fewer than 37,000 people or less than 26% of their population in rural settlements and larger market towns;
- Significant Rural: more than 37,000 people or more than 26% of their population in rural settlements and larger market towns;
- Rural-50: at least 50% but less than 80% of their population in rural settlements and larger market towns;
- Rural-80: at least 80% of their population in rural settlements and larger market towns.

For county councils, the same criteria cannot be applied, as, in general, they have larger populations. A three category classification is therefore applied to counties as follows:

- Predominantly urban: less than 26% of their population in rural areas;
- Significant rural: more than 26% of their population in rural areas;
- Predominantly rural: more than 50% of their population in rural areas;

The way in which the county and non-county classifications map across to one another are illustrated in the diagram below, showing the number of authorities which formed part of the research within each classification.

Appendix 4 – Rural/Urban Local Authority Classification



Appendix 5 – Authorities Participating in the Research

Authority	Type of Authority	Rurality	Number of Diploma Lines 2009	Number of Learners 2009
Barnsley	Metropolitan borough	Predominantly Urban	8	167
Birmingham	Metropolitan borough	Predominantly Urban	7	429
Brent	London borough	Predominantly Urban	1	19
Dudley	Metropolitan borough	Predominantly Urban	6	221
Hackney	London borough	Predominantly Urban	3	118
Hertfordshire	County	Predominantly Urban	8	1,105
Leicester	Unitary	Predominantly Urban	5	103
Liverpool	Metropolitan borough	Predominantly Urban	8	295
Luton	Unitary	Predominantly Urban	3	72
Nottingham	Unitary	Predominantly Urban	7	362
Plymouth	Unitary	Predominantly Urban	9	283
Reading	Unitary	Predominantly Urban	6	88
Sheffield	Metropolitan borough	Predominantly Urban	7	413
Stoke-On-Trent	Unitary	Predominantly Urban	8	356
Sunderland	Metropolitan borough	Predominantly Urban	8	339
Surrey	County	Predominantly Urban	7	453
Buckinghamshire	County	Significantly Rural	5	191
East Sussex	County	Significantly Rural	9	520
Lancashire	County	Significantly Rural	7	231
Leicestershire	County	Significantly Rural	7	416
Nottinghamshire	County	Significantly Rural	9	577
Worcestershire	County	Significantly Rural	9	394
Cambridgeshire	County	Predominantly Rural	7	506
Cumbria	County	Predominantly Rural	8	288
Devon	County	Predominantly Rural	6	92
Dorset	County	Predominantly Rural	7	167
Lincolnshire	County	Predominantly Rural	10	1,218
North Somerset	Unitary	Predominantly Rural	7	478
Northumberland	County	Predominantly Rural	4	61
Wiltshire	Unitary	Predominantly Rural	7	271

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