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# *Assessing benchmarks of good practice in school career guidance*

Gatsby Charitable  
Foundation

*Gatsby Charitable  
Foundation*

*April 2014*

*Final report*

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# Executive summary

## Background

The Gatsby Charitable Foundation commissioned PricewaterhouseCoopers LLP (PwC) to assess the costs and benefits of eight benchmarks of good practice in school career guidance in England. The scope of this work is set out in our engagement letter dated 20<sup>th</sup> February 2014.

## The benchmarks

There are eight benchmarks of good practice. Figure 1 below describes the vision of each benchmark.

Figure 1: The vision

*Every school and college should have an embedded programme of career education and guidance that is known and understood by pupils, parents, teachers and employers.*

**1**

*Every pupil, and their parents, should have access to good-quality information about future study options and labour-market opportunities. They will need the support of an informed adviser to make best use of available information.*

**2**

*Pupils have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each pupil. A school's careers programme should embed equality and diversity considerations throughout.*

**3**

*All teachers should link curriculum learning with careers. Science, technology, engineering and mathematics (STEM) subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.*

**4**

*Every pupil should have multiple opportunities to learn from employers about work and employment and the skills that are valued in the workplace. This can be through a range of activities such as visiting speakers, mentoring, enterprise schemes and a range of other enrichment activities.*

**5**

*Every pupil should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.*

**6**

*All pupils should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.*

**7**

*Every pupil should have opportunities for guidance interviews with a careers adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made and should be expected for all pupils, but should be timed to meet their individual needs.*

**8**

While we anticipate that schools will work towards all eight benchmarks simultaneously we estimate the cost of activities required to achieve each benchmark separately. We also assume that all schools start from a position where none of the benchmark activity is currently taking place. This will tend to underestimate the current state of career guidance in English schools and overestimate the additional cost of introducing the benchmarks. We assume that schools will continue to provide careers education as part of Personal, Social, Health and Economic (PSHE) education and work with other parties to provide individual plans for young people with special educational needs. We also assume that local authorities will retain a statutory duty to secure sufficient suitable education and training for all resident young people aged 16 to 19 and that they will continue to work with schools to identify potential NEETs (i.e. Not in Education, Employment or Training). We have, therefore, attributed no additional cost to this activity.

## *Approach*

We have used the Standard Cost Model (SCM) to estimate the economic costs of the benchmarks. This has involved using activity based costing to breakdown each benchmark into its component activities and then gathering cost information relating to a small cross-section of 'typical' schools which we have then extrapolated across all state maintained schools in England.

Our analysis considers the costs of establishing and operating the benchmarks, focusing on the costs incurred by schools only. We do not consider any additional costs for the National Careers Service or others involved in the career guidance system. We do not attach a cost to any time spent by pupils nor do we include any costs incurred by parents/guardians and employers on the basis that any additional costs incurred by each of these stakeholders are at least offset by benefits to them.

Our assessment of the potential costs of each benchmark has involved the following five steps:

- Identifying who needs to do what for each benchmark;
- Determining the size of the affected population (i.e. the number of schools by type) and the frequency with which each task needs to be completed;
- Estimating the unit costs (i.e. cash and time) associated with each set of activities;
- Identifying the effect of school characteristics (i.e. size, type and location) on delivery costs; and
- Determining the overall costs of undertaking the activities (as the product of the unit cost and the quantity).

Our approach to assessing the costs of the benchmarks has been largely desk based, drawing on the knowledge of the International Centre for Guidance Studies at the University of Derby (iCeGS). We have used data from the Office for National Statistics (ONS) and the Department for Education (DfE) as well as various other official publications and published reports.

PwC has not undertaken any assurance or audit of the underlying data that have been used.

## *The school delivery model*

In consultation with iCeGS we have developed a school delivery model for the English context which forms the basis of our cost analysis. This model comprises a core team that is responsible for delivering career guidance with the assistance of a support team.

The core team is led by a member of the Senior Leadership Team (SLT), who is accountable to the school's Headteacher, Board of Governors and other senior stakeholders for the delivery of career guidance in the school. The Careers Coordinator reports directly to the SLT member on matters related to career guidance and is responsible for the design, development and implementation of career guidance. The Administrator (or Administrators, depending on resourcing requirements) provides administrative assistance for career guidance activities.

The careers support team is comprised of Careers Adviser(s), Class based teachers and IT support, all of whom support the delivery of career guidance in the school.

## *Estimated costs*

There are two main types of costs associated with the delivery of the benchmarks:

- The employment costs related to achieving the benchmarks; and

- Any additional expenses incurred, (e.g. subscription fees, teaching cover etc.).

We consider these costs separately. Table 1 shows the costs associated with delivery of the benchmarks in a typical school (i.e. a medium sized school outside London and the Fringe Area).

*Table 1: Annual cost of achieving the benchmarks in a typical school*

<b>Benchmark activity</b>	<b>Employment costs</b>	<b>Expenses</b>
<p><b><i>Benchmark 1: A careers programme</i></b></p> <p>The core team responsible for career guidance in each school will develop and manage the implementation of a stable, structured career guidance programme with subject matter input from Class based teachers, the Careers Adviser(s) and IT support.</p>	£18,525 in Year 1 £9,564 thereafter	-
<p><b><i>Benchmark 2: Learning from career and labour market information</i></b></p> <p>The core team will design and implement a strategy for collating/purchasing and distributing career path and labour market information, which will be delivered by the Careers Adviser(s).</p>	£1,864	£1,000
<p><b><i>Benchmark 3: Addressing the needs of each pupil</i></b></p> <p>The core team will oversee data input into career guidance records for each pupil. Records will be maintained by the Careers Adviser(s) with some input from IT support. The school will purchase an alumni tracking system and the Careers Administrator(s) will be responsible for using it to track pupil destinations for at least three years.</p>	£2,852	£800
<p><b><i>Benchmark 4: Linking curriculum learning to careers</i></b></p> <p>STEM teachers will maintain their knowledge about the link between careers and curriculum learning. This will be achieved through Continuing Professional Development (CPD) and supported by the development of external networks by the core team, Careers Adviser(s) and Class based teachers.</p> <p>The school will incur additional expenses relating to professional membership fees and teaching cover (to facilitate attendance at CPD).</p>	£14,635	£800
<p><b><i>Benchmark 5: Encounters with employers</i></b></p> <p>The core team will be responsible for providing pupils with at least one meaningful encounter with an employer per year.</p>	£1,363	-
<p><b><i>Benchmark 6: Experiences of workplaces</i></b></p> <p>The core team will be responsible for the design and management of the process for providing workplace experiences, which will be implemented by the Careers Adviser(s).</p>	£8,074	-
<p><b><i>Benchmark 7: Encounters with further and higher education</i></b></p> <p>The core team will be responsible for encouraging encounters with further and higher education, including covering transport costs for those pupils who would otherwise be unable to afford it.</p>	£1,363	£270
<p><b><i>Benchmark 8: Personal guidance</i></b></p> <p>The core team will be responsible for managing and arranging structured interviews with pupils, which will be conducted by the Careers Adviser(s).</p>	£2,091	-
<b>Total cost of achieving the benchmarks in Year 1</b>	<b>£50,767</b>	<b>£2,870</b>
<b>Total cost of achieving the benchmarks from Year 2 onwards</b>	<b>£41,806</b>	<b>£2,870</b>

We assume that all schools start from a position where none of the benchmark activity is currently taking place. We allow additional time in the first year of implementation (Year 1) for the initial design of the career guidance

programme. We believe this will require a broader consultation and research exercise than the subsequent annual reviews and updates. Based on the information in Table 1, we estimate that the total cost of achieving all the benchmarks in a typical school will be £53,637 in Year 1 and **£44,676 per annum** thereafter. This is equivalent to **0.9% of total revenue expenditure<sup>1</sup> in 2012/13** or **£54 per pupil** from Year 2 onwards.

The cost of the benchmarks is sensitive to school characteristics such as size (i.e. the number of pupils and teachers), type (i.e. whether or not it has a sixth form) and location (i.e. pay scale area). Table 2 summarises the cost of achieving the benchmarks by school type and location from Year 2 onwards.

*Table 2: Sensitivity analysis: Total cost of achieving the benchmarks by school type and location from Year 2 onwards*

	Inner London	Outer London	The Fringe Area	Rest of England
Small	£48,264	£46,942	£40,608	£38,472
Medium	£56,874	£55,380	£47,053	£44,676
Large	£77,445	£75,649	£62,184	£59,161
Sixth form	£76,744	£74,978	£61,784	£58,708

We estimate that the total cost of delivery will range from £45,209 to £92,466 in Year 1 and £38,472 to £77,445 from Year 2 onwards in small schools in the rest of England and large, Inner London schools respectively.

We then use DfE data on school size and location and the total number of pupils to estimate the overall school delivery costs across England as a whole. We estimate the total cost of achieving all the benchmarks across England will be **£172m** from Year 2 onwards. This is equivalent to approximately **1.8% of gross expenditure<sup>2</sup>** and **£54 per pupil**. Considering these costs over the course of a pupil’s journey from Year 7 to Year 13, we estimate the total cost per pupil will be £196.

Using the DfE’s projections of expected pupil numbers, we estimate that in 2021/22 the total cost of implementation will be £181m or £52 per pupil (i.e. the cost per pupil is actually expected to decrease because the 5% increase in total cost is offset by a projected increase of almost 11% in pupil numbers during this time).

These cost estimates relate to school level provision only. We have not included the costs of providing career guidance to those pupils who leave school at the end of Year 11 and attend a Further Education (FE) college because we have assumed that those costs are borne by the colleges themselves.

## Benefits

More effective career guidance can potentially lead to economic and social benefits for the individual pupil, for employers, for the Government and for the country as a whole which offset the costs to schools of implementing these benchmarks.

We have developed an impact pathway which describes, in a simplified way, how the career guidance embodied in the benchmarks (as a package of measures) can be expected to drive positive economic and social outcomes. This is based on a review of previous analyses of the economic and social contribution of schools career guidance<sup>3</sup>. Our review suggests that economic and social outcomes are likely to arise from a sequence of links (see Figure 2):

- Pupils get a better understanding of potential work and progression routes;

<sup>1</sup> Total revenue expenditure includes expenditure on teaching staff, educational support staff, other employee costs and running expenses, including Direct Revenue Financing (Revenue Contributions to Capital) (expenditure reference E30).

<sup>2</sup> Gross expenditure differs from the above in that it does not include Direct Revenue Financing.

<sup>3</sup> See, for example, Mayston, D. (2002). Assessing the benefits of career guidance. CeGS Occasional Paper. Derby: Centre for Guidance Studies, University of Derby.

- Pupils are, therefore, better motivated to commit to education and acquire the skills and qualifications they require for a successful working life and, as a result, are likely to achieve more;
- Pupils with higher skills and qualifications are likely to achieve better outcomes in the labour market (e.g. higher earnings, better likelihood of employment and greater satisfaction in their working life); and
- Pupils are less likely to spend protracted or frequent periods Not in Education, Employment or Training (NEET) which means that their wellbeing will be greater and they will impose relatively fewer costs on the public finances and on society.

Figure 2: Overview of impact pathway



We have reviewed the existing literature to identify evidence which can be used to inform an understanding of the potential benefit of the benchmarks. In practice, in the time available, this analysis is necessarily illustrative rather than exhaustive.

We note that there is limited empirical evidence on the relationship between all elements of the career guidance benchmarks, pupil motivation and attainment.

We have, therefore, focused on the potential implications of two related outcomes:

- An increase in the earnings of young people who either acquire more skills and qualifications and so increase their lifetime earnings and/or increase their probability of finding employment which will be reflected in higher incomes for them as individuals and also higher receipts for the Exchequer (as they pay more tax on their earnings); and
- A potential reduction in the number of young people who are NEET.

Research for the Department for Business, Innovation & Skills (BIS) has estimated the returns to intermediate and low level vocational qualifications<sup>4</sup> and Higher Education (HE)<sup>5</sup> both in terms of an increase in the lifetime earnings of the learners and benefits to the Exchequer. There are also a number of studies which estimate the economic and social costs associated with growing numbers of young people being NEET. Some of these costs are borne by the young people themselves (i.e. wage scarring reduced employability, fewer/ lower qualifications, reduced self-confidence), whilst others are borne by the Exchequer and society as a whole (i.e. additional benefit payments, higher cost of crime, higher healthcare costs, lost tax revenues, etc.).

### *Interpretation of costs and benefits*

Some sense of the scale of the potential economic and social benefits of the career guidance Benchmarks relative to their costs of delivery can be gleaned by comparing the lifetime cost of providing one pupil with career guidance throughout their school career with the estimated total return (i.e. increased lifetime earnings for the individual, enhanced income tax and National Insurance receipts to the Exchequer and potential cost savings for public finances in areas such as benefits, crime, healthcare etc.).

On the basis that the expected lifetime cost is approximately £200, then if:

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<sup>4</sup> Department for Business, Innovation & Skills, Returns to Intermediate and Low Level Vocational Qualifications, BIS Research Paper Number 53, September 2011.

<sup>5</sup> Department for Business, Innovation & Skills, The Returns to Higher Education, BIS Research Paper Number 45, June 2011.

- One more pupil is encouraged to attain an undergraduate degree (when otherwise they would only have acquired A levels), this would be enough to offset the costs of providing the benchmarks to 985 pupils;
- One more female pupil is encouraged to attain a Foundation Degree (when otherwise they would only have acquired A levels), this would be enough to offset the costs of providing the benchmarks to 535 pupils;
- One more pupil is encouraged to attain a Level 2 Apprenticeship (when otherwise they would only have acquired a Level 1 qualification), this would be enough to offset the costs of providing the benchmarks to between 395 and 610 pupils;
- One more pupil is encouraged to attain a Level 3 Apprenticeship (when otherwise they would only have acquired a Level 2 qualification), this would be enough to offset the costs of providing the benchmarks to between 665 and 990 pupils; and
- One more pupil is deterred or prevented from becoming NEET, the avoided Exchequer costs would be enough to provide the benchmarks to 280 pupils.



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# 1 *Introduction*

## *Background*

The Gatsby Charitable Foundation commissioned PricewaterhouseCoopers LLP (PwC) to assess the costs and benefits of benchmarks of good practice in school career guidance in England. The scope of this work is set out in our engagement letter dated 20<sup>th</sup> February 2014.

## *Scope of analysis*

The focus of our analysis is the economic costs to individual schools and to England as a whole of eight benchmarks:

- Benchmark 1: A careers programme
- Benchmark 2: Learning from career and labour market information
- Benchmark 3: Addressing the needs of each pupil
- Benchmark 4: Linking curriculum learning to careers
- Benchmark 5: Encounters with employers
- Benchmark 6: Experiences of workplaces
- Benchmark 7: Encounters with further and higher education
- Benchmark 8: Personal guidance.

We also consider the potential economic benefits of the package of benchmarks.

The primary data sources for this analysis are the latest data from national statistics, various other official publications and other published reports.

PwC has not undertaken assurance or audit of any of the underlying data that have been used.

## *Report structure*

The rest of this report is structured in twelve further Sections as follows:

- **Section 2** describes our approach to assessing the costs and benefits of the benchmarks;
- **Section 3** considers how schools might be expected to achieve the benchmarks;
- **Sections 4-11** assess the costs of achieving each of the benchmarks;
- **Section 12** considers the total costs of achieving all eight benchmarks; and
- **Section 13** summarises our assessment of aspects of the potential economic benefits of the benchmarks as a package.

A series of six Appendices provide further details of the calculations and assumptions which underpin our analysis.

## 2 Approach

### Introduction

This Section explains our approach to the analysis.

### Costs

We have used the Standard Cost Model (SCM) to frame our assessment of the economic costs of the benchmarks. We have adapted the SCM in order to define the data needed to estimate the potential costs of the benchmarks. The SCM, which is based on extensive international experience, focuses on the administrative activities required to fulfil specific commitments. It has been widely used by the UK Government and other governments to assess the costs (and benefits) of new and existing policy.

### Standard cost model

The SCM relies upon a consistent and simplified approach to assessing the cost of each activity (see Table 1). It assesses:

- The unit cost of each activity (for an organisation or individual); and
- The quantity (i.e. how many organisations or individuals undertake the activity each year).

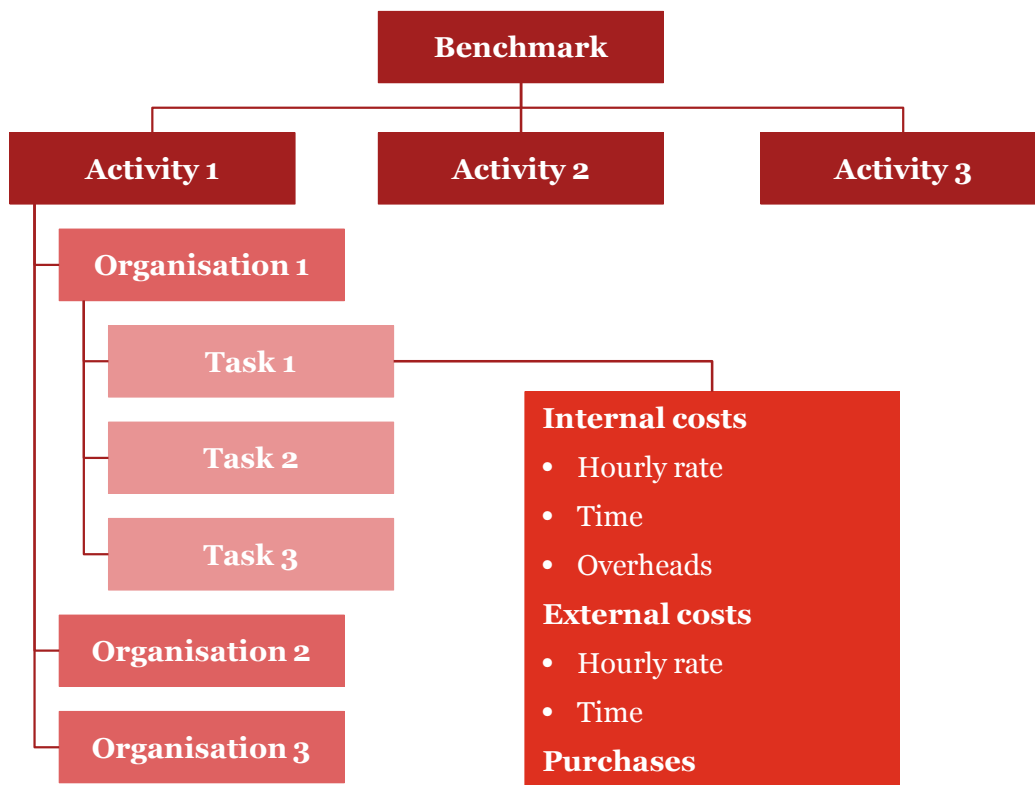
Table 3: Calculation of costs

Unit cost	x	Quantity
Internal costs + External costs	x	Population x Frequency
Internal costs = internal time (hours) x wage rate (£ per hour) (+ overhead) + External costs = (external time x hourly rate) + External goods purchased	x	Population = number of affected organisations/individuals Frequency = how often each organisation/individual undertakes the activity (e.g. annual, etc.)
(Activity level for internal costs, benchmark level for external costs)		(Benchmark level – Same for all activities)

The SCM uses activity based costing to break down each benchmark into its component activities so that each can be assessed in a consistent (yet simplified) way. The analysis can be structured to distinguish between those costs that are one-off in nature (e.g. the establishment of a careers policy and programme) and the recurring costs (e.g. the updating of labour market information).

Application of the SCM involves gathering cost information relating to a small cross-section of typical organisations (i.e. schools) which is then extrapolated across the wider population of affected organisations. This generates indicative estimates of the total costs.

Figure 3: Structure of costs in the SCM



## Scope

The scope of our analysis of costs is clear:

- We focus on state maintained schools in England only: this means that we include all secondary schools, including academies and free schools, but we exclude independent schools.
- We consider the costs both of establishing and then operating the benchmarks.
- We focus on the costs incurred by schools (including teachers and other staff) and their suppliers within the careers system. We do not consider any additional costs for the National Careers Service and others involved in the career guidance system.
- We also assess the time spent by pupils outside their curriculum learning, but we do not attach a cost to this time.
- We do not include as costs the time spent by parents/guardians and employers: this is because neither is obliged to undertake the activities, and we assume that any time (and cash) costs incurred are at least offset by benefits to them.

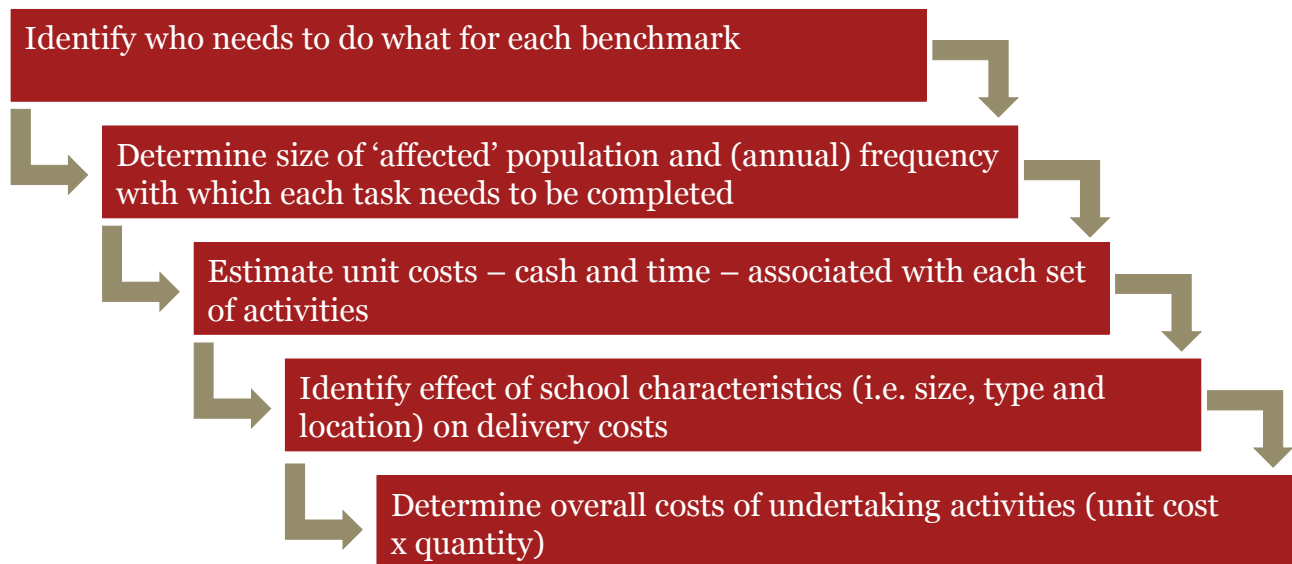
## Application of the SCM

Our approach to assessing the potential costs of each benchmark has involved a five step process (see Figure 4):

- The first step involved defining precisely what activities each stakeholder (within scope) is expected to undertake to achieve each benchmark and how these activities link to each other (if at all) and compare with historic or existing practice.
- In the second step, we determined how many times each of the identified activities are expected to be undertaken in a 'typical' year: this is a product of what the cost drivers are (e.g. pupils, schools, subjects etc.) and how frequently the activity is needed. This has meant that the time needed to undertake some activities being calculated on a per pupil basis whilst others are estimated on a whole school basis. This approach was tested and verified in consultation with representatives from the Gatsby Charitable Foundation and International Centre for Guidance Studies at the University of Derby (iCeGS).

- The third step involved assessing the cash and time costs associated with each activity using the SCM to inform this analysis. Our approach to gathering information on costs involved consultation with iCeGS supported by desk based research. We have undertaken no primary data collection from stakeholders.
- The fourth step identified the effect of school characteristics, such as size, type and location, on delivery costs. In order to do this we examined the structure of the population of state maintained schools in England and selected four different schools from the Department for Education’s (DfE’s) financial benchmarking website<sup>6</sup>. We then selected three schools without sixth forms but of different sizes (i.e. one small, one medium and one large) and one school with a sixth form (which will need to undertake some additional activity with Year 13 pupils unlike those schools without a sixth form). The respective characteristics of these four schools are summarised in Box 1. All schools are outside London and the Fringe Area so as to be representative of more schools nationally: 83% of all state maintained secondary schools in England in 2012/13 were located outside London and the Fringe Area<sup>7</sup>. When estimating the cost of the activities needed to achieve each benchmark we have, however, considered the impact of differences in the teachers’ pay scale on employment costs across the four geographical areas.
- The final step involved calculating the overall costs as the product of the quantity (Step 2) and the unit cost (Steps 3 and 4).

Figure 4: Application of the SCM



Box 1: Summary of model school characteristics

*School A: a small secondary school – with 509 pupils, no sixth form, 34 teachers and a total revenue expenditure of £3.1 million in 2012/13.*

*School B: a medium sized secondary school - with 820 pupils, no sixth form, 58 teachers and a total revenue expenditure of £4.7 million in 2012/13.*

*School C: a large secondary school – with 1,648 pupils, no sixth form, 100 teachers and a total revenue expenditure of £8.2 million in 2012/13.*

*School D: a secondary school with a sixth form- 1,253 pupils including the sixth form, 96 teachers and a total revenue expenditure of £7.5 million in 2012/13.*

<sup>6</sup> <https://www.education.gov.uk/sfb/MetricStage.aspx>

<sup>7</sup> DfE Schools, pupils and their characteristics: January 2013 (<https://www.gov.uk/government/publications/schools-pupils-and-their-characteristics-january-2013>),

## Assumptions

Our analysis of the total cost of delivering the eight benchmarks is underpinned by a number of general and benchmark specific assumptions. The following general assumptions apply to all eight benchmarks:

- Schools will continue to provide careers education as part of Personal, Social, Health and Economic (PSHE) education, starting at Key Stage 3.
- Schools already have appropriate data gathering and management systems in place which implies that staff will not need to familiarise themselves with any new software in order to deliver the benchmarks.
- Schools will continue to use established systems to help pupils interact with the Universities and Colleges Admissions Service (UCAS) system. This activity will, therefore, be unaffected by the benchmarks.
- Schools will continue to have to work with other parties to provide individual plans for young people with special educational needs.
- Local authorities will retain a statutory duty to secure sufficient suitable education and training for all resident young people (aged 16-19) and work with schools to identify potential NEETs (i.e. Not in Education, Employment or Training)<sup>8</sup>.
- Members of the School Leadership Team (SLT) work, on average, 31.6 paid hours per week<sup>9</sup>.
- Class based teachers work, on average, 28.9 paid hours per week<sup>10</sup>.
- Administrators and support staff work, on average, 29.1 paid hours per week<sup>11</sup>.
- Careers Advisers work, on average, 31.9 paid hours per week<sup>12</sup>.
- Teachers are contracted to work 1,265 hours over 195 days a year - 190 for pupil contact and five allocated for in-service training<sup>13</sup>.
- The Office for National Statistics (ONS) Annual Survey of Hours and Earnings (ASHE) does not include a category for school based IT support. We, therefore, used the average salary per hour for IT user support technicians, since the school IT employees are likely to work during term time only, which means that they will work fewer weeks per year than the average IT technician thus resulting in a relatively lower annual salary<sup>14</sup>.
- ASHE data do not include a category for Career Coordinators. We have therefore used Career Advisers' salaries and hours worked as proxies.<sup>15</sup>

Assumptions specific to individual benchmarks are discussed in the relevant Sections of this report below which deal with each of the benchmarks.

## Benefits

Our approach to assessing the potential benefits has been desk based drawing on the existing evidence base.

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<sup>8</sup> DfE, 2013, Statutory Guidance on Participation of Young People in Education, Employment or Training. For Local Authorities. March 2013.

<sup>9</sup> Office for National Statistics (ONS), ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Senior professionals of educational establishments'

<sup>10</sup> ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Secondary education teaching professionals'

<sup>11</sup> ONS, ASHE, Table 15.9a Paid hours worked - Total - For all employee jobs: United Kingdom, 2013, Provisional data for 'Secretarial and related occupations -School secretaries'

<sup>12</sup> ONS, ASHE, Table 15.9a Paid hours worked - Total - For all employee jobs: United Kingdom, 2013, Provisional data for 'Careers advisers and vocational guidance specialists'

<sup>13</sup> TES

<sup>14</sup> ONS, ASHE, Table 15.9a Paid hours worked - Total - For all employee jobs: United Kingdom, 2013, Provisional data for 'IT user support technicians'

<sup>15</sup> ONS, ASHE, Table 15.9a Paid hours worked - Total - For all employee jobs: United Kingdom, 2013, Provisional data for 'Careers advisers and vocational guidance specialists'

# 3 Delivering the benchmarks – The school delivery model

## Introduction

This Section considers what schools might need to do to achieve each of the eight Benchmarks. Figure 5 describes the vision for each of the eight benchmarks of good practice in school career guidance. The remainder of the Section considers how schools might structure the delivery of the benchmarks.

Figure 5: The vision

*Every school and college should have an embedded programme of career education and guidance that is known and understood by pupils, parents, teachers and employers.*

**1**

*Every pupil, and their parents, should have access to good-quality information about future study options and labour-market opportunities. They will need the support of an informed adviser to make best use of available information.*

**2**

*Pupils have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each pupil. A school's careers programme should embed equality and diversity considerations throughout.*

**3**

*All teachers should link curriculum learning with careers. STEM subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.*

**4**

*Every pupil should have multiple opportunities to learn from employers about work and employment and the skills that are valued in the workplace. This can be through a range of activities such as visiting speakers, mentoring, enterprise schemes and a range of other enrichment activities.*

**5**

*Every pupil should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.*

**6**

*All pupils should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.*

**7**

*Every pupil should have opportunities for guidance interviews with a careers adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made and should be expected for all pupils, but should be timed to meet their individual needs.*

**8**

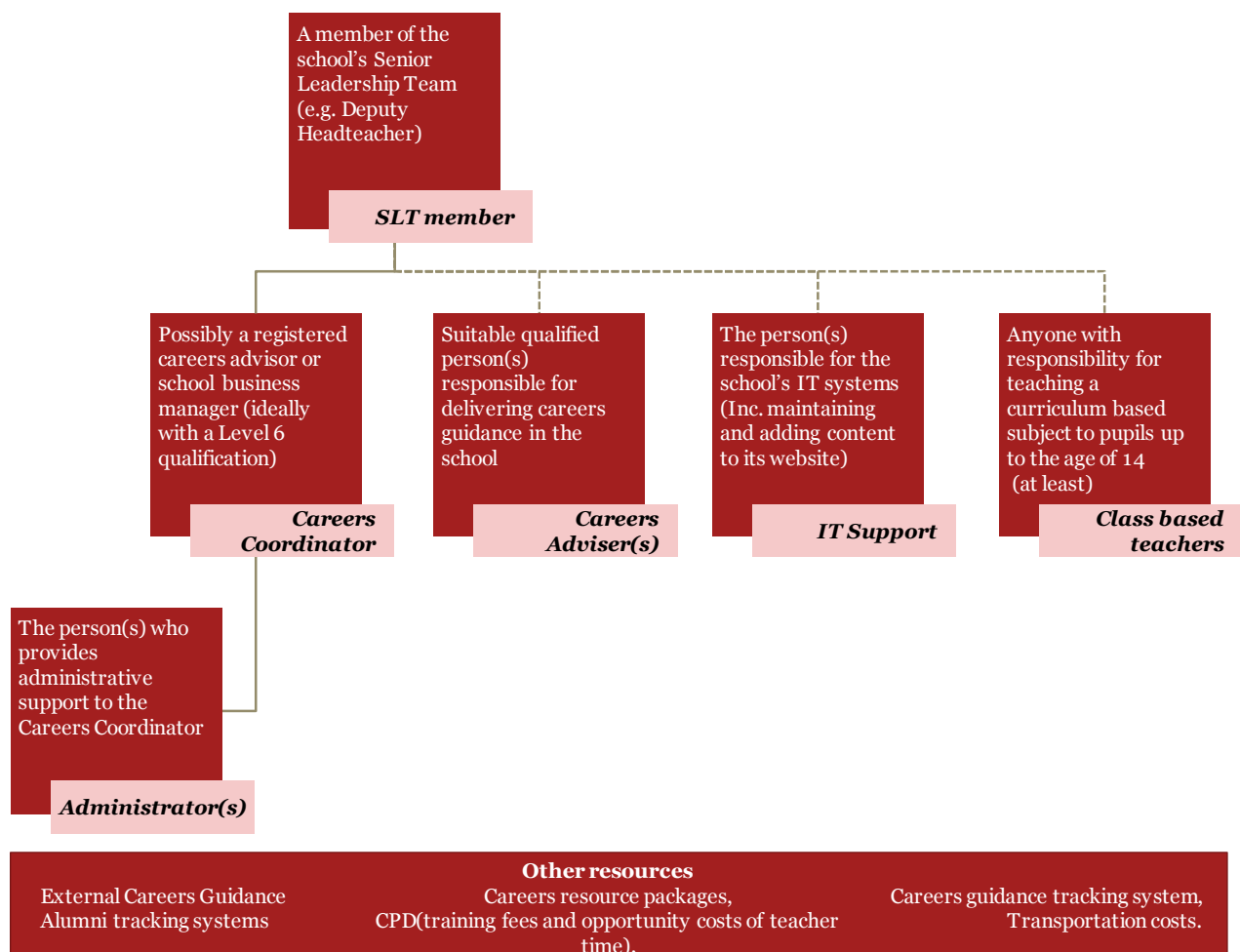
## Delivery model

Our consultation with the iCeGS identified the following structural elements of good practice in school career guidance:

- Support of the Senior Leadership Team (SLT);
- An identified and appropriately trained person responsible for leading and implementing it;<sup>16</sup>
- Adequate administrative and technical support; and
- Input from class based teachers and careers advisers.

We have used these principles to inform our development of a hypothetical school delivery model which we can use as the basis of our analysis. It is illustrated in Figure 6. This delivery model forms the basis of our cost analysis and is described in more detail in the remainder of this Section. This model is not meant to be prescriptive, schools should consider how best to adapt this model to fit within their existing structures and staffing arrangements. For example, the Careers Coordinator could play a coordination only role or could coordinate and provide career guidance to pupils. Similarly, the Careers Adviser(s) may be teaching staff who split their time between providing career guidance and subject teaching or they may be externally contracted advisers.

Figure 6: Career guidance team – Delivery model



<sup>16</sup> This individual does not necessarily have to be career guidance professional, but should be suitably trained to undertake a coordinating role.

## *Roles and responsibilities within schools*

The model depicted in Figure 6 envisages a core team that is responsible for delivering career guidance with the assistance of a careers support team.

The core team is led by a member of the SLT, who is accountable to the school’s Head teacher, Board of Governors and other senior stakeholders for the delivery of career guidance in the school. The Careers Coordinator reports directly to the SLT member on matters related to career guidance and is responsible for the design, development and implementation of career guidance. The Administrator (or Administrators, depending on resourcing requirements) provides administrative assistance for career guidance activities.

The support team comprises Careers Adviser(s), Class based teachers and the school’s IT support staff, all of whom support the delivery of career guidance in the school.

Table 4 summarises the responsibilities of each role in relation to delivering the eight benchmarks of good practice. The activities and costs associated with each benchmark are described in detail in subsequent Sections.

*Table 4: Responsibilities of the career guidance team*

<b>Bench mark</b>	<b>Task/activity</b>	<b>SLT member</b>	<b>Careers Coordinator</b>	<b>Admin.</b>	<b>Careers Adviser(s)</b>	<b>IT support</b>	<b>Class based teachers</b>
1&3	Design structured career guidance programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in Year 1 only)	✓	✓	✓	✓		✓
1&3	Review and update structured career guidance programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every three years)	✓	✓	✓			✓
1-8	Oversee programme delivery	✓					
1	Publish career guidance programme on school's website		✓			✓	
2	Collate and distribute career path and labour market information		✓	✓	✓		
2	Support pupils to access and use career path and labour market information		✓	✓	✓		
2	Encourage parents to access and use career path and labour market information (e.g. through Careers Coordinator attendance at parents’ evenings)		✓	✓			
3	Maintain a career guidance record for each pupil		✓	✓		✓	
3	Allow pupils access to their own career guidance records					✓	
3	Track pupil destination information for at least three years		✓	✓			
4	Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers						✓
4	Develop network with external organisations (e.g. employers, colleges, universities, etc.)	✓	✓		✓		✓
5	Arrange at least one meaningful encounter per year with an employer for every pupil aged 11 or over		✓	✓			



Assessing benchmarks of good practice in school career guidance

<b>Bench mark</b>	<b>Task/activity</b>	<b>SLT member</b>	<b>Careers Coordinator</b>	<b>Admin.</b>	<b>Careers Adviser(s)</b>	<b>IT support</b>	<b>Class based teachers</b>
6	Arrange at least one workplace experience for every pupil by the end of Year 11		✓	✓	✓		
6	Arrange at least one further workplace experience for every pupil by the end of Year 13*		✓	✓	✓		
7	Encourage a meaningful encounter with the full range of Further Education (FE) and Higher Education (HE) providers for every pupil by the end of Year 11		✓	✓			
7	Encourage at least two university visits for every pupil considering applying, by the end of Year 13*		✓	✓			
8	Conduct at least one structured interview with every pupil by the age of 16		✓	✓	✓		
8	Provide the opportunity for a further structured interview with every pupil by the age of 18*		✓	✓	✓		
*Only applies to schools with sixth form							

## 4 *Benchmark 1: A careers programme*

### *Introduction*

In this Section we assess the potential costs of Benchmark 1. We describe what the benchmark requires in terms of who needs to do what and consider the unit costs and the number of times these costs can be expected to be incurred. We then summarise our cost estimates and explain any significant sensitivities and assumptions.

### **Summary**

*The aim of Benchmark 1 is that every school and college should have an embedded programme of career education and guidance that is known and understood by pupils, parents, teachers and employers.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 1 to require subject matter input from Class based teachers, the Careers Adviser(s) and IT support.*

*We estimate that the total internal (employment) costs in a typical school will be £18,525 in the first year (when the programme is being established) and will fall to £9,564 per annum thereafter. The average ongoing costs are equivalent to about £12 per pupil (or 0.2% of the school's expenditure) but range from £17 per pupil in a small, Inner London school compared to £8 per pupil in a large school outside the Fringe Area. No external costs (expenses) are associated with this Benchmark.*

### *What is the benchmark?*

#### **Vision:**

*Every school and college should have an embedded programme of career education and guidance that is known and understood by pupils, parents, teachers and employers.*

#### **Benchmark:**

*Every school should have a stable, structured career guidance programme that has the explicit backing of the senior management team, and has an identified and appropriately-trained person responsible for it.*

*The career guidance programme should be published on the school's website in a way that enables pupils, parents, teachers and employers to access and understand it.*

*The programme should be regularly evaluated with feedback from pupils, parents, teachers and employers as part of the evaluation process.*

### *What activities will be needed to achieve the benchmark?*

Our delivery model assumes that the SLT member will oversee the Careers Coordinator in the design, development and implementation of a stable, structured career guidance programme. This will include management of the programme budget and the commissioning of external support as necessary. It will also require subject matter input from all Class based teachers and the Careers Adviser(s) involved in the delivery of the programme as well as administrative support from the Careers Administrator(s). Once the programme has been developed and agreed with the Headteacher, Board of Governors and other senior stakeholders, IT support will be required to publish it on the school's website in a way that enables pupils, parents, teachers and employers to access and understand it.

The school's career guidance programme will be reviewed and updated annually and evaluated every three years using feedback from pupils, parents, teachers and employers. The Careers Coordinator will be responsible for the programme review and evaluation, under the direction of the SLT member and with appropriate input from Class based teachers and the Careers Administrator(s).

### *What are the expected employment costs?*

Table 5 shows the time and financial costs associated with delivering this benchmark in a 'typical' school, that is a medium sized secondary school with 820 pupils across five year groups (i.e. Years 7- 11), 58 teachers and total revenue expenditure of £4.7 million in 2012/13.<sup>17</sup>

We assume that the initial design of a structured career guidance programme will require a broader consultation and research exercise than the subsequent annual reviews and updates and will, therefore, take longer and incur greater costs. These have been reflected in Table 5. We estimate that the total cost of achieving Benchmark 1 in a 'typical' school will be £18,525 in Year 1 and then £9,564 per annum from Year 2 onwards.

Table 5: Cost of activities needed to achieve Benchmark 1 in a medium sized school

	SLT member	Careers Coordinator	Admin.	Careers Adviser(s)	IT support	Class based teachers	Total hours/activity	Total cost/activity
<i>Design structured career guidance programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in Year 1 only)</i>	32 hr.	48 hr.	32 hr.	48 hr.		3 hr./teacher	334 hr.	£8,961
Review and update structured career guidance programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every three years)	32 hr.	50 hr.	36 hr.			3 hr./teacher	292 hr.	£8,132
Oversee programme delivery	32 hr.						32 hr.	£1,351
Publish career guidance programme on school's website		1 hr.			3 hr.		4 hr.	£80
Total hours/role in Year 1	96 hr.	99 hr.	68 hr.	48 hr.	3 hr.	348 hr.	662 hr.	-
Total cost/role in Year 1	£4,053	£1,890	£852	£916	£61	£10,752	-	£18,525
Total hours/role from Year 2 onwards	64 hr.	51 hr.	36 hr.	0 hr.	3 hr.	174 hr.	328 hr.	-
Total cost/role from Year 2 onwards	£2,702	£974	£451	£0	£61	£5,376	-	£9,564

*Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).*

<sup>17</sup> Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>)

## What are the expected expenses?

There are no additional expenses associated with the delivery of Benchmark 1 which means that the only costs of achieving Benchmark 1 relate to the cost of staff time described above.

## What is the total cost?

We estimate that the total cost of achieving Benchmark 1 in a medium sized school will be £18,525 in Year 1 and £9,564 per annum from Year 2 onwards. This is equivalent to 0.4% of the school's total revenue expenditure in 2012/2013 in Year 1 (or £23 per pupil) and 0.2% of total revenue expenditure from Year 2 onwards (or £12 per pupil). However, because the cost of delivering this benchmark is based on the time taken to deliver each activity, the actual costs incurred by a school will depend on its size (both in terms of the number of pupils and the number of teachers) and its geographical location (which will impact staff salaries and, therefore, employment costs). The sensitivity analysis below considers the possible impact of school size and location on the costs of achieving Benchmark 1.

## Sensitivity analysis

We consider the effect which school characteristics, such as size and location, have on the estimated cost of achieving Benchmark 1. Table 6 illustrates the impact of these characteristics from Year 2 onwards. This sensitivity analysis shows that the total cost of achieving Benchmark 1 in a large (School C), Inner London secondary school is more than double that of a small secondary school (School A) elsewhere in England (i.e. £15,763 and £7,339 per annum respectively). However, consideration of these costs on a per pupil basis shows that larger schools will benefit from economies of scale (i.e. the costs range from £17 per pupil in a small, Inner London school compared to £8 per pupil in a large school outside the Fringe Area).

Table 6: Cost of achieving Benchmark 1 by school size and location from Year 2 onwards

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£8,675	£8,243	£7,645	£7,339
School B	£11,252	£10,648	£9,873	£9,564
School C	£15,763	£14,857	£13,772	£13,457
School D	£15,333	£14,457	£13,400	£13,086

## Other assumptions

In addition to our overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 1 is underpinned by an assumption that the evaluation of the career guidance programme will be conducted internally by the in-school careers team once every three years.

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

## 5 *Benchmark 2: Learning from career and labour market information*

### *Introduction*

In this Section we assess the potential costs of Benchmark 2 following the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### **Summary**

*The aim of Benchmark 2 is that every pupil, and their parents, should have access to good-quality information about future study options and labour-market opportunities. They will need the support of an informed adviser to make best use of available information.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 2 to require subject matter input from the Careers Adviser(s).*

*We estimate that the total internal (employment) costs in a typical school will be £1,864 per annum and that the additional expenses will be in the region of £1,000. Overall, the expected costs are £2,864 per annum for a typical school, which is equivalent to approximately £3 per pupil (or less than 0.1% of the school's expenditure); the cost ranges from £6 per pupil in a small, Inner London school to £2 per pupil in a large school outside the Fringe in England.*

### *What is the benchmark?*

#### **Vision:**

*Every pupil, and their parents, should have access to good-quality information about future study options and labour-market opportunities.*

#### **Benchmark:**

*By the age of 14, all pupils should have accessed and used information about career paths and the labour market to inform their own decisions on study options.*

*Parents should be encouraged to access and use information about labour markets and future study options to inform their support to their children.*

### *What activities will be needed to achieve the benchmark?*

We assume that the Careers Coordinator will be responsible for the development and implementation of the school's strategy for collating and distributing career path and labour market information and making it accessible to pupils and parents. The Careers Administrator(s) will undertake the collation of career path and labour market information and distribute it to pupils and parents in line with the school's strategy.

The Careers Coordinator will design and provide support to help pupils to access and use career path and labour market information, which will be delivered by the Careers Adviser(s).

The Careers Coordinator will also be responsible for encouraging parents to access and use career path and labour market information to inform their own support to their children. This parental engagement activity will be coordinated by the Careers Administrator(s).

## What are the expected employment costs?

Table 7 shows the time and employment costs associated with achieving this benchmark in a typical medium sized secondary school<sup>18</sup>. We estimate that the cost of the time required to undertake these activities in a ‘typical’ school will be £1,864.

Table 7: Cost of activities needed to achieve Benchmark 2 in a medium sized school

	Careers Coordinator	Admin.	Careers Adviser(s)	Total hours/ activity	Total cost/ activity
Collate and distribute career path and labour market information	3 hr.	30 hr.	3hr.	36 hr.	£490
Support pupils to access and use career path and labour market information	3 hr.	3 hr.	1 hr./class for each year group	47 hr.	£878
Encourage parents to access and use career path and labour market info. (e.g. through Careers Coordinator attendance at parents’ evenings)	24 hr.	3 hr.		27 hr.	£496
Total hours/role	30 hr.	36 hr.	44 hr.	110 hr.	-
Total cost/role	£573	£451	£840	-	£1,864

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

## What are the expected expenses?

This part of the Section considers the expenses associated with achieving Benchmark 2. There are a variety of existing resources which schools can use to help pupils and their parents to access career path and labour market information. These resources range from publicly available labour market information, which schools can acquire free of charge, to bespoke software packages that extend beyond career path and labour market information and require an annual subscription fee. In order to estimate the likely costs associated with accessing this type of information we have reviewed the resources described in Table 8. This list is indicative; it is not meant to be exhaustive and does not constitute a recommendation or any comment on the quality of the resources included or excluded.

Table 8: Examples of careers resource packages

Resource	Expected cost
<b>Free resources</b>	Free
The National Careers Service website ( <a href="https://nationalcareersservice.direct.gov.uk/advice/planning/jobfamily/Pages/default.aspx">https://nationalcareersservice.direct.gov.uk/advice/planning/jobfamily/Pages/default.aspx</a> ) provides a profile for almost 800 different jobs, by offering key information such as the work needed, the hours, the income, the entry requirements, etc.. There is also a job market information tool, which provides information by employment sector and by geography.	
Other careers information resources can be found on the following websites:	
<ul style="list-style-type: none"> <li>• <a href="http://www.prospects.ac.uk/careers_information_officer.htm">http://www.prospects.ac.uk/careers_information_officer.htm</a></li> <li>• <a href="http://www.careersa-z.co.uk/typeO.asp">http://www.careersa-z.co.uk/typeO.asp</a></li> </ul>	

<sup>18</sup> This is a school with 820 pupils, no sixth form, 58 teachers and a total revenue expenditure of £4.7 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

Resource	Expected cost
<ul style="list-style-type: none"> <li>• <a href="http://www.careers-gateway.co.uk/">http://www.careers-gateway.co.uk/</a></li> <li>• <a href="https://www.princetonreview.com/careers-after-college.aspx">https://www.princetonreview.com/careers-after-college.aspx</a></li> </ul> <p>Schools can access free career diagnostic tools via the following links:</p> <ul style="list-style-type: none"> <li>• <a href="https://www.princetonreview.com/careers-after-college.aspx">https://www.princetonreview.com/careers-after-college.aspx</a></li> <li>• <a href="http://www.educations.com/career-test">http://www.educations.com/career-test</a></li> <li>• <a href="http://www.careerkey.org/career-tests/take-career-test-career-assessment.html#.Uw3Ui_1_t4k">http://www.careerkey.org/career-tests/take-career-test-career-assessment.html#.Uw3Ui_1_t4k</a></li> <li>• <a href="http://www.assessment.com/Students-Graduates.asp">http://www.assessment.com/Students-Graduates.asp</a></li> </ul>	
<p><b>Morrisby</b></p> <p>Fasttomato (<a href="http://www.fasttomato.com/">http://www.fasttomato.com/</a>) provides career information, subject information and four questionnaires that help learners identify their preferences and the suitable careers for their traits. Furthermore, they also have a management section for Career Coordinators, Advisers and teachers to track their pupils.</p> <p>Morrisby also offer a product which allows schools to test and profile pupils.</p>	<p>£300 per annum for a one year subscription or £275 per annum for three years</p> <p>£325/delegate for two days training plus £50 per candidate tested</p>
<p><b>Cascaid</b></p> <p>The Cascaid School Package (<a href="https://www.cascaid.co.uk/schools-package/">https://www.cascaid.co.uk/schools-package/</a>) includes three software products:</p> <ul style="list-style-type: none"> <li>• Launchpad - targeted at Key Stage 3 pupils, it provides information on 400 careers complemented by case studies, videos, photographs and a personal learning and thinking skills diagnostic tool;</li> <li>• Kudos Inspire - targeted at 13-19 year olds and aims to inspire pupils to find suitable careers from a poll of 700 options;</li> <li>• Careerscape - offers additional, in-depth information on careers as well as higher education courses.</li> </ul>	<p>£630 per annum for the School Package</p> <p>or</p> <p>£830 per annum for the School Package plus Kudos Inspire</p>
<p><b>Pearson</b></p> <p>Pearson's Think Future subscription (<a href="https://www.thinkfuture.pearson.com/">https://www.thinkfuture.pearson.com/</a>) offers access to impartial careers and courses advice, tailored specifically for teachers, pupils and parents. They also provide a careers curriculum with materials structured for years 8 to 11 and regular updates on employers, the local labour market and further education opportunities. In addition, Pearson's product includes direct messaging with their local career professional, for all teachers and learners and direct set-up help.</p>	<p>£3,600 per annum</p>

While job profiles can be of much help to pupils who are already considering certain jobs and want to learn more about them, they do not necessarily enable pupils or their parents to identify a list of suitable careers. Similarly job market information can be very helpful in converging from a long list of options to a short list of preferences. This means that the wide range of data and information that is freely available online is likely to require school staff to compile it and present it in an appropriate, accessible format to pupils. In contrast, commercial software packages are specifically tailored to schools and are not likely to require a significant investment of time from school staff.

We assume, therefore, that schools will devote some additional expenditure to the purchase of one or more careers resources, including diagnostic tests to identify pupil preferences and career path information. Based on the costs outlined in Table 8 we estimate this cost to be in the region of £1,000 per school per annum.

### *What is the total cost?*

We estimate that the total annual cost of achieving Benchmark 2 in a medium sized school will be £2,864 (i.e. £1,864 worth of time and £1,000 of expenses). This is equivalent to less than 0.1% of the school's total revenue expenditure in 2012/2013 or £3 per pupil.

## *Sensitivity analysis*

We consider the effect that the school characteristics (i.e. size and location) will have on the expected cost of achieving this benchmark. Table 9 illustrates the impact of these characteristics by estimating the respective delivery costs.

*Table 9: Cost of achieving Benchmark 2 by school size and location*

	Inner London	Outer London	The Fringe Area	Rest of England
<b>School A</b>	£3,035	£3,035	£2,801	£2,567
<b>School B</b>	£3,366	£3,366	£3,164	£2,864
<b>School C</b>	£4,247	£4,247	£4,132	£3,654
<b>School D</b>	£4,049	£4,049	£3,914	£3,477

This sensitivity analysis shows that the total cost of delivering this benchmark in a large secondary school in Inner or Outer London is almost two thirds higher than that of a small secondary school (School A) in the rest of England (i.e. £4,247 and £2,567 per annum respectively). Consideration of these costs on a per pupil basis, however, shows that larger schools will benefit from economies of scale (i.e. ranging from £6 per pupil in a small, Inner London school to £2 per pupil in a large school outside the Fringe in England).

## *Other assumptions*

In addition to our overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 2 is underpinned by the following assumptions:

- Careers resources are expected to be primarily technology based;
- Parental engagement regarding labour market information will use pre-existing communication channels, e.g. school newsletter, website and parents' evenings (i.e. incurring no additional expense); and
- An average class size of 20 pupils from years 7 to 11 and 10 pupils from years 12 to 13.<sup>19</sup>

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

<sup>19</sup> Source: DfE, 2011, Class Size and education in England evidence report, DFE-RR169.



## 6 *Benchmark 3: Addressing the needs of each pupil*

### *Introduction*

In this Section we assess the potential costs of Benchmark 3. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### **Summary**

*The aim of Benchmark 3 is that the career advice and support provided need to be tailored to meet the individual needs of each pupil, and that the school's career guidance programme should embed equality and diversity considerations throughout.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 3 to require input from the IT support team.*

*We estimate that the total internal (employment) costs in a typical school will be £2,852 per annum and that the additional expenses will be in the region of £800. Overall, the expected costs are £3,652 per annum for a typical school, which is equivalent to approximately £4 per pupil (or less than 0.1% of the school's expenditure); this ranges from £10 per pupil in a small, Inner London school to £2 per pupil in a large school outside the Fringe in England.*

### *What is the benchmark?*

#### **Vision:**

*Pupils have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each pupil. A school's career guidance programme should embed equality and diversity considerations throughout.*

#### **Benchmark:**

*A school's career guidance programme should actively seek to challenge stereotypical thinking and raise aspirations.*

*Schools should keep systematic records of the individual advice given to each pupil, and subsequent agreed decisions.*

*All pupils should have access to these records to support their career development. Schools should collect and maintain accurate data for each pupil on their education, training or employment destinations for at least three years after they leave school.*

### *What activities will be needed to achieve the benchmark?*

Our delivery model envisages that some of the activities required to achieve this benchmark will be undertaken as part of the design and development of a stable and structured career guidance programme (i.e. that the programme will actively seek to challenge stereotypical thinking and raise aspirations (see Benchmark 1)).

In terms of maintaining and giving pupils access to their individual career guidance records, the Careers Coordinator will oversee and manage the input of data into career guidance records for each pupil with the assistance of the Careers Administrator(s). These records will be maintained by the Careers Adviser(s) as part of their structured interviews with pupils (see Benchmark 8) and will require some input from IT support, in terms of: maintaining the electronic system; allowing pupils to access their own records; and providing all users (staff and pupils) with technical support where necessary.

The Careers Administrator(s) will be responsible for the collection and collation of data tracking pupil destinations for at least three years.

### *What are the expected employment costs?*

The focus of this Section of our report is on the additional costs of achieving Benchmark 3 (i.e. above and beyond those captured in Benchmarks 1 and 8).

Table 10 sets out the time and employment costs associated with delivering this benchmark. Unlike Benchmarks 1 and 2 we assume that this activity does not depend on the size of the school (i.e. the number of pupils or teachers).

*Table 10: Cost of activities needed to achieve Benchmark 3*

	Careers Coordinator	Admin.	IT support	Total hours/activity	Total cost/activity
Maintain a career guidance record for each pupil	18 hr.	30 hr.	30 hr.	78 hr.	£1,333
Allow pupils access to their own career guidance records			30 hr.	30 hr.	£613
Track pupil destination information for at least three years	12 hr.	54 hr.		66 hr.	£906
Total hours/role	30 hr.	84 hr.	60 hr.	174 hr.	-
Total cost/role	£573	£1,053	£1,146	-	£2,852

*Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).*

### *What are the expected expenses?*

We consider the expected unit cost of each activity separately. We anticipate that there are likely to be two types of non-employment costs associated with the delivery of Benchmark 3:

- A Virtual Learning Environment (VLE) to record the career guidance and advice given to pupils; and
- An alumni management system to track pupil destination for at least three years.

Most (if not all) secondary schools in England already have some type of VLE in place. As part of our research we have reviewed the functionality of a number of VLEs (including SIMS,<sup>20</sup> Moodle, Firefly, Studywiz and School eLockers). Our research has found that while VLEs do not necessarily have a feature called ‘career guidance record’, they do **‘offer the basic function to provide content to specified pupils in restricted and shared views’**. This means that VLEs do allow staff to input records on careers (or any other type of) guidance or advice using existing features at no additional cost.

Where schools do not use a VLE, Career Coordinators or Advisers could record the advice provided in readily available file storage software and share it, or give access to it, to individual pupils and their parents (e.g. via cloud storage, emails on request or after each interview).

In terms of tracking pupil destinations, schools could either use Microsoft Access or an alternative database management product that they already own, or purchase a sophisticated alumni management system, such as Alumni Channel (at a cost of £660– £780 per annum) or Wild Apricot (which costs £650 – £1,290 per annum).

<sup>20</sup> SIMS Learning Gateway allows the senior leadership team, teachers and parents to access real time data such as assessment results, homework progress or attendance. The software is capable of storing career guidance information and providing parents and pupils with read-only access to it.

On the basis of this analysis we assume that schools will use their existing VLEs to deliver Benchmark 3 and devote some additional expenditure to acquiring an alumni tracking system. We have, therefore estimated the unit costs associated with Benchmark 3 to be approximately £800 per school per year.

### *What is the total cost?*

We estimate that the total cost of achieving Benchmark 3 in any school will be £3,652 (i.e. £2,852 of time and £800 of expenses). This is equivalent to less than 0.1% of a typical school's total revenue expenditure in 2012/2013 or £4 per pupil.

### *Sensitivity analysis*

As noted previously we assume that the cost of achieving Benchmark 3 is not affected by school size. Table 11 illustrates the impact of school location by estimating the respective delivery costs in each of the four pay scale areas.

This sensitivity analysis shows that the total cost of achieving Benchmark 3 in London is 33% higher than that of a school in the rest of England (i.e. £4,852 and £3,652 per annum respectively). Since these costs are not linked to school size, larger schools will benefit from economies of scale resulting in a significantly lower average cost per pupil than smaller schools (i.e. ranging from £10 per pupil in a small, school in London to £2 per pupil in a large school outside the Fringe in England).

*Table 11: Cost of achieving Benchmark 3 by location*

<b>Inner London</b>	<b>Outer London</b>	<b>The Fringe Area</b>	<b>Rest of England</b>
£4,852	£4,852	£3,903	£3,652

### *Other assumptions*

In addition to our overall assumptions set out in Section 2, in estimating the cost of achieving Benchmark 3, we assume that broadening aspirations will be addressed through staff Continuing Professional Development (CPD).

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

## 7 *Benchmark 4: Linking curriculum learning to careers*

### *Introduction*

In this Section we assess the potential costs of Benchmark 4. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### **Summary**

*The aim of Benchmark 4 is that all teachers should link curriculum learning with careers and STEM subject teachers highlight the relevance of STEM subjects for a wide range of future career paths.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 4 to require subject matter input from the Career Adviser(s) and Class based teachers.*

*We estimate that the total internal (employment) costs in a typical school will be £14,635 per annum and that the additional expenses will be in the region of £800. Overall, the expected costs are £15,435 per annum for a typical school, which is equivalent to approximately £19 per pupil (or 0.3% of the school's expenditure); the cost ranges from £35 per pupil in a small, Inner London school to £9 per pupil in a large school outside the Fringe in England.*

### *What is the benchmark?*

#### **Vision:**

*All teachers should link curriculum learning with careers. Science, Technology, Engineering and Mathematics (STEM) subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.*

#### **Benchmark:**

*By the age of 14, every pupil should have had the opportunity to learn how the different STEM subjects help people to gain entry to, and be more effective workers within, a wide range of careers.*

### *What activities will be needed to achieve the benchmark?*

Our delivery model envisages that Benchmark 4 requires STEM teachers to maintain their skills and knowledge about the link between their particular STEM subject and careers through CPD and to be able to cascade this knowledge throughout the school and integrate careers information into curriculum learning for STEM subjects. This activity will be supported through the development of networks with external organisations (e.g. employers, colleges, universities etc.) by the SLT member, Careers Coordinator, Careers Adviser(s) and Class based teachers, particularly in STEM subjects.

### *What are the employment costs?*

Table 12 sets out the time and employment costs associated with achieving Benchmark 4. As with Benchmark 3 we assume this activity does not depend on the size of the school.

Table 12: Cost of activities needed to achieve Benchmark 4

	SLT member	Careers Coordinator	Careers Adviser(s)	Class based teachers	Total hours /activity (hr.)	Total cost/activity (£)
Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers				12 hr /subject	216 hr.	£6,673
Develop network with external organisations (e.g. employers, colleges, universities, etc.)	39 hr.	39 hr.	117 hr.	6 hr./subject	303 hr.	£7,962
Total hours/role	39 hr.	39 hr.	117 hr.	324 hr.	519 hr.	-
Total cost/role	£1,647	£745	£2,234	£10,012	-	£14,635

*Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).*

We expect that schools will encourage teachers to link careers to curriculum learning in all National Curriculum subjects, rather than focusing these efforts exclusively on STEM subjects. However, as STEM subjects account for approximately one third of subjects currently taught as part of the National Curriculum for Key Stages 3 and 4,<sup>21</sup> it would be logical to conclude that approximately one third of the Class based teacher costs in Table 12 relate to STEM subjects (i.e. £3,337). Therefore, if a school were to implement this benchmark for STEM subjects only the total employment cost would be around £8,000.

### *What are the expected expenses?*

We consider the expected unit cost of each activity separately. In addition to the employment costs identified in Table 12, it is reasonable to expect that schools could incur some costs in relation to membership of professional associations, CPD and the provision of teaching cover in achieving Benchmark 4.

We estimate that STEM related professional associations charge membership fees in the region of £100 per annum (e.g. Association for Science Education charges members £89 per annum<sup>22</sup> and Association of Teachers of Mathematics charges £90 per annum).<sup>23</sup> If a school were to fund one teacher's membership fees per STEM subject (i.e. biology, chemistry, design and technology, ICT, maths, physics) this would cost approximately £600 per year.

In terms of CPD which links curriculum learning to careers, the cost of provision ranges from free resources to more formal training courses. Table 13 provides some indicative examples of these resources; it is not meant to be exhaustive and does not constitute a recommendation or any comment on the quality of the resources included or excluded.

<sup>21</sup> <http://webarchive.nationalarchives.gov.uk/20131202172639/http://www.education.gov.uk/schools/teachingandlearning/curriculum/secondary?page=2>

<sup>22</sup> <http://www.ase.org.uk/documents/ase-membership-form-2013/>

<sup>23</sup> <http://www.atm.org.uk/join/>

Table 13: Examples of CPD which links curriculum learning to careers

Resource
The National STEM Centre provides a range of free resources signposting careers links for teachers, pupils and parents (see <a href="http://www.nationalstemcentre.org.uk/stem-in-context/signposting-links">http://www.nationalstemcentre.org.uk/stem-in-context/signposting-links</a> ).
Warwick's <a href="http://www2.warwick.ac.uk/fac/soc/ier/ngrf/stem/">National Guidance Research Forum</a> has a free STEM Careers learning module for teachers, guidance professionals, careers Coordinators, tutors and mentors (see <a href="http://www2.warwick.ac.uk/fac/soc/ier/ngrf/stem/">http://www2.warwick.ac.uk/fac/soc/ier/ngrf/stem/</a> ).
Science Learning Centres provide a number of courses which aim to develop teacher confidence in describing and promoting careers in STEM subjects. These include: <ul style="list-style-type: none"> <li>• Careers in STEM – one day course, £185 for maintained schools. A DfE Impact Award bursary covering 60% of the fee may be available toward the cost of this CPD for teachers or technicians (see <a href="https://www.sciencelearningcentres.org.uk/cpd/97d546aa-36fo-41of-8fd7-641cb59db2e5/careers-in-stem/">https://www.sciencelearningcentres.org.uk/cpd/97d546aa-36fo-41of-8fd7-641cb59db2e5/careers-in-stem/</a>); and</li> <li>• Promoting STEM Careers in your Classroom: Engage, Enrich, Enthuse – two day course, £465 ex VAT for maintained schools. An ENTHUSE Award bursary of up to £730 is available to help teachers and technicians participate in this CPD (see <a href="https://www.sciencelearningcentres.org.uk/consortia/national/cpd/2coc3d75-7ee4-4beb-b2dc-68of491e8ca9/promoting-stem-careers-in-your-classroom-engage-enrich-enthuse/">https://www.sciencelearningcentres.org.uk/consortia/national/cpd/2coc3d75-7ee4-4beb-b2dc-68of491e8ca9/promoting-stem-careers-in-your-classroom-engage-enrich-enthuse/</a>)</li> </ul>

Given the availability of free resources and bursaries to cover course fees in this area we expect that schools will utilise these resources and cascade the learning throughout the school at no additional cost. Therefore, the only additional costs associated with achieving Benchmark 4 are the professional membership fees (described earlier in this Section) and the cost of teaching cover to facilitate attendance at face-to-face training courses. We estimate these costs to be £600 and £200<sup>24</sup> respectively per annum.

### What is the total cost?

We estimate that the total cost of achieving Benchmark 4 in any school will be £15,435 (i.e. £14,635 of time and £800 of expenses). This is equivalent to 0.3% of a typical school's total revenue expenditure in 2012/2013 or £19 per pupil.

### Sensitivity analysis

As noted previously we assume that the cost of achieving Benchmark 4 is unaffected by school size. Table 14 illustrates the impact of school location by estimating the respective delivery costs in each of the four pay scale areas.

Table 14: Cost of achieving Benchmark 4 by location

Inner London	Outer London	The Fringe Area	Rest of England
£17,588	£16,698	£16,174	£15,435

This sensitivity analysis shows that the total cost of achieving Benchmark 4 is over 10% higher in Inner London compared to the Rest of England due to the difference in pay scales. Because these costs are not linked to school size, larger schools will benefit from economies of scale resulting in a significantly lower average cost per pupil than smaller schools (i.e. £35 per pupil in a small, Inner London school compared to £9 per pupil in a large school outside the Fringe in England).

<sup>24</sup> The cost of two days teaching cover ranges from £179 to £207 depending on the region. These estimates are based on ASHE 2013 and the Teachers' salary scales.

## *Other assumptions*

In addition to our overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 4 is underpinned by the following assumptions:

- Linking curriculum learning to careers will be addressed through staff CPD; and
- Schools offer an average of 18 National Curriculum subjects.

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

## 8 *Benchmark 5: Encounters with employers*

### *Introduction*

In this Section we assess the potential costs of Benchmark 5. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### **Summary**

*The aim of Benchmark 5 is that every pupil has multiple opportunities to learn from employers about work and employment and the skills that are valued in the workplace.*

*We expect Benchmark 5 to require no other input besides that provided by the core team responsible for career guidance in each school.*

*We estimate that the total internal (employment) costs in a typical school will be £1,363 per annum and that no external costs (expenses) are associated with this Benchmark. Overall the expected costs of £1,363 are equivalent to approximately £2 per pupil (or less than 0.1% of the school's expenditure); this ranges from £4 per pupil in a small, Inner London school to £1 per pupil in a large school outside the Fringe in England.*

### *What is the benchmark?*

#### **Vision:**

*Every pupil should have multiple opportunities to learn from employers about work and employment and the skills that are valued in the workplace. This can be through a range of activities such as visiting speakers, mentoring, enterprise schemes and a range of other enrichment activities.*

#### **Benchmark:**

*Every year, from the age of 11, pupils should participate in at least one meaningful<sup>25</sup> encounter with an employer (or an employee acting as an ambassador).*

### *What activities will be needed to achieve the benchmark?*

Our delivery model assumes that the Careers Coordinator will be responsible for the design, development and management of the delivery process for providing at least one meaningful encounter per year with an employer for every pupil aged 11 or over. The Careers Administrator(s) will provide logistic and administrative support for this process.

### *What are the employment costs?*

Table 15 sets out the time and employment costs associated with achieving Benchmark 5. As with Benchmarks 3 and 4 we assume this activity is not dependent on the size of the school.

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<sup>25</sup> A 'meaningful' encounter is one in which the pupil has an opportunity to learn about what work is like or what it takes to be successful in the workplace.



Table 15: Cost of activities needed to achieve Benchmark 5

	Careers Coordinator	Admin.	Total hours/activity (hr.)	Total cost/activity (£)
Arrange at least one meaningful encounter per year with an employer for every pupil aged 11 or over	32 hr.	60 hr.	92 hr.	£1,363
Total hours/role	32 hr.	60 hr.	92 hr.	-
Total cost/role	£611	£751	-	£1,363

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

### What are the expected expenses?

We consider the expected unit cost of each activity separately. We do not anticipate that schools will incur any additional costs in relation to the delivery of Benchmark 5 over and above the employment costs described earlier in this Section.

### What is the total cost?

We estimate that the total cost of achieving Benchmark 5 in a school of any size will be £1,363 (i.e. employment costs only). This is equivalent to less than 0.1% of a typical school's total revenue expenditure in 2012/2013 or £2 per pupil.

### Sensitivity analysis

As noted previously we assume that the cost of achieving Benchmark 5 is not affected by school size. Table 16 illustrates the impact of school location by estimating the respective delivery costs in each of the four pay scale areas.

Table 16: Cost of achieving Benchmark 5 by location

Inner London	Outer London	The Fringe Area	Rest of England
£2,001	£2,001	£1,472	£1,363

This sensitivity analysis shows that the total cost of delivering Benchmark 5 in London is almost 50% higher than that of a school in the rest of England (i.e. £2,001 and £1,363 per annum respectively). Since these costs are not linked to school size, larger schools benefit from economies of scale giving them a significantly lower average cost per pupil than smaller schools (i.e. from £4 per pupil in a small schools in London to £1 per pupil in a large school outside the Fringe in England).

### Assumptions

There are no additional assumptions linked specifically to Benchmark 5 over and above the assumptions set out in Section 2. The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

## 9 *Benchmark 6: Experiences of workplaces*

### *Introduction*

In this Section we assess the potential costs of Benchmark 6. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### **Summary**

*The aim of Benchmark 6 is that every pupil has first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 6 to require subject matter input from the Career Adviser(s).*

*We estimate that the total internal (employment) costs in a typical school will be £8,074 per annum and that no external costs (expenses) are associated with this Benchmark. Overall, the expected costs are equivalent to approximately £10 per pupil (or 0.2% of the school's expenditure) for a typical school but range from £16 per pupil in a small, Inner London school to £10 per pupil in a large school outside the Fringe in England.*

### *What is the benchmark?*

#### **Vision:**

*Every pupil should have first-hand experiences<sup>26</sup> of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.*

#### **Benchmark:**

*By the end of Year 11, every pupil should have had at least one experience of a workplace, additional to any part-time jobs they may have.*

*By the end of Year 13, every pupil should have had one further such experience, additional to any part-time jobs they may have.*

### *What activities will be needed to achieve the benchmark?*

We envisage that the Careers Coordinator will be responsible for the design, development and management of the delivery process for providing at least one workplace experience for every pupil by the end of Year 11 and, where applicable, at least one further workplace experience for every pupil by the end of Year 13. This process will be implemented by the Careers Adviser(s), with the Careers Administrator(s) providing logistics and administrative support. The process for giving pupils workplace experience, which is already established in some cases, will potentially involve:

- Undertaking health and safety and Disclosure and Barring Service (DBS) checks;
- Matching pupils to employers;
- Preparing/briefing pupils ahead of their work experience;
- Visiting pupils during their work experience; and
- Collecting feedback about the experience from pupils and employers.

<sup>26</sup> As far as is possible, schools and employers should ensure these are **positive** experiences.

## What are the employment costs?

Table 17 shows the time and financial costs associated with achieving this benchmark in a medium sized secondary school.<sup>27</sup>

Table 17: Cost of activities needed to achieve Benchmark 6 in a medium sized school

	Careers Coordinator	Admin.	Careers Adviser(s)	Total hours/activity	Total cost/activity
Arrange at least one workplace experience for every pupil by the end of Year 11	18 hr.	3hr./pupil	0.5hr./pupil	592 hr.	£8,074
Total hours/role	18 hr.	492 hr.	82 hr.	592 hr.	-
Total cost/role	£344	£6,165	£1,565	-	£8,074

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

The activities and costs shown in Table 17 are those of a medium sized school without a sixth form. A school with a sixth form will need to undertake additional activities with Year 13 pupils in order to achieve Benchmark 6 (i.e. to give them a further workplace experience by the end of Year 13). Table 18 shows the time and financial costs associated with delivering this benchmark in a typical secondary school with a sixth form (i.e. School D, a school with a sixth form that has 1,253 pupils from Years 7 to 13, 96 teachers and total revenue expenditure of £7.5 million in 2012/13).<sup>28</sup> These costs differ from those in Table 17 for two reasons: first, the additional activity with Year 13 pupils and, second, the increased time taken to complete each activity because there are more pupils.

Table 18: Cost of activities needed to achieve Benchmark 6 in a school with a sixth form

	Careers Coordinator	Admin.	Careers Adviser(s)	Total hours/activity	Total cost/activity
Arrange at least one workplace experience for every pupil by the end of Year 11	18 hr.	3hr./pupil	0.5hr./pupil	749 hr.	£10,187
Arrange at least one further workplace experience for every pupil by the end of Year 13*	18 hr.	3hr./pupil	0.5hr./pupil	383 hr.	£5,265
Total hours/role	36 hr.	940 hr.	157 hr.	1,132 hr.	-
Total cost/role	£687	£11,775	£2,990	-	£15,453

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

\*only applies to schools with sixth form

<sup>27</sup> This is a school with 820 pupils, no sixth form, 58 teachers and a total revenue expenditure of £4.7 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

<sup>28</sup> DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

We estimate, therefore, that the cost of the time required to undertake these activities will be:

- £8,074 in a medium sized school without a sixth form; and
- £15,453 in a school with a sixth form.

### *What are the expected expenses?*

We consider the expected unit cost of each activity separately. As with Benchmark 5, we do not anticipate that schools will incur any additional costs in relation to the delivery of Benchmark 6 over and above the employment costs described earlier in this Section.

### *What is the total cost?*

We estimate that the total cost of achieving Benchmark 6 in a medium sized school will be £8,074. This is equivalent to 0.2% of the school's total revenue expenditure in 2012/2013 or £10 per pupil.

### *Sensitivity analysis*

We consider the effect of school characteristics, such as size, type and location, on the cost of achieving this benchmark. Table 19 illustrates the impact of these characteristics by estimating the respective delivery costs.

*Table 19: Cost of achieving Benchmark 6 by school size, type and location*

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£8,184	£8,184	£5,295	£5,142
School B	£12,950	£12,950	£8,272	£8,074
School C	£25,639	£25,639	£16,201	£15,880
School D	£24,769	£24,769	£15,839	£15,453

This sensitivity analysis shows that the total cost of delivering this benchmark in a large school (School C) in London is almost five times that of a small secondary school (School A) elsewhere in England (i.e. £25,639 and £5,142 per annum respectively). Consideration of these costs on a per pupil basis shows that they range from £16 per pupil in a small London school to £10 per pupil in a large school outside the Fringe in England.

### *Other assumptions*

In addition to our overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 6 is underpinned by the following assumptions:

- While the goal is for every pupil to have experience(s) of the workplace, in reality this may not be feasible due to illness etc. so we assume that schools should aim for 90% of pupils to have such an experience;
- Pupils are evenly distributed from years 7 to 11 (i.e. each year group is approximately the same size); and
- Where schools have a sixth form, on average, years 12 and 13 have approximately 50% as many pupils as other year groups (i.e. years 7 to 11).

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

# 10 Benchmark 7: Encounters with further and higher education

## Introduction

In this Section we assess the potential costs of Benchmark 7. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### Summary

*The aim of Benchmark 7 is that all pupils understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.*

*We expect Benchmark 7 to require no other input besides that provided by the core team responsible for career guidance in each school.*

*We estimate that the total internal (employment) costs in a typical school will be £1,363 per annum and that the additional expenses will be in the region of £270. Overall, the expected costs are £1,633 per annum for a typical school, which is equivalent to approximately £2 per pupil (or 0.1% of the school's expenditure); this ranges from £4 per pupil in a small, Inner London school to £1 per pupil in a large school outside the Fringe in England.*

## What is the benchmark?

### Vision:

*All pupils should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.*

### Benchmark:

*By the end of Year 11, every pupil should have had a meaningful<sup>29</sup> encounter with providers of the full range of learning opportunities, including sixth forms, colleges, universities and apprenticeship providers. This should include the opportunity to meet both staff and pupils.*

*By the end of Year 13, all pupils who are considering applying for university should have had at least two visits to universities to meet staff and pupils.*

## What activities will be needed to achieve the benchmark?

Our delivery model assumes that the Careers Coordinator will be responsible for the design, development and management of the delivery process for encouraging a meaningful encounter with the full range of Further Education (FE) and Higher Education (HE) providers for every pupil by the end of Year 11, and where applicable, at least two university visits for every pupil considering applying, by the end of Year 13. The Careers Administrator(s) will provide logistic and administrative support for this process.

## What are the employment costs?

Table 20 shows the time and financial costs associated with achieving this benchmark in a medium sized secondary school.<sup>30</sup>

<sup>29</sup> A 'meaningful' encounter is one in which the pupil has an opportunity to learn about what it's like to learn in that environment.

Table 20: Cost of activities needed to achieve Benchmark 7 in a medium sized school

	Careers Coordinator	Admin.	Total hours/ activity	Total cost/ activity
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Year 11	32 hr.	60 hr.	92 hr.	£1,363
Total hours/role	32 hr.	60 hr.	92 hr.	-
Total cost/role	£611	£752	-	£1,363

*Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).*

As with Benchmark 6, schools that have a sixth form will need to undertake additional activities to achieve Benchmark 7 and will, therefore, incur additional costs (i.e. to support Year 13 pupils who are considering applying for university to have at least two visits to universities to meet staff and pupils). Table 21 shows the time and financial costs associated with delivering this benchmark in a 'typical' school with a sixth form.<sup>31</sup>

Table 21: Cost of activities needed to achieve Benchmark 7 in a school with a sixth form

	Careers Coordinator	Admin.	Total hours/ activity	Total cost/ activity
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Year 11	32 hr.	60 hr.	92 hr.	£1,363
Encourage at least two university visits for every pupil considering applying, by the end of Year 13*	12 hr.	30 hr.	42 hr.	£605
Total hours/ role	44 hr.	90 hr.	134 hr.	-
Total cost/ role	£840	£1,128	-	£1,968

*Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).*

*\*only applies to schools with sixth form*

We have, therefore, estimated that the cost of the time required to undertake these activities will be £1,363 in a medium sized school without a sixth form and £1,968 in a school with a sixth form.

<sup>30</sup> This is a school with 820 pupils, no sixth form, 58 teachers and a total revenue expenditure of £4.7 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

<sup>31</sup> This is a school with 1,253 pupils, a sixth form, 96 teachers and a total revenue expenditure of £7.5 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

## What are the expected expenses?

We consider the expected unit cost of each activity separately. In addition to the employment costs estimated above we anticipate that schools will cover transportation costs to and from Further and Higher Education institutions for pupils who would not otherwise be able to afford it. Based on the number of pupils in School D (i.e. 1,253), the assumption that 50% of Year 13 pupils plan on applying to university (i.e. c.50) and that 25% of those would struggle to afford the transportation cost (i.e. c.13 pupils), a minibus would provide a sufficient capacity to transport the whole cohort. Assuming an average trip takes three hours and schools facilitate an average of two trips per year we estimate the cost of minibus hire to be £45/hour for two trips lasting three hours each giving a total cost of £270.

## What is the total cost?

We estimate that the total cost of achieving Benchmark 7 in a medium sized school without a sixth form will be £1,633 (i.e. £1,363 worth of time and £270 of expenses). This is equivalent to less than 0.1% of the school's total revenue expenditure in 2012/2013 or £2 per pupil.

## Sensitivity analysis

We consider the effect of school characteristics, such as size, type and location, on the cost of delivering this benchmark. Table 22 illustrates the impact of these characteristics by estimating the respective delivery costs.

Table 22: Cost of achieving Benchmark 7 by school size, type and location

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£2,271	£2,271	£1,742	£1,633
School B	£2,271	£2,271	£1,742	£1,633
School C	£2,271	£2,271	£1,742	£1,633
School D	£3,186	£3,186	£2,384	£2,238

This sensitivity analysis shows that the total cost of delivering Benchmark 7 in a school with sixth form (School D) based in London is almost twice as high as the cost for a small secondary school (School A), without sixth form (School A), elsewhere in England (i.e. £3,186 and £1,633 per annum respectively). Consideration of these costs on a per pupil basis shows that they range from £4 per pupil in a small school in London to £1 per pupil in a large school outside the Fringe in England.

## Other assumptions

In addition to our overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 7 is underpinned by the following assumptions:

- As with Benchmark 6, we assume that pupils are evenly distributed from years 7 to 11 (i.e. each year group is approximately the same size);
- As with Benchmark 6, where schools have a sixth form, we assume that, on average, years 12 and 13 have approximately 50% as many pupils as other year groups (i.e. years 7 to 11); and
- We assume that 50% of Year 13 pupils plan on applying to university and that the transportation costs associated with visiting a university would be a barrier to 25% of those pupils.

The detailed assumptions and calculations which sit behind these figures are included in the Appendices to this report.

# 11 Benchmark 8: Personal guidance

## Introduction

In this Section we assess the potential costs of Benchmark 8. We follow the same structure as that used in the other Sections which analyse the expected estimated costs of other Benchmarks.

### Summary

*The aim of Benchmark 8 is that all pupils have opportunities for guidance interviews with a Careers Adviser. These interviews should be expected for all pupils and should be available whenever significant study or career choices are being made, but should be timed to meet their individual needs.*

*Besides the core team responsible for career guidance in each school, we expect Benchmark 8 to require subject matter input from the Career Adviser(s).*

*We estimate that the total internal (employment) costs in a typical school will be £2,091 per annum and that no external costs (expenses) are associated with this Benchmark. Overall the expected costs of £2,091 are equivalent to approximately £3 per pupil (or less than 0.1% of the school's expenditure); this ranges from £3 per pupil in a small, Inner London school to £2 per pupil in a large school outside the Fringe in England.*

## What is the benchmark?

### Vision:

*Every pupil should have opportunities for guidance interviews with a Careers Adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made and should be expected for all pupils, but should be timed to meet their individual needs.*

### Benchmark:

*Every pupil should be expected to have at least one such interview by the age of 16, and the opportunity for a further interview by the age of 18.*

## What activities will be needed to achieve the benchmark?

We assume that the Careers Coordinator will be responsible for the management of the delivery of at least one structured careers interview with every pupil by the age of 16 and, where applicable, the provision of the opportunity for a further structured careers interview with every pupil by the age of 18. Interviews will be conducted by the Careers Adviser(s), who may or may not be the same person as the Careers Coordinator. The Careers Administrator(s) will be responsible for arranging these interviews.

## What are the employment costs?

Table 23 shows the time and financial costs associated with achieving this benchmark in a medium sized secondary school.<sup>32</sup>

<sup>32</sup> This is a school with 820 pupils, no sixth form, 58 teachers and a total revenue expenditure of £4.7 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).



Table 23: Cost of activities needed to achieve Benchmark 8 in a medium sized school

	Careers Coordinator	Admin.	Careers Adviser(s)	Total hours/activity	Total cost/activity
Conduct at least one structured interview with every pupil by the age of 16	6 hr.	0.2hr./ pupil	0.5hr./ pupil	121 hr.	£2,091
Total hours/role	6 hr.	33 hr.	82 hr.	121 hr.	-
Total cost/role	£115	£413	£1,565	-	£2,091

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

Achieving Benchmark 8 in a school with a sixth form means that schools need to provide pupils with the opportunity for a further structured interview by the age of 18. In order to estimate the additional cost of activities associated with this extra activity Table 24 shows the time and financial costs associated with delivering Benchmark 8 in a school with a sixth form.<sup>33</sup>

Table 24: Cost of activities needed to achieve Benchmark 8 in a school with a sixth form

	Careers Coordinator	Admin.	Careers Adviser(s)	Total hours/activity	Total cost/activity
Conduct at least one structured interview with every pupil by the age of 16	6 hr.	0.2hr/pupil	0.5hr/pupil	152 hr.	£2,631
Provide the opportunity for a further structured interview with every pupil by the age of 18*	6 hr.	0.2hr/pupil	0.5hr/pupil	79 hr.	£1,373
Total hours/role	12 hr.	63 hr.	157 hr.	231 hr.	-
Total cost/role	£229	£785	£2,990	-	£4,004

Note: Estimated cost of employment per hour is based on the England average salary for each role excluding London (Source: ONS, ASHE 2013).

\*only applies to schools with sixth form

We have, therefore, estimated that the cost of the time required to undertake these activities will be £2,091 in a medium sized school without a sixth form and £4,004 in a school with a sixth form.

## What are the expected expenses?

We consider the expected unit cost of each activity separately. As with Benchmarks 5 and 6, we do not anticipate that schools will incur any additional costs in relation to achieving Benchmark 8 over and above the employment costs described earlier in this Section.

## What is the total cost?

We estimate that the total cost of achieving Benchmark 8 in a medium sized school will be £2,091. This is equivalent to less than 0.1% of the school's total revenue expenditure in 2012/2013 or £3 per pupil.

<sup>33</sup> This is a school with 1,253 pupils, a sixth form, 96 teachers and a total revenue expenditure of £7.5 million in 2012/13. Source: DfE, Financial Benchmarking website (<https://www.education.gov.uk/sfb/MetricStage.aspx>).

## *Sensitivity analysis*

We consider the effect of school characteristics, such as size, type and location, on the cost of achieving this benchmark. Table 25 illustrates the impact of these characteristics by estimating the respective delivery costs for the four different types of school in four locations.

*Table 25: Cost of achieving Benchmark 8 by school size, type and location*

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£1,658	£1,658	£1,576	£1,341
School B	£2,594	£2,594	£2,453	£2,091
School C	£5,084	£5,084	£4,788	£4,087
School D	£4,966	£4,966	£4,698	£4,004

This sensitivity analysis shows that the total cost of delivering Benchmark 8 in a large school (School C) in London is more than triple that of a small secondary school (School A) elsewhere in England (i.e. £5,084 and £1,341 per annum respectively). Since most of the cost is driven by the number of pupils, the effects of economies of scale will be minimal (i.e. ranging from £3 per pupil in a small school in London to £2 per pupil in a large school outside the Fringe in England).

## *Other assumptions*

In addition to the overall assumptions set out in Section 2, the estimated cost of achieving Benchmark 8 is underpinned by the following specific assumptions:

- Structured career guidance interviews will require 30 minutes on average;
- As with Benchmarks 6 and 7, pupils are evenly distributed from years 7 to 11 (i.e. each year group is approximately the same size); and
- As with Benchmarks 6 and 7, where schools have a sixth form (School D), on average, years 12 and 13 have approximately 50% as many pupils as other year groups (i.e. years 7 to 11).

The detailed assumptions and calculations which sit behind these estimates are included in the Appendices to this report.

# 12 Summary of costs of the benchmarks

## Introduction

This Section summarises the results of our overall assessment of the economic costs of the benchmarks. We anticipate that schools will implement all eight benchmarks simultaneously, rather than selecting one or more benchmarks. We begin by summarising the school level costs associated with delivering all eight benchmarks. This is followed by analysis of the cost of delivering the benchmarks in all state maintained schools in England. We conclude by estimating the expected future delivery costs based on DfE projections for pupil numbers to 2021/22.

## School delivery cost

Table 26 shows the total annual cost of achieving all eight benchmarks in Year 1. As described earlier in this report, we envisage that schools will incur one-off set up costs in the first year of implementation, which will not be incurred in subsequent years (see Section 4 Benchmark 1: A careers programme). These costs relate to the initial design of the career guidance programme, which is likely to involve a broader consultation and research exercise than subsequent annual reviews and updates. The total annual cost of achieving the benchmarks from Year 2 onwards is shown in Table 27. Both tables demonstrate the effect of school characteristics such as size, type and location on delivery costs.

Table 26: Total cost of achieving the benchmarks by school size, type and location in Year 1

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£56,196	£54,537	£47,791	£45,209
School B	£67,384	£65,380	£56,464	£53,637
School C	£92,466	£89,858	£75,493	£72,014
School D	£91,335	£88,785	£74,723	£71,191

Table 27: Total cost of achieving the benchmarks by school size, type and location from Year 2 onwards

	Inner London	Outer London	The Fringe Area	Rest of England
School A	£48,264	£46,942	£40,608	£38,472
School B	£56,874	£55,380	£47,053	£44,676
School C	£77,445	£75,649	£62,184	£59,161
School D	£76,744	£74,978	£61,784	£58,708

We estimate that the total cost of delivery will range from £45,209 to £92,466 in Year 1 and £38,472 to £77,445 from Year 2 onwards in small schools in the rest of England and large, Inner London schools respectively. We also expect that the total cost of delivery in a 'typical' school from Year 2 onwards will be £44,676, which is equivalent to approximately 0.9% of total revenue expenditure in 2012/13 and £54 per pupil.

The total costs of achieving the benchmarks assume that schools already have appropriate data gathering and management systems in place. Our consultations with iCeGS suggest that this is an accurate reflection of the current capabilities of state maintained secondary schools in England. In order to test the sensitivity of this assumption we estimated the cost of the Careers Coordinator and Administrator(s) devoting an additional seven hours each, in Year 1 only, to familiarise themselves with the software. This is equivalent to an additional £303 for an Inner London school or £221 for a school outside the Fringe Area.

### *National delivery cost*

We used DfE data on school size, type and location to estimate the overall cost of implementing the benchmarks across all state maintained secondary schools in England.<sup>34</sup> Table 28 shows the distribution of schools in England.

Table 28: Distribution of state maintained secondary schools in England in 2012/13

	Inner London		Outer London		The Fringe Area		Rest of England		England	
	Number	%	Number	%	Number	%	Number	%	Number	%
<b>Small</b>	20	12.6%	15	5.3%	12	11.3%	392	14.35%	439	13.4%
<b>Medium</b>	28	17.6%	36	12.7%	17	16.0%	636	23.28%	717	21.9%
<b>Large</b>	11	6.9%	4	1.4%	6	5.7%	156	5.71%	177	5.4%
<b>Sixth form</b>	100	62.9%	228	80.6%	71	67.0%	1,548	56.7%	1,947	59.4%
<b>All</b>	159	5%	283	9%	106	3%	2,732	83%	3,280	100%

Table 29 shows how the total number of pupils is distributed across these schools.<sup>35</sup>

Table 29: Distribution of pupils in England in 2012/13

	Inner London		Outer London		The Fringe Area		Rest of England		England	
	'000	%	'000	%	'000	%	'000	%	'000	%
<b>Small</b>	7.2	4.8%	6.1	1.9%	5.4	5.1%	156.6	6.0%	175.4	5.5%
<b>Medium</b>	23.3	15.5%	31.2	9.8%	15.0	14.0%	522.0	19.8%	591.5	18.4%
<b>Large</b>	15.2	10.1%	5.1	1.6%	7.6	7.1%	200.6	7.6%	228.4	7.1%
<b>Sixth form</b>	104.0	69.5%	276.1	86.7%	79.1	73.8%	1,751.9	66.6%	2,211.2	69.0%
<b>All</b>	149.6	4.7%	318.6	9.9%	107.2	3.3%	2,631.1	82.1%	3,206.5	100.0%

<sup>34</sup> DfE Schools, pupils and their characteristics: January 2013 (<https://www.gov.uk/government/publications/schools-pupils-and-their-characteristics-january-2013>),

<sup>35</sup> DfE, State-funded schools: Full-time equivalent number of pupils (aged up to and including 15) by type of school in England: January 2001 to 2012 (actual) – January 2013 to 2021 (projection).

We then separated the total costs incurred by schools (i.e. Table 26 and Table 27) into two different categories:

- Variable costs that are driven by the number of pupils or teachers within the school; and
- Fixed costs that do not vary according to the number of pupils or teachers in a school– we assume that these will be identical for schools of different sizes within the same location.

The variable costs have been calculated on a per pupil basis for each area and school type for Year 1 (see Table 30) and for the later years (see Table 31).

Table 30: Variable costs per pupil in Year 1

	Inner London	Outer London	The Fringe Area	Rest of England
Small	£34.60	£33.64	£27.60	£26.35
Medium	£35.12	£34.11	£27.71	£26.63
Large	£32.70	£31.82	£25.33	£24.40
Sixth form	£41.49	£40.39	£32.03	£30.89

Table 31: Variable costs per pupil from Year 2 onwards

	Inner London	Outer London	The Fringe Area	Rest of England
Small	£27.43	£26.95	£21.40	£20.16
Medium	£31.02	£27.02	£21.14	£20.08
Large	£27.92	£25.74	£19.70	£18.78
Sixth form	£35.55	£32.71	£24.92	£23.79

We have used the number of schools provided in Table 28, our estimates of the variable costs per region (see Table 30 and Table 31) and the number of pupils by location and school type (Table 29) to estimate the total cost of implementing the benchmarks across England. Overall, we expect the costs to be £207.3m in Year 1 and £172.9m from Year 2 onwards (see Table 32 and Table 33 respectively). This is equivalent to approximately 1.8% of the £9.7bn total gross expenditure in 2012/13<sup>36</sup> and £54 per pupil.

We have also considered the total lifetime cost of providing the benchmarks to one pupil as they progress through the school system. We estimate this cost to be £196 based on a pupil who joins School D (i.e. a school with a sixth form outside of the Fringe Area) in Year 7 in 2014/15 and completes Year 13 in 2020/21.

<sup>36</sup> DfE, Detailed school income and expenditure statistics for local authority maintained schools in England by phase of education, 2011-12 and 2012-13.

Table 32: Total cost of achieving the benchmarks across England by school type and location in Year 1

	Inner London		Outer London		The Fringe Area		Rest of England		England	
	£(m)	%	£(m)	%	£(m)	%	£(m)	%	£(m)	%
<b>Small</b>	£1.0	8.4%	£0.8	3.3%	£0.6	8.0%	£16.6	10.1%	£18.9	9.1%
<b>Medium</b>	£1.9	15.7%	£2.4	10.3%	£1.0	14.3%	£34.1	20.7%	£39.4	19.0%
<b>Large</b>	£0.9	7.6%	£0.3	1.3%	£0.4	5.7%	£9.9	6.0%	£11.5	5.5%
<b>Sixth form</b>	£8.3	68.3%	£19.9	85.0%	£5.0	72.0%	£104.4	63.3%	£137.5	66.3%
<b>All</b>	£12.1	5.8%	£23.3	11.3%	£6.9	3.3%	£165.0	79.6%	£207.3	100.0%

Table 33: Total cost of achieving the benchmarks across England by school type and location from Year 2 onwards

	Inner London		Outer London		The Fringe Area		Rest of England		England	
	£(m)	%	£(m)	%	£(m)	%	£(m)	%	£(m)	%
<b>Small</b>	£0.9	7.3%	£0.7	2.8%	£0.5	6.8%	£14.2	8.6%	£16.2	7.8%
<b>Medium</b>	£1.6	13.2%	£2.0	8.7%	£0.8	11.9%	£28.4	17.2%	£32.9	15.9%
<b>Large</b>	£0.8	6.4%	£0.3	1.1%	£0.3	4.7%	£8.2	5.0%	£9.5	4.6%
<b>Sixth form</b>	£6.9	57.2%	£16.8	71.9%	£4.1	59.8%	£86.4	52.4%	£114.3	55.1%
<b>All</b>	£10.2	4.9%	£19.8	9.5%	£5.8	2.8%	£137.2	66.2%	£172.9	100.0%

## Expected future delivery costs

We have also estimated the expected future costs of implementing the benchmarks using the DfE's projections of the expected number of pupils through to 2021/22. In undertaking this analysis, as mentioned previously, we note that not all costs are influenced by changes in school size (i.e. they do not depend on pupil or teacher numbers).

The DfE provides projections for the number of pupils aged up to and including 15. Since the pupils in this age band account for 88% of the total number of state-funded secondary schools pupils, we considered that the rate of change in their numbers are representative for the whole secondary school pupil population (see Table 34).

Table 34: DfE projected changes in the number of pupils, state-funded secondary schools (for pupils aged up to and including 15)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Change vs. 2012	-1.17%	-2.85%	-3.20%	-2.85%	-1.46%	0.75%	3.95%	7.01%	10.48%

Based on these changes and the variable costs provided in Table 31, we estimated the total expected future cost of delivering the benchmarks across England in 2015/16, 2018/19 and 2021/22.

Our estimates of the expected future costs by location and school type are shown in Table 35.

Table 35: Total expected future cost of achieving the benchmarks across England by school type and location

	Inner London	Outer London	The Fringe Area	Rest of England	England
<b>2015/16</b>					
Small	£0.9m	£0.7m	£0.5m	£14.1m	£16.1m
Medium	£1.6m	£2.0m	£0.8m	£28.1m	£32.5m
Large	£0.8m	£0.3m	£0.3m	£8.0m	£9.4m
Sixth Form	£6.8m	£16.5m	£4.1m	£85.1m	£112.5m
Total	£10.0m	£19.4m	£5.7m	£135.3m	£170.5m
<b>2018/19</b>					
Small	£0.9m	£0.7m	£0.5m	£14.2m	£16.3m
Medium	£1.6m	£2.0m	£0.8m	£28.5m	£33.0m
Large	£0.8m	£0.3m	£0.3m	£8.2m	£9.6m
Sixth Form	£6.9m	£16.9m	£4.2m	£86.7m	£114.7m
Total	£10.2m	£19.8m	£5.8m	£137.7m	£173.5m
<b>2021/22</b>					
Small	£0.9m	£0.7m	£0.5m	£14.5m	£16.6m
Medium	£1.7m	£2.1m	£0.9m	£29.5m	£34.2m
Large	£0.8m	£0.3m	£0.3m	£8.6m	£10.0m
Sixth Form	£7.3m	£17.7m	£4.3m	£90.8m	£120.2m
Total	£10.7m	£20.8m	£6.0m	£143.4m	£181.0m

We estimate that the total cost of implementing the benchmarks across England in 2021/22 will be £181m. This is equivalent to approximately £52 per pupil.

These cost estimates relate to school level provision only. We have not included the costs of providing career guidance to those pupils who leave school at the end of Year 11 and attend a Further Education (FE) college because we have assumed that those costs are borne by the colleges themselves.

# 13 *Potential benefits of the benchmarks*

## *Introduction*

More effective career guidance can potentially lead to economic and social benefits for the individual pupil, for schools, for employers, for the Government and for the country as a whole which offset the costs to schools of implementing these benchmarks. This Section considers the available evidence. We start by developing an impact pathway which describes how career guidance can drive economic and social benefits and then summarise some of the existing literature which helps to gauge the potential magnitude of the different impacts. In practice, in the time available and without detailed primary research, this analysis is necessarily illustrative rather than exhaustive.

## *Expected impacts of career guidance*

We have developed an impact pathway which describes, in a simplified way, how the career guidance embodied in the benchmarks (as a package of measures) can be expected to drive positive economic and social outcomes. This is based on a review of previous analyses of the economic and social contribution of schools career guidance<sup>37</sup>.

Our review suggests that economic and social outcomes are likely to arise from a sequence of links (see Figure 7):

- Pupils get a better understanding of potential work and progression routes;
- Pupils are, therefore, better motivated to commit to education and acquire the skills and qualifications they require for a successful working life and, as a result, are likely to achieve more;
- Pupils with higher skills and qualifications are likely to achieve better outcomes in the labour market (e.g. higher earnings, better likelihood of employment, greater satisfaction in their working life); and
- Pupils are less likely to spend protracted or frequent periods Not in Education, Employment or Training (NEET) which means that their wellbeing will be greater and they will impose relatively fewer costs on the public finances and on society.

*Figure 7: Overview of impact pathway*



In the remainder of this Section we consider each link in the pathway in more detail.

<sup>37</sup> See, for example, Mayston, D. (2002). Assessing the benefits of career guidance. CeGS Occasional Paper. Derby: Centre for Guidance Studies, University of Derby.



The benchmarks will potentially give pupils a **better understanding of potential work and progression routes** because they:

- Are made more aware of how possible courses of study will provide them with skills in areas of current or future skills shortage;
- Are more likely to choose the course of study at school and college that will lead to the qualifications they need for available jobs;
- Reflect on what this new knowledge means for them and their own ambitions;
- Are motivated to complete the courses they start with the result that they take fewer wrong turns and are less likely to have to restart different courses or careers; and
- Experience a better match between their interests and talents and the skills they acquire.

As a consequence of having a better understanding of work and progression routes, pupils will potentially be **more motivated to acquire the skills and qualifications they require** to enjoy a working life in which they can fulfil their potential because they will:

- See the benefit of working hard to get the qualifications they need for the kind of job they want;
- Be less likely to inadvertently drop critical subjects (such as mathematics) that they subsequently find they need;
- Leave full time education with greater confidence in their job-seeking and career management skills<sup>38</sup>; and
- Be more confident that they will find a job that suits their interests and skills.

This means that they will:

- Leave full time education having been encouraged, guided and challenged to explore and find an appropriate education and career path by careers advisors or teachers;
- Have been encouraged to achieve the best possible qualifications;
- Be well positioned to find employment which reflects their potential; and
- Avoid taking the wrong courses at 16 and 18 and failing to complete them with the result that they then wait to start a more suitable course or, in the worst case, never re-enter education.

Following on from this, pupils with higher skills and qualifications will potentially **achieve better outcomes in the labour market** because they will:

- Find suitable work more quickly;
- Be more satisfied with their jobs;
- Be less likely to want to change jobs; and
- Have stronger skills (and are able to add more value and earn more).

In summary, we see career guidance as having the potential to deliver economic and social benefits for three groups:

1. Individuals who benefit from greater potential earnings and enhanced wellbeing over their lifetime;
2. Employers and, hence, the economy as a whole, which benefits from improved productivity (over and above the effect on individuals); and
3. Government which benefits from the positive impact on the public finances through reduced demand for welfare spending (on JSA, housing benefit, etc.), healthcare, criminal justice costs and higher tax receipts.

There may also be important distributional outcomes in terms of more equal opportunities and greater integration as well as enhanced social mobility. These benefits are particularly important for young people from disadvantaged backgrounds because the career guidance envisaged in the benchmarks is less likely to be available to them to raise aspirations, reduce stereotyping and so improve social mobility.

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<sup>38</sup> These include the ability to compose a CV and covering letters, to find and approach potential employers and to understand and negotiate recruitment systems such as online competence-based applications, assessment centres, psychometric testing and interviews.

## Evidence

We have reviewed the existing literature to identify evidence which can be used to inform an understanding of the potential benefit of the benchmarks.

We note that there is limited empirical evidence on the relationship between all elements of the career guidance benchmarks, pupil motivation and attainment.

We have, therefore, focused on the potential implications of two related outcomes:

- An increase in the earnings of young people who either acquire more skills and qualifications and/or increase their probability of finding employment; and
- A potential reduction in the number of young people who are NEET.

## The benefits of skills and qualifications

The career guidance benchmarks can be expected to contribute to young people being able to increase their lifetime earnings as they acquire more skills and qualifications and/or increase the probability of finding employment. This will be reflected in higher incomes for them as individuals and also higher receipts for the Exchequer (as they pay more tax on their earnings). Below, we summarise the evidence of recent research for the Department for Business, Innovation & Skills (BIS).

## Returns to intermediate and low level vocational qualifications

Research for BIS has estimated the returns to intermediate and low level vocational qualifications to learners and to the Exchequer<sup>39</sup>. We summarise the key findings below.

### Lifetime earnings

The net present value (NPV) of the lifetime earnings benefits of acquiring Apprenticeships at either Level 2 or Level 3 (net of the associated costs) are between £48,000 and £74,000 for Level 2 and between £77,000 and £117,000 for Level 3 Apprenticeships.<sup>40</sup> The impacts of vocational qualifications at the same level are summarised in Table 36.

Table 36: Benefits of vocational qualifications at Level 2 and Level 3 (NPV)

	City & Guilds	BTEC	NVQ
<b>Level 2</b>	£42,353 - £70,699	£35,138 - £56,571	£17,728 - £42,441
<b>Level 3</b>	£55,281 - £88,967	£44,906 - £63,801	£36,848 - £66,593

### Exchequer benefits

Besides enhancing lifetime earnings for the individual, the Exchequer benefits from a positive return from vocational qualifications, especially at Level 3. For apprenticeships, the estimated return to the Exchequer is between £31,000 and £48,000 at Level 2, and between £56,000 and £81,000 for Level 3 apprenticeships. Vocational qualifications, especially at Level 3, also provide significant returns to the Exchequer (see Table 37).

<sup>39</sup> Department for Business, Innovation & Skills, Returns to Intermediate and Low Level Vocational Qualifications, BIS Research Paper Number 53, September 2011.

<sup>40</sup> The range reflects different assumptions about the proportion of the employment effect that is attributed to the particular qualification: the lower estimate assumes that half of the employment benefit is attributed to the qualification while the higher estimate assumes that all of the employment gain is due to obtaining the qualification.

Table 37: Exchequer benefits of vocational qualifications at Level 2 and Level 3

	City & Guilds	BTEC	NVQ
<b>Level 2</b>	£25,633 - £41,830	£19,748 - £32,154	£3,308 - £17,276
<b>Level 3</b>	£29,654 - £47,748	£27,311 - £38,108	£20,514 - £36,355

## Returns to higher education

A similar type of analysis for BIS has also estimated the returns to HE.<sup>41</sup> We summarise the key findings below.

### Lifetime earnings

The estimated lifetime earnings benefit of attaining an undergraduate degree (rather than simply A levels) is estimated to be approximately £125,000 in NPV terms (after tax but before taking account of the costs). If costs are included, the benefit falls to approximately £108,000 on average, with some variation by gender.

The benefits of Foundation degrees and HE Diplomas vary by gender. For women, a Foundation degree provides a net benefit (i.e. net of costs) of approximately £62,000, HE Diploma offers an estimated benefit of £70,000 and 'other' higher education qualifications deliver a benefit of £33,000. Men achieve an equivalent net benefit of £52,000 from a Foundation degree, £21,000 for a higher education Diploma and £33,000 for 'other' higher education qualifications.

### Exchequer benefits

The mean gross Exchequer benefit (i.e. enhanced income tax and National Insurance receipts before the costs of provision) associated with undergraduate degree level provision is approximately £110,000 in NPV terms. Net of the costs associated with undergraduate degree level provision, the Exchequer benefits is £89,000 overall.

Achievement of a Foundation degree by a woman provides the Exchequer with a net benefit of approximately £45,000 while a HE Diploma and 'other' higher education qualifications contribute approximately £55,000 and £22,000 respectively. The Exchequer benefit associated with the achievement of a Foundation degree by a man stands at £37,000, while the benefit associated with a HE Diploma is £13,000.

### The consequences of young people being NEET

There are a number of economic and social costs which are associated with growing numbers of young people being NEET. Most are borne by the young people themselves, but there are also wider social and economic costs. Career guidance has the potential to help avoid some of these associated costs.

For the individual, the costs include:

- Wage scarring – A period of unemployment at an early age can result in reduced wages over a long period. Gregg and Tominey estimate that youth unemployment can reduce an individuals' wages by between 13 and 21 per cent by the age of 42.<sup>42</sup>
- Reduced employability – Lack of labour market contact inhibits the development of key 'employability' and 'soft' skills including self-motivation, time management and communication skills. Employers have highlighted a growing shortage of these skills amongst young people;<sup>43</sup>
- Fewer/lower qualifications – NEET individuals are six times less likely to have qualifications (lower potential earnings, loss of tax revenue); and
- Reduced self-confidence – More than one-in-five NEETs surveyed in 2009 reported that they had lost the confidence to go to job interviews.<sup>44</sup>

<sup>41</sup> Department for Business, Innovation & Skills, The Returns to Higher Education, BIS Research Paper Number 45, June 2011.

<sup>42</sup> Gregg, P. and Tominey, E. (2005) 'The wage scar from youth unemployment,' Labour Economics, 12:4: 487-509.

<sup>43</sup> Bell, D. and Blanchflower, D. (2010) Youth Unemployment: Déjà vu? Bonn: Institute for the Study of Labour; ACEVO (2012). Youth unemployment: the crisis we cannot afford, London. AVECO.

The 2008 NEET cohort was expected to cost an estimated £22 billion in opportunity costs over their lifetimes.<sup>45</sup>

Beyond the costs for the individual, if more young people are NEET, this represents a cost to public finances (through additional benefit payments, higher cost of crime, higher healthcare costs, lost tax revenues and so on) as well as to the economy in the form of reduced economic productivity. Several studies have attempted to estimate the costs associated with young people who are NEET.

- **Higher unemployment costs.** Better guidance means young people are more likely to choose, and be motivated towards, courses leading to qualifications and skills that will make them employable. So they are less likely to be unemployed on leaving school, and less likely to become long-term unemployed. This in turn reduces the benefit payments that the state has to make. Recent research by the Prince's Trust suggests that the November 2010 level of NEETs amongst 20-24 year olds cost £22m per week in Jobseekers Allowance (JSA) and between £22-133m per week in lost productivity.<sup>46</sup>
- **Higher costs of crime.** There is a statistical association between unemployment and crime. By reducing unemployment, better career guidance can reduce crime and its associated costs. Youth unemployment has been seen to increase the risk of problematic behaviour and delinquency.<sup>47</sup> Whilst representing a considerable cost to the criminal justice system, this also impacts greatly at an individual level as having a criminal record is a barrier to employment and impacts negatively on subsequent labour market experiences. The cost of youth crime (including imprisonment of children and young people) is estimated to be £23m a week (or £1.2bn per year).<sup>48</sup> NEET individuals are five times more likely to have a criminal record (i.e. contributing to policing and criminal justice system costs).<sup>49</sup>
- **Poorer health and well-being leading to higher health care costs.** There is a correlation between income, quality of life and health status. Being out of work can lead to stress, lower self-esteem, and depression.<sup>50</sup> Unemployed people and those on low income have poorer health overall which increases the costs of the National Health Service. This in turn may increase the strain on families, communities and the NHS. In a recent UK survey of young people a quarter of those who were or had been unemployed said that being unemployed caused arguments with their family; and more than one in ten said that being unemployed drove them to drugs or alcohol.<sup>51</sup> NEET individuals are three times more likely to have depression (costs to the NHS).<sup>52</sup>
- **Increased tax yields.** Better career guidance will, overall, put people into jobs that better match their abilities, and as a result they will earn more and so will their employers, resulting in a higher tax yield for the Exchequer.

Overall, the average total cost to the public finances of each 16-18 year old who is currently NEET is estimated to be £56,000 over the course of their lifetime and the latest estimate of the aggregate public finance costs of 16-18 year old NEETs ranges from £12bn to £32bn.<sup>53</sup>

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<sup>44</sup> The Prince's Trust (2010) YouGov Youth Index, The Prince's Trust.

<sup>45</sup> See Audit Commission (2010) Against the Odds, Available at <http://www.audit-commission.gov.uk/2010/07/against-the-odds-re-engaging-young-people-in-education-employment-or-training/>

<sup>46</sup> The Prince's Trust (2010) The Cost of Exclusion: Counting the cost of youth disadvantage in the UK, The Prince's Trust. The lower bound of the cost-range (£22m pa) assumes a productivity cost equal to the JSA cost; the upper bound (£133m pa) is the average productivity of their wage group (20-25 years old).

<sup>47</sup> The Prince's Trust (2007) The Cost of Exclusion: Counting the cost of youth disadvantage in the UK, The Prince's Trust.

<sup>48</sup> The Prince's Trust (2010) The Cost of Exclusion: Counting the cost of youth disadvantage in the UK, The Prince's Trust.

<sup>49</sup> See Audit Commission (2010) Against the Odds, Available at <http://www.audit-commission.gov.uk/2010/07/against-the-odds-re-engaging-young-people-in-education-employment-or-training/>

<sup>50</sup> Audit Commission (2010) Against the odds: Re-engaging young people in education, employment or training. London: Audit Commission.

<sup>51</sup> The Prince's Trust (2010) YouGov Youth Index, The Prince's Trust.

<sup>52</sup> See Audit Commission (2010) Against the Odds, Available at <http://www.audit-commission.gov.uk/2010/07/against-the-odds-re-engaging-young-people-in-education-employment-or-training/>

<sup>53</sup> Coles, B., Godfrey, C., Keung, A., Parrott, S. and Bradshaw, J. (2010) Estimating the life-time cost of NEET: 16-18 year olds in Education, Employment or Training: Research undertaken for the Audit Commission, University of York.

## *Interpretation of the evidence*

Some sense of the scale of the potential economic and social benefits of the career guidance Benchmarks relative to their costs of delivery can be gleaned by comparing the potential benefits cited above (i.e. increased lifetime earnings for the individual, enhanced income tax and National Insurance receipts to the Exchequer and potential cost savings for the Exchequer and for society as a whole in areas such as benefits, crime, healthcare etc.) with the lifetime cost of providing one pupil with career guidance throughout their school career.

On the basis that the expected lifetime cost is approximately £200, then if:

- One more pupil is encouraged to attain an undergraduate degree (when otherwise they would only have acquired A levels), this would be enough to offset the costs of providing the benchmarks to 985 pupils;<sup>54</sup>
- One more female pupil is encouraged to attain a Foundation Degree (when otherwise they would only have acquired A levels), this would be enough to offset the costs of providing the benchmarks to 535 pupils;
- One more pupil is encouraged to attain a Level 2 Apprenticeship (when otherwise they would only have acquired a Level 1 qualification), this would be enough to offset the costs of providing the benchmarks to between 395 and 610 pupils;
- One more pupil is encouraged to attain a Level 3 Apprenticeship (when otherwise they would only have acquired a Level 2 qualification), this would be enough to offset the costs of providing the benchmarks to between 665 and 990 pupils; and
- One more pupil is deterred or prevented from becoming NEET, the avoided Exchequer costs would be enough to provide the benchmarks to 280 pupils<sup>55</sup>.

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<sup>54</sup> i.e. (net lifetime earnings benefit + net exchequer benefits) ÷ lifetime cost of providing one pupil with career guidance throughout their school career = (£108,000 + £89,000) ÷ £200 = £197,000 ÷ £200 = 985.

<sup>55</sup> i.e. average total cost to public finances of each 16-18 year old who is NEET ÷ lifetime cost of providing one pupil with career guidance throughout their school career = £56,000 ÷ £200 = 280.

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# *Appendices*

# Appendix A: Frequency of activity

## School characteristics by type

	School A	School B	School C	School D
No. of pupils	509	820	1,648	1,253
Sixth form (y/n)	n	n	n	y
No. of Year Groups	5	5	5	7
No. of teachers	34	58	100	96
<b>Total revenue expenditure (in 2012/13) (£)</b>	<b>£30,89,357</b>	<b>£47,27,197</b>	<b>£81,78,387</b>	<b>£74,96,464</b>

Source: DfE Financial Benchmarking, available at: <https://www.education.gov.uk/sfb/login.aspx>

Task/activity	Role	SLT member	Careers Coordinator	Administrator (s)	Careers Adviser(s)	IT support	Class based teachers	Total hours/activity			
								School A	School B	School C	School D
<i>Design structured careers programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in year 1 only)</i>		32	48	32	48		3 hr./teacher	262	334	460	448
Review and update structured careers programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every 3 years)		32	50	36			3 hr./teacher	220	292	418	406
Oversee programme delivery		32						32	32	32	32
Publish careers programme on school's website			1			3		4	4	4	4
Collate and distribute career path and labour market info.			3	30	3			36	36	36	36
Support pupils to access and use career path and labour market info.			3	3	1 hr./class for each Year Group			31	47	88	79
Encourage parents to access and use career path and labour market info. (e.g. through Careers coordinator attendance at parents' evenings)			24	3				27	27	27	27
Maintain a career guidance record for each pupil			18	30		30		78	78	78	78
Allow pupils access to their own career guidance records						30		30	30	30	30
Track pupil destination information for at least 3 years			12	54				66	66	66	66



Task/activity	Role	SLT member	Careers Coordinator	Administrator (s)	Careers Adviser(s)	IT support	Class based teachers	Total hours/activity			
								School A	School B	School C	School D
Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers							12 hr./subject (18)	216	216	216	216
Develop network with external organisations (e.g. employers, colleges, universities, etc.)		39	39		117		6 hr./subject (18)	303	303	303	303
Arrange at least 1 meaningful encounter per year with an employer for every pupil aged 11 or over			32	60				92	92	92	92
Arrange at least 1 workplace experience for every pupil by the end of Y11			18	3 hr./pupil	0.5 hr./pupil			374	592	1,172	749
Arrange at least 1 further workplace experience for every pupil by the end of Y13*			18	3 hr./pupil	0.5 hr./pupil			*	*	*	383
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Y11			32	60				92	92	92	92
Encourage at least 2 university visits for every pupil considering applying, by the end of Y13*			12	30				*	*	*	42
Conduct at least 1 structured interview with every pupil by the age of 16			6	0.2 hr./pupil	0.5 hr./pupil			77	121	237	152
Provide the opportunity for a further structured interview with every pupil by the age of 18*			6	0.2 hr./pupil	0.5 hr./pupil			*	*	*	79
<b>Total hours/role for School A in Year 1</b>		<b>135</b>	<b>286</b>	<b>634</b>	<b>295</b>	<b>63</b>	<b>528</b>	<b>1,941</b>			
<b>Total hours/role for School B in Year 1</b>		<b>135</b>	<b>286</b>	<b>833</b>	<b>373</b>	<b>63</b>	<b>672</b>		<b>2,362</b>		
<b>Total hours/role for School C in Year 1</b>		<b>135</b>	<b>286</b>	<b>1,363</b>	<b>580</b>	<b>63</b>	<b>924</b>			<b>3,351</b>	
<b>Total hours/role for School D in Year 1</b>		<b>135</b>	<b>322</b>	<b>1,340</b>	<b>554</b>	<b>63</b>	<b>900</b>				<b>3,315</b>

Task/activity	Role	SLT member	Careers Coordinator	Administrator (s)	Careers Adviser(s)	IT support	Class based teachers	Total hours/activity			
								School A	School B	School C	School D
<b>Total hours/role for School A from Year 2 onwards</b>		<b>103</b>	<b>238</b>	<b>602</b>	<b>247</b>	<b>63</b>	<b>426</b>	<b>1,679</b>			
<b>Total hours/role for School B from Year 2 onwards</b>		<b>103</b>	<b>238</b>	<b>801</b>	<b>325</b>	<b>63</b>	<b>498</b>	<b>2,028</b>			
<b>Total hours/role for School C from Year 2 onwards</b>		<b>103</b>	<b>238</b>	<b>1,331</b>	<b>532</b>	<b>63</b>	<b>624</b>			<b>2,891</b>	
<b>Total hours/role for School D from Year 2 onwards</b>		<b>103</b>	<b>274</b>	<b>1,308</b>	<b>506</b>	<b>63</b>	<b>612</b>				<b>2,867</b>
<i>*Only applies to schools with sixth form</i>											

*Source: PwC analysis based on consultation with International Centre for Guidance Studies (iCeGS), University of Derby, and The Gatsby Charitable Foundation*

# Appendix B: Calculating employment costs

## Class based teachers

Location	Estimated annual salary (£)	Expected additional employment costs	Annual cost (£)	2013/14 costs (£)*	Cost per week (£)	Hours worked per week	Cost per hour (£)
England without London	£32,836	40%	£45,970	£46,430	£893	28.9 hr.	£30.9
Inner London	£38,048	40%	£53,267	£53,800	£1,035	28.9 hr.	£35.8
Outer London	£35,503	40%	£49,704	£50,201	£965	28.9 hr.	£33.4
The Fringe Area	£32,886	40%	£46,040	£46,500	£894	28.9 hr.	£30.9

Source: PwC analysis based on the ONS, ASHE 2013 data and the teachers' salary scale

\* based on a 1% increase in the teachers' salaries

## SLT Members

Location	Estimated annual salary (£)	Expected additional employment costs	Annual cost (£)	2013/14 costs (£)*	Cost per week (£)	Hours worked per week	Cost per hour (£)
England without London	£49,061	40%	£68,685	£69,372	£1,334	31.6 hr.	£42.2
Inner London	£55,715	40%	£78,001	£78,781	£1,515	31.6 hr.	£47.9
Outer London	£52,317	40%	£73,244	£73,976	£1,423	31.6 hr.	£45.0
The Fringe Area	£50,717	40%	£71,004	£71,714	£1,379	31.6 hr.	£43.6

Source: PwC analysis based on the ONS, ASHE 2013 data and the school leaders' salary scale

\* based on a 1% increase in the teachers' salaries (£)

## Career Adviser(s) and Coordinators

Location	Estimated annual salary (£)	Expected additional employment costs	Annual cost (£)	Cost per week (£)	Hours worked per week	Cost per hour (£)	Notes
London	£25,208	40%	£35,291	£679	31.9 hr.	£21.3	Used for the Inner London and Outer London regions.
South East	£27,698	40%	£38,777	£746	31.9 hr.	£23.4	Used for the Fringe Area.
England (average excluding London)	£22,622	40%	£31,671	£609	31.9 hr.	£19.1	

Source: ONS, ASHE 2013

## Administrators

Location	Estimated annual salary (£)	Expected additional employment costs	Annual cost (£)	Cost per week (£)	Hours worked per week	Cost per hour (£)	Notes
London	£23,775	40%	£33,285	£640	29.1 hr.	£22.0	Used for the Inner London and Outer London regions.
South East	£13,038	40%	£18,253	£351	29.1 hr.	£12.1	Used for the Fringe Area
England (average excluding London)	£13,543	40%	£18,960	£365	29.1 hr.	£12.5	

Source: ONS, ASHE 2013

## *IT support*

Location	Estimated annual salary (£)	Expected additional employment costs	Annual cost (£)	Cost per week (£)	Hours worked per week	Cost per hour (£)	Notes
London	£34,871	40%	£48,819	£939	36.2 hr.	£25.9	Used for the Inner London and Outer London regions.
South East	£31,119	40%	£43,567	£838	36.2 hr.	£23.1	Used for the Fringe Area
England (average excluding London)	£27,496	40%	£38,495	£740	36.2 hr.	£20.4	

*Source: ONS, ASHE 2013*

## *Summary – Cost per hour for different roles in different locations (£)*

Location/ Role	SLT member	Careers Coordinator	Administrator(s)	Career Adviser(s)	IT support	Class based teachers
Inner London	£47.9	£21.3	£22.0	£21.3	£25.9	£35.8
Outer London	£45.0	£21.3	£22.0	£21.3	£25.9	£33.4
The Fringe Area	£43.6	£23.4	£12.1	£23.4	£23.1	£30.9
England outside the Fringe Area	£42.2	£19.1	£12.5	£19.1	£20.4	£30.9

*Source: PwC analysis based in the ONS, ASHE 2013 results and the teachers' salary scales*

## *Total cost, based on England outside the Fringe Area*

School and Year/ Role	Total cost per role						Total cost	Proportion of expenditure	Average cost per pupil (£)
	SLT member	Careers Coordinator	Administrator(s)	Career Adviser(s)	IT support	Class based teachers			
School A in Year 1	£5,699	£5,460	£7,941	£5,637	£1,288	£16,313	£42,339	1.4%	£83
School B in Year 1	£5,699	£5,460	£10,435	£7,122	£1,288	£20,762	£50,766	1.1%	£62
School C in Year 1	£5,699	£5,460	£17,075	£11,074	£1,288	£28,547	£69,144	0.8%	£42
School D in Year 1	£5,699	£6,148	£16,795	£10,584	£1,288	£27,806	£68,320	0.9%	£55
School A from Year 2 onwards	£4,348	£4,544	£7,540	£4,721	£1,288	£13,161	£35,603	1.2%	£70
School B from Year 2 onwards	£4,348	£4,544	£10,034	£6,205	£1,288	£15,386	£41,806	0.9%	£51
School C from Year 2 onwards	£4,348	£4,544	£16,674	£10,157	£1,288	£19,279	£56,291	0.7%	£34
School D from Year 2 onwards	£4,348	£5,231	£16,394	£9,667	£1,288	£18,908	£55,838	0.7%	£45

*Source: PwC analysis*

## Appendix C: Total employment costs per activity by school size and location

Task/activity	Inner London				Outer London			
	School A	School B	School C	School D	School A	School B	School C	School D
<i>Design structured careers programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in year 1 only)</i>	£7,932	£10,510	£15,020	£14,591	£7,594	£9,999	£14,208	£13,808
Review and update structured careers programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every 3 years)	£7,041	£9,619	£14,130	£13,700	£6,704	£9,109	£13,318	£12,917
Oversee programme delivery	£1,534	£1,534	£1,534	£1,534	£1,441	£1,441	£1,441	£1,441
Publish careers programme on school's website	£99	£99	£99	£99	£99	£99	£99	£99
Collate and distribute career path and labour market info.	£788	£788	£788	£788	£788	£788	£788	£788
Support pupils to access and use career path and labour market info.	£671	£1,002	£1,883	£1,685	£671	£1,002	£1,883	£1,685
Encourage parents to access and use career path and labour market info. (e.g. through Careers co-ordinator attendance at parents' evenings)	£577	£577	£577	£577	£577	£577	£577	£577
Maintain a career guidance record for each pupil	£1,821	£1,821	£1,821	£1,821	£1,821	£1,821	£1,821	£1,821
Allow pupils access to their own career guidance records	£778	£778	£778	£778	£778	£778	£778	£778
Track pupil destination information for at least 3 years	£1,443	£1,443	£1,443	£1,443	£1,443	£1,443	£1,443	£1,443

Assessing benchmarks of good practice in school career guidance

Task/activity	Inner London				Outer London			
	School A	School B	School C	School D	School A	School B	School C	School D
Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers	£7,733	£7,733	£7,733	£7,733	£7,215	£7,215	£7,215	£7,215
Develop network with external organisations (e.g. employers, colleges, universities, etc.)	£9,055	£9,055	£9,055	£9,055	£8,682	£8,682	£8,682	£8,682
Arrange at least 1 meaningful encounter per year with an employer for every pupil aged 11 or over	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001
Arrange at least 1 workplace experience for every pupil by the end of Y11	£8,184	£12,950	£25,639	£16,385	£8,184	£12,950	£25,639	£16,385
Arrange at least 1 further workplace experience for every pupil by the end of Y13*	£0	£0	£0	£8,384	£0	£0	£0	£8,384
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Y11	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001	£2,001
Encourage at least 2 university visits for every pupil considering applying, by the end of Y13*	£0	£0	£0	£915	£0	£0	£0	£915
Conduct at least 1 structured interview with every pupil by the age of 16	£1,658	£2,594	£5,084	£3,268	£1,658	£2,594	£5,084	£3,268
Provide the opportunity for a further structured interview with every pupil by the age of 18*	£0	£0	£0	£1,698	£0	£0	£0	£1,698
<b>Total cost for year 1</b>	<b>£53,315</b>	<b>£64,503</b>	<b>£89,585</b>	<b>£88,454</b>	<b>£51,656</b>	<b>£62,499</b>	<b>£86,977</b>	<b>£85,904</b>
<b>Total cost for year 2 onwards</b>	<b>£45,383</b>	<b>£53,993</b>	<b>£74,564</b>	<b>£73,864</b>	<b>£44,062</b>	<b>£52,499</b>	<b>£72,769</b>	<b>£72,097</b>



Assessing benchmarks of good practice in school career guidance

Task/activity	The Fringe Area				England without London			
	School A	School B	School C	School D	School A	School B	School C	School D
<i>Design structured careers programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in year 1 only)</i>	£7,183	£9,411	£13,309	£12,938	£6,736	£8,961	£12,853	£12,483
Review and update structured careers programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every 3 years)	£6,156	£8,384	£12,282	£11,911	£5,908	£8,132	£12,025	£11,655
Oversee programme delivery	£1,397	£1,397	£1,397	£1,397	£1,351	£1,351	£1,351	£1,351
Publish careers programme on school's website	£93	£93	£93	£93	£80	£80	£80	£80
Collate and distribute career path and labour market info.	£502	£502	£502	£502	£490	£490	£490	£490
Support pupils to access and use career path and labour market info.	£701	£1,065	£2,033	£1,815	£581	£878	£1,668	£1,490
Encourage parents to access and use career path and labour market info. (e.g. through Careers co-ordinator attendance at parents' evenings)	£597	£597	£597	£597	£496	£496	£496	£496
Maintain a career guidance record for each pupil	£1,477	£1,477	£1,477	£1,477	£1,333	£1,333	£1,333	£1,333
Allow pupils access to their own career guidance records	£694	£694	£694	£694	£613	£613	£613	£613
Track pupil destination information for at least 3 years	£932	£932	£932	£932	£906	£906	£906	£906
Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers	£6,684	£6,684	£6,684	£6,684	£6,673	£6,673	£6,673	£6,673
Develop network with external organisations (e.g. employers, colleges, universities, etc.)	£8,691	£8,691	£8,691	£8,691	£7,962	£7,962	£7,962	£7,962
Arrange at least 1 meaningful encounter per year with an employer for every pupil aged 11 or over	£1,472	£1,472	£1,472	£1,472	£1,363	£1,363	£1,363	£1,363

Task/activity	The Fringe Area				England without London			
	School A	School B	School C	School D	School A	School B	School C	School D
Arrange at least 1 workplace experience for every pupil by the end of Y11	£5,295	£8,272	£16,201	£10,419	£5,142	£8,074	£15,880	£10,187
Arrange at least 1 further workplace experience for every pupil by the end of Y13*	£0	£0	£0	£5,420	£0	£0	£0	£5,265
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Y11	£1,472	£1,472	£1,472	£1,472	£1,363	£1,363	£1,363	£1,363
Encourage at least 2 university visits for every pupil considering applying, by the end of Y13*	£0	£0	£0	£642	£0	£0	£0	£605
Conduct at least 1 structured interview with every pupil by the age of 16	£1,576	£2,453	£4,788	£3,085	£1,341	£2,091	£4,087	£2,631
Provide the opportunity for a further structured interview with every pupil by the age of 18*	£0	£0	£0	£1,613	£0	£0	£0	£1,373
<b>Total cost for year 1</b>	<b>£44,920</b>	<b>£53,594</b>	<b>£72,623</b>	<b>£71,853</b>	<b>£42,339</b>	<b>£50,766</b>	<b>£69,144</b>	<b>£68,320</b>
<b>Total cost for year 2 onwards</b>	<b>£37,737</b>	<b>£44,183</b>	<b>£59,313</b>	<b>£58,914</b>	<b>£35,603</b>	<b>£41,806</b>	<b>£56,291</b>	<b>£55,838</b>

Source: PwC analysis

## Appendix D: Expenses summary

Activity	Expense	Cost
<i>Design structured careers programme which challenges stereotypical thinking and raises aspirations (additional cost of initial set up in year 1 only)</i>	N/A	
Review and update structured careers programme which challenges stereotypical thinking and raises aspirations (e.g. annually). Conduct regular evaluation of the programme (e.g. every 3 years)	N/A	
Oversee programme delivery	N/A	
Publish careers programme on school's website	N/A	
Collate and distribute career path and labour market info.	Careers resource packages	£1,000
Support pupils to access and use career path and labour market info.	N/A	
Encourage parents to access and use career path and labour market info. (e.g. through Careers Coordinator attendance at parents' evenings)	N/A	
Maintain a career guidance record for each pupil	N/A	
Allow pupils access to their own career guidance records	N/A	
Track pupil destination information for at least 3 years	Alumni tracking system	£800
Maintain skills/knowledge about link between subject and careers through CPD and link curriculum learning to careers	Professional membership fees and teaching cover	£800
Develop network with external organisations (e.g. employers, colleges, universities, etc.)	N/A	
Arrange at least 1 meaningful encounter per year with an employer for every pupil aged 11 or over	N/A	
Arrange at least 1 workplace experience for every pupil by the end of Y11	N/A	

Assessing benchmarks of good practice in school career guidance

<b>Activity</b>	<b>Expense</b>	<b>Cost</b>
Arrange at least 1 further workplace experience for every pupil by the end of Y13*	N/A	
Encourage a meaningful encounter with the full range of FE and HE providers for every pupil by the end of Y11	N/A	
Encourage at least 2 university visits for every pupil considering applying, by the end of Y13*	Transportation costs	£270
Conduct at least 1 structured interview with every pupil by the age of 16	N/A	
Provide the opportunity for a further structured interview with every pupil by the age of 18*	N/A	
<b>Total cost</b>		<b>£2,870</b>

## Appendix E: Total fixed costs by school type and location

Year 1				
	<i>Inner London</i>	<i>Outer London</i>	<i>The Fringe Area</i>	<i>Rest of England</i>
School A	£38,584	£37,413	£33,743	£31,797
School B	£38,584	£37,413	£33,743	£31,797
School C	£38,584	£37,413	£33,743	£31,797
School D	£39,350	£38,179	£34,585	£32,485
Year 2 onwards				
	<i>Inner London</i>	<i>Outer London</i>	<i>The Fringe Area</i>	<i>Rest of England</i>
School A	£34,304	£33,226	£29,716	£28,212
School B	£31,434	£33,226	£29,716	£28,212
School C	£31,434	£33,226	£29,716	£28,212
School D	£32,200	£33,992	£30,558	£28,900

# Appendix F: List of principal assumptions

Assumption	Benchmark
Schools will continue to provide some careers education as part of Personal, Social, Health and Economic (PSHE) education, starting at Key Stage three. We have, therefore, attributed no additional cost to this activity.	All
Schools already have appropriate data gathering and management systems in place, therefore, staff will not need to familiarise themselves with any new software in order to achieve the benchmarks.	All
Schools will continue to use established systems to help pupils interact with the Universities and Colleges Admissions Service (UCAS) system. This activity will, therefore, be unaffected by the benchmarks.	All
School will continue to have to work with other parties to provide individual plans for young people with special educational needs.	All
Local authorities will retain a statutory duty to secure sufficient suitable education and training for all resident young people (aged 16-19) and work with schools to identify potential NEETs (i.e. Not in Education, Employment or Training) <sup>56</sup> .	All
SLT members work 31.6 paid hours (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Senior professionals of educational establishments').	All
Class based teachers work 28.9 paid hours (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Secondary education teaching professionals').	All
Administrators and support staff work 29.1 paid hours (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Secretarial and related occupations -School secretaries').	All
Careers Advisers work 31.9 paid hours (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Careers advisers and vocational guidance specialists').	All
Teachers are contracted to work 1,265 hours over 195 days a year – 190 for pupil contact and five allocated for in-service training (Source: TES).	All
ASHE data do not include a category for school based IT support. We have therefore used the average salary per hour for IT user support technicians, since the school IT employees are likely to work during term time only, which means that they will work fewer weeks per year than the average IT technician thus	All

<sup>56</sup> DfE, 2013, Statutory Guidance on Participation of Young People in Education, Employment or Training. For Local Authorities. March 2013.

Assumption	Benchmark
resulting in a relatively lower annual salary (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'IT user support technicians').	
ASHE data does not include a category for Career Coordinators. We have therefore used Career Advisers salaries and hours worked as proxies. (Source: ONS, ASHE, Table 15.9a Paid hours worked – Total – For all employee jobs: United Kingdom, 2013, Provisional data for 'Careers advisers and vocational guidance specialists').	All
<b>Salary assumptions:</b>	All
<ul style="list-style-type: none"> <li>• The teachers' and schools heads' salaries for the England outside the Fringe area are based on the ONS, ASHE 2013 mean earnings level, calculated as a weighted average which excludes the London earnings level.</li> <li>• The teachers' and schools heads' salaries for the Fringe Area, Inner London and Outer London are estimated based on the ASHE 2013 earnings for London and the differences in the salary scales between these three areas. We assumed that the relative differences in salary scales are identical to the differences in the average earnings for the three areas.</li> <li>• We applied a 1% uplift in the teachers' and school heads' salaries, based on the changes in the salary scales for the school year 2013/14.</li> <li>• The salaries for all the other staff for Inner and Outer London are based on the ASHE 2013 average earnings level for London; for the Fringe Area, they are based on the ASHE 2013 average earnings level for the South East of England; and for the Rest of England, they are based on the ASHE 2013 earnings for England, excluding London.</li> </ul>	
We assumed that the additional cost of employment for each employee is 40% of his/her gross salary. We tested this multiplier against an expenditure range obtained from the DfE Financial Benchmarking tool, which confirmed our estimate.	All
<p>In terms of classifying schools by size, based on our observations on the DfE data and the schools selected from the School Financial Benchmarking tool for our analysis, we made the following assumptions:</p> <ul style="list-style-type: none"> <li>• A small school has up to 600 pupils;</li> <li>• A medium school has 601-1,100 pupils;</li> <li>• A large school has 1,101+ pupils.</li> </ul>	All
Evaluation of the careers programme will be conducted internally by the in-school careers team.	1
Evaluation of the careers programme will take place at least once every three years.	1
Career path and Labour market information will be predominately technology based.	2
Parental engagement regarding labour market information will use pre-existing communication channels, e.g. school newsletter, website, parents' evenings (i.e. incurring no additional expense).	2

Assumption	Benchmark
We have assumed an average class size of 20 pupils from year 7 to 11 and 10 from years 12 to 13 (Source: DfE, 2011, Class Size and education in England evidence report, DFE-RR169).	2
Broadening aspirations will be addressed through staff CPD.	3
Linking curriculum learning to careers will be addressed through staff CPD.	4
On average schools offer 18 National Curriculum subjects (Source: <a href="http://webarchive.nationalarchives.gov.uk/20131202172639/http://www.education.gov.uk/schools/teachingandlearning/curriculum/secondary?page=2">http://webarchive.nationalarchives.gov.uk/20131202172639/http://www.education.gov.uk/schools/teachingandlearning/curriculum/secondary?page=2</a> ).	4
While the goal is for every pupil to have experience(s) of the workplace, in reality this may not be feasible due to illness etc.. Therefore schools should aim for 90% of pupils to have such an experience.	6
We assume that 50% of Year 13 pupils plan on applying to university and that the transportation costs associated with visiting a university would be a barrier to 25% of those pupils.	7
Structured career guidance interviews will require 30 minutes on average.	8
We have assumed that pupils are evenly distributed from year 7 to 11 (i.e. each year group is approximately the same size).	6,7,8
Where schools have a sixth form, we have assumed that, on average, years 12 and 13 have approximately 50% as many pupils as other year groups (i.e. years 7 to 11).	6,7,8







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140327-075751-NM-OS