Baseline Research for Economic Studies as part of Brand Management Work for Cumbria and the Lake District

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DCResearch
Economics and Regeneration

cred
UNIVERSITY of Cumbria

Red Research

Carlisle
Suite 7 (Second Floor)
Carlyle's Court
1 St Mary's Gate
Carlisle CA3 8RY
t: 01228 402 320
m: 07501 725 114
e: stephen@dcresearch.co.uk

Leicester
1 Hewett Close
Great Glen
Leicester
LE8 9DW
t: 0116 259 2390
m: 07501 725115
e: jon@dcresearch.co.uk

www.dcresearch.co.uk

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SECTION 1: INTRODUCTION AND AIMS OF THE RESEARCH

Introduction

1.1 In November 2012, **DC Research**, working with partners - the Centre for Regional Economic Development (**CRED**) at the University of Cumbria and **Red Research** - were commissioned to carry out a research study: "*Baseline Research for Economic Studies as part of Brand Management Work for Cumbria and the Lake District*".

1.2 The research work was commissioned by Copeland Borough Council on behalf of local partners. The client group that has overseen the research included representatives from: Allerdale Borough Council, Copeland Borough Council, Cumbria County Council, Cumbria Chamber of Commerce, Cumbria Tourism and the Lake District National Park Authority.

1.3 The main purpose of the study was to carry out **baseline economic research** on the Cumbria and Lake District brands in relation to the Managing Radioactive Waste Safely Process. This involved carrying out research on the sectors in Cumbria that benefit from the Cumbria and Lake District brands with the results being used to provide a baseline for any future research that would be carried out if a Decision to Participate in the search for a site for a geological disposal facility was made.

1.4 The specific objectives of the research have therefore been to:

- Advise **what information will be needed** if this process continues in order to form a judgement about whether businesses that benefit from the brands are being affected by the siting process;
- Advise **what information is currently collected** that can be used for this purpose;
- Advise **what additional research would need to be undertaken** in future to make such an assessment;
- Advise **what research needs to be carried out** before the Councils decide whether to participate in the siting process in order to provide a baseline for any future research which would be carried out;
- **Carry out the research** that is needed to provide this baseline;
- Provide a **narrative with a summary report** that sets out the results of the baseline research, in such a way that it facilitates comparisons against possible future research.

1.5 When this economic baseline research was commissioned (November 2012), it was not known whether there would be a decision to take part in the search for a repository site, and the remit for this work made it clear that, ahead of a decision being taken, only research that was necessary to provide a baseline for the possible future research was to be carried out.

1.6 As such, this report provides the economic baseline required, addressing all of the objectives set out above, and this baseline could be used for comparisons if research is needed/carried out in the future.

Structure of report

1.7 This report forms the Final Report for the Baseline Research for Economic Studies as part of Brand Management Work for Cumbria and the Lake District (produced in mid February 2013) and is structured as follows:

- **Section 2** provides an overview of the **context** within which this economic baseline has been developed – focusing on the issues around brand management in relation to the MRWS process. Section 2 also provides an overview of the **method** that was adopted for this research and the issues emerging from the adoption of this method. It also presents the **key issues for businesses** around the use of Cumbria and Lake District brands.
- **Section 3** explains the **development** of the economic baseline – outlining the **rationale for the selection of economic indicators** used and also the **rationale for the selection of the comparator areas** used.
- **Section 4** presents the **results of the economic baseline** – drawing on the main sources of data and evidence used to present an overview and provide a narrative around the key baseline results.
- Finally, **Section 5** summarises the findings from the Economic Baseline and highlights issues for consideration in terms of any research that may be carried out in the future to assess any changes in this baseline.
- **Annex 1** – presents an overview of the findings from some desk based research that looked at **international comparisons**.
- **Annex 2** – presents the list of **businesses that were consulted** on a one-to-one basis as part of this research.
- **Annex 3** – presents the key summary tables outlining the **results of the business survey**.
- **Annex 4 –** includes additional **definitional information** about some of the economic and tourism specific indicators used in the baseline.

SECTION 2: CUMBRIA & LAKE DISTRICT BRANDS – CONTEXT, METHOD AND RESEARCH FINDINGS

2.1 This section of the report provides an overview of the context within which this economic baseline has been developed – focusing on the issues around brand management in relation to the MRWS process. It also provides an overview of the method that was adopted for this research and the issues emerging from the adoption of this method. It also presents the key issues for businesses around the use of Cumbria and Lake District brands.

Context

2.2 In 2008 the UK Government launched a search for an engineered, underground site that will be the final home for the country's higher activity radioactive wastes. The Government is inviting communities across the country to talk to them about potentially hosting this site that will ultimately be called the 'Geological Disposal Facility' (GDF). This approach was set out in the *"Managing Radioactive Waste Safely (MRWS): A Framework for Geological Disposal"* White Paper.

2.3 In West Cumbria, about seventy percent of the country's nuclear waste is already stored at Sellafield. Because of this, Allerdale Borough Council, Copeland Borough Council and Cumbria County Council started talking to Government about the search for a site. The West Cumbria Managing Radioactive Waste Safely Partnership published its Final Report[1] in July 2012 on the issues that would be involved in the Allerdale and/or Copeland areas taking part in the search for somewhere to put a geological disposal facility.

2.4 In this context, the MRWS Partnership final report draws attention to the possibility that while some sectors of the local economy may stand to benefit as local suppliers of goods and services linked to the construction and operations of a GDF there may also be risks to other sectors.

2.5 One of the issues the MRWS Partnership considered was what effect, if any, taking part in the search for a site might have on the Cumbria and Lake District brands, and therefore on the businesses that benefit from these brands.

2.6 In its Final Report, the Partnership said:

"Our opinion is that, although they are hard to quantify, we acknowledge there are potential risks to some parts of the economy in the county if the process moves forward, in particular the visitor, land-based, and food and drink sectors. We advise that a coordinated strategy and action plan is prepared to support those aspects of Cumbria's visitor and land-based economic activity". (p.163)

2.7 The report recommends that a coordinated strategy should be in place designed to "protect" those sectors that depend to a greater degree on public perception of the Cumbrian/Lake District brands. In response, the Partnership set up a subgroup to develop a **Brand Management Plan**, which built on the Brand Protection Strategy produced in 2012.

2.8 The plan has been produced by the Brand Management Sub-Group, and considers *"what measures should be taken...to limit and mitigate any negative impacts on the combined Cumbria and Lake District Brands if there is a decision that the*

[1] Available at: www.westcumbriamrws.org.uk

Allerdale and/or Copeland areas should take part in a search for somewhere to put a repository for higher activity radioactive waste" (Brand Management Plan, p.3).

2.9 The Plan identifies that in addition to **tourism** (which is described as the largest sector that benefits from the brand) other sectors such as **food and drink** and **land based businesses** benefit from the brand.

2.10 In terms of assessing whether there is any impact on the area's brand during the process, the Brand Management Plan sets out the rationale for carrying out economic studies – to establish what actual impact, if any, taking part in the search for a repository site was having on businesses that benefit from the brand, particularly the tourism and food and drink sectors.

2.11 The need for economic baseline research to be carried out prior to any Decision about Participation is recognised in the Brand Management Plan, and it is this need and the approach set out in the Brand Management Plan around this that has provided the specific framework for this baseline research.

Method for Baseline Development

2.12 The method adopted for the development of the economic baseline research was a five stage method as follows:

2.13 **Stage 1: Inception, Scoping & Progress**. An inception meeting between the study team and the Brand Management Group was held in late November 2012, with subsequent progress updates provided in the form of further face-to-face meetings (in December, January and February), as well as telephone and email communications throughout the study.

2.14 **Stage 2: Desk Research**. This comprised two complementary elements: **(i) Evidence and research collation and collection:** which involved the collation of research, prior studies, evidence, and data to be used in this baseline study. **(ii) Desk Based Review:** A review of all of the documents, data, evidence collected was carried out, which had five key elements: Production of the Preliminary Baseline Framework; Secondary Data Analysis; Identification of key gaps to be addressed by the primary research; Informing the issues to cover in the business consultations; Identification of potential comparator/benchmark areas and lessons from international experience.

2.15 **Stage 3: Business Survey.** Whilst there was substantial pre-existing research and evidence that helped to inform various aspects of the baseline study, there was nothing directly/explicitly relating to the potential impacts of a 'Decision to Participate' on businesses. As such, **primary research was carried out with businesses located in Cumbria**. An e-survey was developed for use with businesses which focused on asking key questions to businesses across the Cumbrian economy about their businesses sensitivity to, and reliance on, the key aspects of the Cumbrian brand (and its various perspectives). It also asked about the potential/expected impacts on their business from Cumbria taking part in the search for a repository site. This primary research allowed the baseline to identify the different types of business (in terms of sector, size, location, etc.) that are more reliant on Cumbria and Lake District brands, or sensitive to any changes in perception about these brands.

2.16 The survey was an online e-survey, and was disseminated to businesses across Cumbria by both Cumbria Tourism and Cumbria Chamber of Commerce to all of their business contacts, with the aim being to ensure that as many Cumbrian businesses across all sectors as possible had the opportunity to take part in the survey.

2.17 A total of **446 replies** were received to the survey, and the characteristics of survey respondent and considerations around this (in terms of the representativeness of the survey respondents) are set out later in this section.

2.18 **Stage 4: Key Business Consultations.** In addition to the business survey, a range of one-to-one consultations with businesses across Cumbria were carried out. The aim of these interviews was to gather information that informed the development of the baseline (i.e. inform the type of measures to include to ensure that the economic baseline covers all the aspects of the economy it should), and also forms part of some of the baseline measures themselves (e.g. perceptions about key economic factors included in the baseline).

2.19 These consultations were carried out as one-to-one, face-to-face (or telephone) interviews, with the one-to-one approach being adopted to ensure that consultees have the opportunity to offer views on an equal basis. A total of **44 interviews** were carried out during December 2012 and January 2013, and a list of businesses consulted is set out in Annex 2 to this report. Those consulted do represent businesses across Cumbria and across a range of sectors within Cumbria, with a natural emphasis/focus towards the business sectors for whom the issues around branding and the use of Cumbria and Lake District brands is of greater interest – i.e. tourism, food and drink, and land based.

2.20 **Stage 5: Analysis & Development of Baseline Framework.** Building on all of the above, the framework for the economic baseline was developed which set out: the baseline indicators to be measured, the assumptions underpinning the use of each of the measures/indicators, the sources to be used for each indicator, and the rationale for each measure. The Baseline has been built upon the various strands of research carried out during this study and the rationale for the overarching baseline, the indicators used within the baseline, and the comparator areas selected are all set out in Section 3, with the economic baseline results themselves being presented in Section 4 of this report.

2.21 Before this, the remainder of this section considers the findings from the primary research elements of the study and the implications around this.

Reflections on the Characteristics of the Survey Respondents

2.22 As noted above, a key element of the economic baseline was use of primary research methods (with both an online, business survey and a range of one-to-one consultations with businesses across Cumbria being carried out between December 2012 and January 2013).

2.23 Given the timescale available for this study, the time of year it was carried out, and the importance of ensuring that all/any primary research was completed prior to any Decision about Participation being made (i.e. the 30th January 2013), the adoption of two elements of primary research did present some challenges. This included trying to ensure that a sufficient level of response was received to the online survey, and also trying to carry out one-to-one consultations with a sufficient range of business in January (a month in which many businesses – especially in the tourism and food and drink sectors - are less likely to be available to meet).

2.24 Notwithstanding these issues, a total of **446 replies** were received to the survey, although the actual number of replies to each individual question did vary. Given that some of the results from the survey are used within the economic baseline set out in Sections 3 and 4 of this report it is important to consider the characteristics of the businesses that replied to the survey and the extent to which these can be regarded as being more generally representative of Cumbrian businesses (or not).

2.25 In terms of general business characteristics, the survey results presented in the tables below show that **respondents do present typical characteristics** (for Cumbrian businesses generally) **around the size of business** – both in terms of employment patterns and scale of turnover, and also in terms of the **type of business** and **age of the business**.

Table 2.1: Where does your business operate?		
	Response Percent	**Response Count**
From one location in Cumbria	84.5%	370
From several locations with HQ in Cumbria	12.3%	54
From several locations with HQ outside Cumbria	3.2%	14
Source: DC Research, CRED, Red Research Survey (January 2013) n= 438		

Table 2.2: How long has your business been operating in Cumbria?		
	Response Percent	**Response Count**
Less than 1 year	2.0%	9
1-4 years	15.2%	67
5-9 years	16.8%	74
10-14 years	15.7%	69
15 years+	50.2%	221
Source: DC Research, CRED, Red Research Survey (January 2013) n= 440		

Table 2.3: How many people (including yourself) work in your business in Cumbria? (please state as FTE's - full time equivalents)		
Number of employees (categories)	**Response Count**	**Response Percent**
5 or fewer	279	71.5%
6 to 10	32	8.2%
11 to 25	28	7.2%
26 to 50	20	5.1%
51 to 100	14	3.6%
101 to 250	9	2.3%
more than 250	8	2.1%
Total	390	100.0%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 390		

Table 2.4: Please specify/estimate the annual turnover of your business in Cumbria (most recent year)		
Annual Turnover (categories)	**Response Count**	**Response Percent**
Under £250,000	261	66.6%
Between £250,000 and £500,000	39	9.9%
Between £500,000 and £1million	29	7.4%
Between £1million and £2.5million	24	6.1%
Between £2.5million and £5million	16	4.1%
Between £5million and £10million	9	2.3%
Between £10million and £25million	9	2.3%
Between £25million and £50million	2	0.5%
More than £100million	3	0.8%
Total	392	100.0%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 392		

2.26 However, in terms of other issues, the survey respondents do not seem to present business characteristics that are typical of Cumbrian businesses generally. For example, in terms of **business location**, and the main **type of business activity**/business sector that they operate in, the characteristics of survey respondents exhibit a particular focus – with (as shown in the tables below) businesses from Allerdale and South Lakeland, and businesses operating from within the Lake District National Park represent a higher proportion of respondents than is the pattern for Cumbrian businesses generally. In addition, there is a greater than proportionate (when compared to Cumbrian averages) number of tourism businesses that have replied to the survey.

Table 2.5: Where is your main business location within Cumbria?		
	Response Percent	**Response Count**
Allerdale	33.2%	145
Barrow-in-Furness	2.3%	10
Carlisle	11.0%	48
Copeland	4.3%	19
Eden	12.8%	56
South Lakeland	36.4%	159
Source: DC Research, CRED, Red Research Survey (January 2013) n= 437		

Table 2.6: Do you operate from any sites within the Lake District National Park?		
	Response Percent	**Response Count**
Yes	51.3%	223
No	48.7%	212
Source: DC Research, CRED, Red Research Survey (January 2013) n= 435		

Table 2.7: What is your main business activity?

Categories	Response Count	Response Percent
Tourism	228	51%
Food and drink	12	3%
Land based	12	3%
Leisure	15	3%
Commerce/services	68	15%
Retail	21	5%
Production/manufacturing	21	5%
Education	6	1%
Culture and Creative	16	4%
Not for profit, charity, public sector	11	2%
Other (property, transport)	4	1%
Not spec	30	7%
TOTAL	444	100%

Source: DC Research, CRED, Red Research Survey (January 2013) n= 444

2.27 Survey respondents were asked to describe their main business activity and the responses were allocated into the above categories (Table 2.7) as part of the survey analysis. The word cloud[2] (Figure 2.1) below presents the same information in an alternative format. Both formats show that the majority of respondents are from the tourism (and tourism related) sectors, with tourism accommodation providers accounting for the vast majority of these respondents.

Figure 2.1: What is your main business activity?

Source: DC Research, CRED, Red Research Survey (January 2013) n= 444

[2] A word cloud is a visual representation or depiction of a set of words or terms which have been grouped together, in this instance because of their frequency (number of times they appear in survey responses). In this (and subsequent) examples, the word cloud has been used to summarise key words and phrases emerging from the analysis of the open-ended responses to specific questions within the e-survey. The largest/boldest words can be regarded as the key themes that emerged from the responses to that specific question.

2.28 **These findings,** with a greater than proportionate response to the survey from businesses within Allerdale, within South Lakeland, and from within the National Park generally, as well as from those operating within the tourism sector generally, and within this, tourism accommodation (which accounts for the vast majority of these respondents), **are, on reflection, not surprising**.

2.29 The business survey was an online survey with invitations to participate being sent to all businesses that Cumbria Tourism and Cumbria Chamber of Commerce had contact details for. As such the **survey respondents are self selecting**, and are more likely to be businesses for whom the survey topics – relating to issues around branding, brand management and the use of Cumbria and Lake District brands in particular, are of greater importance and/or of greater interest.

2.30 Whilst therefore it should be recognised that the **survey is not representative of all Cumbrian businesses in terms of location and sector**, the survey respondents do exhibit the business characteristics to suggest they are representative of the businesses within Cumbria for whom issues around brands and branding – especially Cumbria and Lake District brands and branding – are relevant. It can therefore be argued that they provide a sample of businesses for whom the issues around brands and branding is most relevant, and as such, can be used (with this acknowledgement) as part of the economic baseline.

2.31 However, given this, it is more appropriate to use only the survey results from the businesses that do make use of Cumbria and Lake District brands for some/all of their products/markets, and this is the approach adopted in the baseline.

2.32 Therefore, when the baseline is presented in Sections 3 and 4 of this report, the focus (in terms of the survey measures used as indicators within the baseline) is on the responses from those that do make use of Cumbria and Lake District brands – where a stronger rationale exists that the survey replies do represent these businesses rather than Cumbrian businesses in general.

2.33 One lesson from the primary research is that, in any future research, efforts should be made to try to get comparator data representing the views of all Cumbrian businesses on the same survey topics – as this would provide the opportunity to have a local comparator/control group against which to assess the views of those businesses that do make use of Cumbria and Lake District brands.

Cumbria and Lake District Brands and Branding

2.34 Both of the primary research elements of this study – the one-to-one interviews and the business survey – asked interviewees and survey respondents about a range of issues related to Cumbria and Lake District brands and branding.

2.35 This included the extent to which they (and also, where relevant, their business clients and suppliers) used Cumbria, Lake District and any other geographic/place based brands; the importance of these brands to their business; the effects of these brands; and the sensitivity of their business to any changes in these brands. Additional questions were also asked about a range of associations around Cumbria and the Lake District and location issues around being a business based in Cumbria. The key messages and findings from this element of the baseline study are presented below.

Use of Cumbria and Lake District Brands

2.36 Given the reflections above, about what types of business responded to the survey, it is not surprising that the majority (more than two-thirds) of survey respondents make use of Cumbria and Lake District brands (Table 2.8 below).

Table 2.8: Does your business make use of any Cumbria and Lake District brands/branding?

	Response Percent	Response Count
Yes - For all products and markets	28.3%	110
Yes - For some products and markets	39.6%	154
No - not at all	32.1%	125
Source: DC Research, CRED, Red Research Survey (January 2013) n= 389		

2.37 When asked what particular Cumbria and Lake District brands they used[3] more than three quarters of the businesses that answered the survey question stated that they used Lake District brands (see Table 2.9), with the majority of businesses also stating that they used Cumbria brands.

2.38 Only around one quarter of respondents to this question identified any other geographic/place based brands, and these most commonly were more specific areas within Cumbria – including, for example, Hadrian's Wall, North Pennines, Eden Valley, Keswick, Northern Lakes, Coast as well as reemphasising both Lake District, the National Park, and Cumbria, in addition to specifying their own specific brands (e.g. individual hotels, visitor attractions, specific food and drink brands etc.).

Table 2.9: Do you use any of the following Cumbria and Lake District Brands?

	Yes	No	Response Count
Cumbria	179	38	217
Lake District	190	32	222
Any other geographic/place based brands	65	69	134
Source: DC Research, CRED, Red Research Survey (January 2013) n= 248			

2.39 The interviews confirmed these patterns around the use of Cumbria and Lake District brands, both in terms of the use of Cumbria and Lake District brands and also the range of other geographic/place based brands used.

2.40 This high level of use of Cumbria and Lake District brands, as exhibited in both the survey results and the interview findings does contain within it a wide variety of approaches to the use of Cumbria, Lake District and other geographic brands.

2.41 Interviews also indicated many nuances in the way businesses make use of multiple brands and associations, not just one. Businesses can have different product lines branded in different ways to reflect different markets (e.g. within Cumbria, outside Cumbria) and that these can operate at different spatial scales (e.g. "Keswick" within "Lake District").

[3] It should be noted that only those survey respondents who had stated they did make use of Cumbria and Lake District brands were invited to answer the question about which geographic/place based brands in particular they used.

2.42 Generally, the use of such brands tends to be more prevalent for businesses that rely on the visitor economy, in particular, tourist accommodation, food and drink producers and some land-based activities. However, within this overarching finding, the use of these brands varies considerably and while they tend to be associated with these particular sectors, it cannot be assumed that all businesses in these sectors are "brand sensitive".

2.43 Most interviewees recognised the significance of Cumbria and Lake District as brands for themselves and for many other businesses in the area. However, it is important to note that, in general terms, many interviewees **drew a clear (and in some cases a fundamental) distinction between "Lake District" and "Cumbria" as brands.**

2.44 **Lake District** is recognised by the vast majority of interviewees as the **key brand** that they use or associate their business with. Key to this is the fact that Lake District is viewed as a very strong brand with good recognition locally, nationally and internationally. The international profile, visibility and recognition of the Lake District brand is recognised as very important, and particularly around tourism and the visitor economy. The brand value of Lake District is something that many businesses feel travels further (in the UK and internationally) than any other geographic brands.

2.45 **Associations with Lake District** that underpin its strength as a brand are dealt with in more detail below, but the most common associations identified by businesses include: rural, landscape, mountains, hills, lakes, natural, clean, quality of life, beautiful scenery, and the cultural heritage (e.g. literature and poetry).

2.46 A notable number of businesses that do not explicitly make use of Lake District brands do acknowledge that they implicitly or indirectly exploit these associations and therefore make use of and benefit from Lake District brands, branding and associations in a more subtle/indirect way.

2.47 Within this, it is also worth noting that the use of Lake District branding is not limited to those businesses located within the Lake District National Park boundary. Many businesses located within Cumbria, but outside of the National Park itself make use of the Lake District brands and associations. Businesses can also use visual inference in media and marketing (e.g. photos of lakes, landscape, rurality, clean and green associations of the Lake District) without actually using the words "Lake District". This is found to be the case for businesses within all of the key sectors - tourism, food and drink and land-based - as well as other businesses in other sectors.

2.48 In comparison, Cumbria as a brand is viewed by many as not having the same international, or even national, profile and recognition, and is therefore less well used. Whilst some businesses do make use of Cumbria as a brand, it is generally accepted to be less well known, less distinctive, and has a far lower awareness outside of the local area.

2.49 Some business interviewees even questioned whether "Cumbria" is a brand in the same sense as Lake District, most especially in relation to tourism, with strong suggestions that people (from outside of the area) do not know where Cumbria is, describing Cumbria simply as a 'place' on a map, and an administrative boundary, with very low awareness and without any of the positive brand associations that Lake District has.

2.50 Taking this one step further some businesses identified Cumbria quite clearly as distinct from the Lake District (in terms of branding and associations) and link the Lake District with tourism and Cumbria with many of the 'negative' associations for the area (e.g. foot and mouth disease, floods, shooting, industrial and nuclear associations etc.) and think that this distinction is important for branding generally, and would also be important in relation to debates and considerations about nuclear disposal facilities in the area.

2.51 In contrast, some businesses argued, however, that the "Cumbrian" brand is still useful even if people do not know for sure where it is, suggesting that this does not matter, because the term "Cumbrian" can be linked in people's minds to something that is "local" (wherever that may be). A "Cumbrian" product is therefore associated with provenance, traceability, support for local communities, fair prices for local farmers, distinctiveness, authenticity and so on.

Importance and Effect of Cumbria and Lake District Brands

2.52 Given the overall scale of the use of the Cumbria and Lake District brands by businesses, the survey and interviews explored how important these brands are to the businesses themselves, and also sought their views on how important these brands are to other sectors of the economy that they are aware of – i.e. their competitors, their business clients and suppliers, their customers, and the Cumbrian economy more generally.

2.53 Table 2.10 shows that for businesses that use Cumbria and Lake District brands, **half of these businesses regard the brands as vitally important**, with a further one-third describing them as important to their own business.

Table 2.10: How important is this/are these brand(s) to your business?

	Response Percent	Response Count
Vitally important	50.0%	123
Important though not vital	33.7%	83
Of some importance	9.3%	23
Of minor importance only	6.9%	17
Source: DC Research, CRED, Red Research Survey (January 2013) n= 246		

2.54 Beyond their own business, survey respondents and interviewees were asked about the extent to which their business clients and suppliers rely on Cumbria and Lake District brands and branding, with the results (Table 2.11 below) showing that the **highest proportion of respondents think that these brands are vital for <u>only some</u> businesses**.

Table 2.11: To what extent do you think your business clients and suppliers rely upon Cumbria and Lake District brands/branding?

	Response Percent	Response Count
Vital for all businesses	11.1%	37
Vital for most businesses	21.6%	72
Vital for some businesses	42.9%	143
Vital for only a few, if any, businesses	24.3%	81
Source: DC Research, CRED, Red Research Survey (January 2013) n= 333		

2.55 Taking these results alongside the interview findings suggests that whilst some businesses regard the Cumbria and Lake District brands as vital or critical to their business (and other businesses), other respondents and interviewees who do use the brands, regard their business as being less sensitive to any changes.

2.56 There are therefore some businesses for which the Lake District and Cumbria brands and branding are very important, and resultantly their business is very sensitive to any changes to these brands.

2.57 Some businesses regard themselves as being very sensitive to negative influences on the brands (Table 2.12 shows just less than one-quarter of survey respondents describe themselves as 'very sensitive' to any changes and that any such changes would have a major impact on their business). The interviews identified previous experiences around the impact of foot and mouth disease, and the 2009 floods as the type of major influence that could affect the brands, and resultantly, their business. Some businesses describe themselves as being very reliant on visitors coming to the area, and anything that has a negative impact on the scale of visitors can have an impact on their business viability.

2.58 Conversely, there are businesses that do not regard themselves as being overly sensitive to any changes in these brands, even if they do make use of the brands. Table 2.12 shows that more than half of survey respondents (56%) describe themselves as either 'slightly sensitive' or 'not at all sensitive' where any changes in the brands would have only a minor or no impact at all.

Table 2.12: How sensitive is your business to changes in Cumbria and Lake District brands?

	Response Percent	Response Count
Very sensitive – changes have a major impact on our business	22.3%	78
Sensitive - changes have a moderate impact on our business	21.2%	74
Slightly sensitive - changes have a minor impact on our business	28.9%	101
Not at all sensitive – changes have no impact on our business	27.5%	96
Source: DC Research, CRED, Red Research Survey (January 2013) n= 349		

2.59 This links to the resilience of the businesses and the extent to which they feel they would be able to adapt to any issues that changed the Cumbria and Lake District brands. Most of the businesses interviewed that did make use of Cumbria and Lake District brands but which did not view themselves as being sensitive to any changes in the brands explained this in relation to their business' ability to adapt to a changing environment, as well as a belief in the strength of the brands, their own business resilience, and also being able to use alternative or more specific brands and branding.

2.60 Some of the businesses interviewed talked about this resilience and the ability to adapt and change as an important element of their business viability, and included consideration of the issues around the siting of a high level nuclear waste geological disposal facility (GDF) and the potential impacts this could have. Those businesses that feel able to adapt to any changes and consider themselves to be resilient therefore view themselves as less sensitive to changes including any potential impacts of a GDF, whilst those that are more sensitive to changes in the brands, are more concerned about the impacts that a GDF could have.

2.61 In terms of the **tangible effects and impacts** of using the Cumbria and Lake District brands, there is evidence from the survey and interviews that there are some tangible impacts from using Cumbria and Lake District brands and branding.

2.62 Table 2.13 below shows that survey respondents have identified impacts in terms of both price and also turnover.

Table 2.13: Do you think your use of these Cumbria and Lake District brands has any tangible effect on the following:

	Yes	No	Response Count
Price of your product or service	129	106	235
Turnover of your business	162	69	231

Source: DC Research, CRED, Red Research Survey (January 2013) n= 238

2.63 In terms of price, the survey and interviews suggest that whilst **some businesses do benefit from a price premium** – i.e. they state that they are able to charge a price premium for some, or all, of their products – other businesses do not experience this tangible impact in terms of price.

2.64 Those that do benefit feel that they are able to charge a higher price across all of their products/services due to the branding and associations, especially related to the Lake District brand.

2.65 However, other businesses report that they do not feel there is a current price premium, partly due to the current economic climate, where customers are more price sensitive and there is a greater level of price competition in their market.

2.66 A **greater proportion of businesses report that there is a tangible benefit in terms of turnover**, even where there is not a price premium. This can be in the form of benefiting from higher occupancy rates for accommodation providers, and also in terms of a higher market share for non-accommodation businesses. Businesses think that the benefits are explained in part because of the almost all year round nature of the market in the area, which means that occupancy levels maintain a consistently higher level than other areas (that rely more on good weather) and therefore the Lake District branding and Lake District location manifests itself in higher turnover.

2.67 In summary, when reflecting on the importance of Cumbria and Lake District brands to businesses in the area, Table 2.14 shows the results to the questions that asked businesses how important Cumbria and Lake District brands were to their own business, their competitors, their sector, their customers, and the Cumbrian economy more generally.

2.68 The results show that the most common response across each of these categories is 'very important' (own business – 27%; competitors – 24%; sector in Cumbria – 28%; your customers – 31%; Cumbrian economy in general – 44%) although the results for each category are typically spread across critical, very important and moderately important responses.

2.69 Again, drawing on the result from table 2.14, and taking the 'critical' and 'very important' responses together, shows that businesses believe these brands are more important to themselves than to their competitors, but that they are more important to their sector generally and their customers than to their own business (own business - 49%; competitors - 43%; sector in Cumbria - 53%; your customers - 53%; Cumbrian economy in general - 75%).

2.70 All of these comparisons are less significant than the views about how important the brands are to the Cumbrian economy in general, with 75% of respondents stating this with the next closest being sector and customers at 53%.

2.71 This suggests that there is a perception about how important the brands are to the area where businesses think that the brands are more important to other parts of the economy, beyond themselves and their direct competitors.

Table 2.14: Overall, how important do you think Cumbria and Lake District Brands are to the following:

	Critical	Very imp.	Moderately imp.	Minor imp.	Low imp.	Don't know	Not relevant	Total
Your own business	76 (22%)	**94 (27%)**	77 (22%)	41 (12%)	27 (8%)	1 (0%)	27 (8%)	343 (100%)
Your competitors	65 (19%)	**82 (24%)**	64 (19%)	39 (12%)	30 (9%)	22 (7%)	35 (10%)	337 (100%)
Your sector in Cumbria	85 (25%)	**95 (28%)**	60 (18%)	43 (13%)	28 (8%)	6 (2%)	23 (7%)	340 (100%)
Your customers	73 (22%)	**104 (31%)**	81 (24%)	34 (10%)	21 (6%)	4 (1%)	22 (6%)	339 (100%)
The Cumbrian economy in general	106 (31%)	**149 (44%)**	47 (14%)	20 (6%)	8 (2%)	5 (1%)	7 (2%)	342 (100%)

Source: DC Research, CRED, Red Research Survey (January 2013) n= 345

Associations and Business Location Issues

2.72 Finally, the research also asked businesses about the extent to which the performance of their business in Cumbria was affected by a range of factors. The full list of factors and the results are set out in Table 2.15 overleaf, and these factors can be split into **associational factors** and **business location issues**.

2.73 In terms of associational factors, the survey results show **very positive effects** for the associations around:

- The **natural environment** of Cumbria (54%).
- The **rural** characteristics of Cumbria (48%).
- The **peace and tranquillity** of Cumbria (47%).
- Being **located in/close to the Lake District** National Park (45%).

2.74 Additionally, the quality of life in Cumbria was identified as very positive by 40% of respondents, and as positive by 42% of respondents.

2.75 The interview findings strongly support these findings with the same phrases around 'rural', 'clean', 'quality of life', 'landscape', 'mountains', 'lakes', 'natural', 'beautiful', 'scenery', 'cultural heritage', 'fresh air', 'views', 'rural idyll', being most commonly cited, as well as some emerging newer associations included 'outdoor adventure' related associations.

2.76 Some associations in particular, around 'clean', 'health', 'hills', 'lakes', 'rural', 'farming', and 'outdoors living' were thought to be especially important for those in the food and drink sectors.

2.77 Some of the **common negative associations** included issues around 'expensive' (for both visitors but also for businesses in terms of supplies etc.), 'not good value for money', 'crowded', 'congested', 'weather', distance', 'foot and mouth disease',

Table 2.15: To what extent is the performance of your business in Cumbria affected by the following?

	Very Negative Effect	Negative Effect	No Effect	Positive Effect	Very Positive Effect	Don't Know/Not Relevant	Response Count
The natural environment of Cumbria	1 (0%)	2 (1%)	50 (14%)	97 (28%)	**190 (54%)**	10 (3%)	350 (100%)
The rural characteristics of Cumbria	4 (1%)	17 (5%)	43 (12%)	107 (31%)	**167 (48%)**	11 (3%)	349 (100%)
The quality of life in Cumbria	1 (0%)	7 (2%)	46 (13%)	**149 (42%)**	139 (40%)	10 (3%)	352 (100%)
The peace and tranquillity of Cumbria	1 (0%)	4 (1%)	59 (17%)	112 (32%)	**166 (47%)**	11 (3%)	353 (100%)
Presence of the nuclear industry in Cumbria	55 (16%)	59 (17%)	**144 (41%)**	34 (10%)	20 (6%)	36 (10%)	348 (100%)
The presence of large multinational companies in Cumbria	17 (5%)	44 (13%)	**178 (51%)**	53 (15%)	10 (3%)	47 (14%)	349 (100%)
The availability of labour in Cumbria	10 (3%)	63 (18%)	**161 (47%)**	57 (17%)	11 (3%)	44 (13%)	346 (100%)
The cost of labour in Cumbria	7 (2%)	40 (11%)	**178 (51%)**	64 (18%)	9 (3%)	52 (15%)	350 (100%)
The supply of appropriate business premises in Cumbria	7 (2%)	43 (12%)	**163 (47%)**	52 (15%)	13 (4%)	68 (20%)	346 (100%)
The cost of appropriate business premises in Cumbria	24 (7%)	77 (22%)	**137 (40%)**	38 (11%)	13 (4%)	55 (16%)	344 (100%)
The availability of suitable suppliers in Cumbria	5 (1%)	36 (10%)	**124 (36%)**	**126 (36%)**	38 (11%)	20 (6%)	349 (100%)
The cost of supplies in Cumbria	9 (3%)	99 (28%)	**162 (47%)**	45 (13%)	9 (3%)	24 (7%)	348 (100%)
Being located in/close to the Lake District National Park	4 (1%)	9 (3%)	73 (21%)	94 (27%)	**160 (45%)**	13 (4%)	353 (100%)
Transport infrastructure	29 (8%)	**132 (28%)**	69 (20%)	82 (24%)	25 (7%)	8 (2%)	345 (100%)
ICT infrastructure	32 (9%)	86 (25%)	**105 (31%)**	49 (14%)	22 (6%)	50 (15%)	344 (100%)
Proximity to market/customer base	9 (3%)	42 (12%)	**110 (32%)**	**109 (32%)**	33 (10%)	40 (12%)	343 (100%)

Source: DC Research, CRED, Red Research Survey (January 2013) n= 355

2.78 Some of the other associations (that a minority of interviewees had mentioned) were not identified as negative associations from the survey results – but are most commonly described as having **'no effect' on businesses** answering the survey – including: **presence of the nuclear industry** in Cumbria (41% say no effect); the **presence of large multinational companies** in Cumbria (51% say no effect).

2.79 The only factor that was identified by most respondents as **negative** was **transport infrastructure** with 28% of survey respondents stating this had a negative effect on their business.

2.80 All of the other business location issues were most commonly identified as being either of no effect or of having a positive impact on business, including: the availability and cost of labour, the availability and cost of premises, and ICT infrastructure.

2.81 The proximity to market/customer base was identified by just less than one third of respondents as having no effect, and by the same number as having a positive effect, again suggesting that this was not a major issue.

2.82 The interview findings supported these results, with common themes being around: remoteness and perceptions of remoteness, difficulties in recruiting staff (especially specialist/highly skilled staff), transport issues, technology issues (especially broadband and mobile telephony), cost of supplies due to location, and general infrastructure issues.

SECTION 3: DEVELOPMENT OF THE ECONOMIC BASELINE

3.1 This section explains the development of the economic baseline – outlining the rationale for the selection of economic indicators used in the baseline framework and also the rationale for the selection of the comparator areas that have been used in this baseline study.

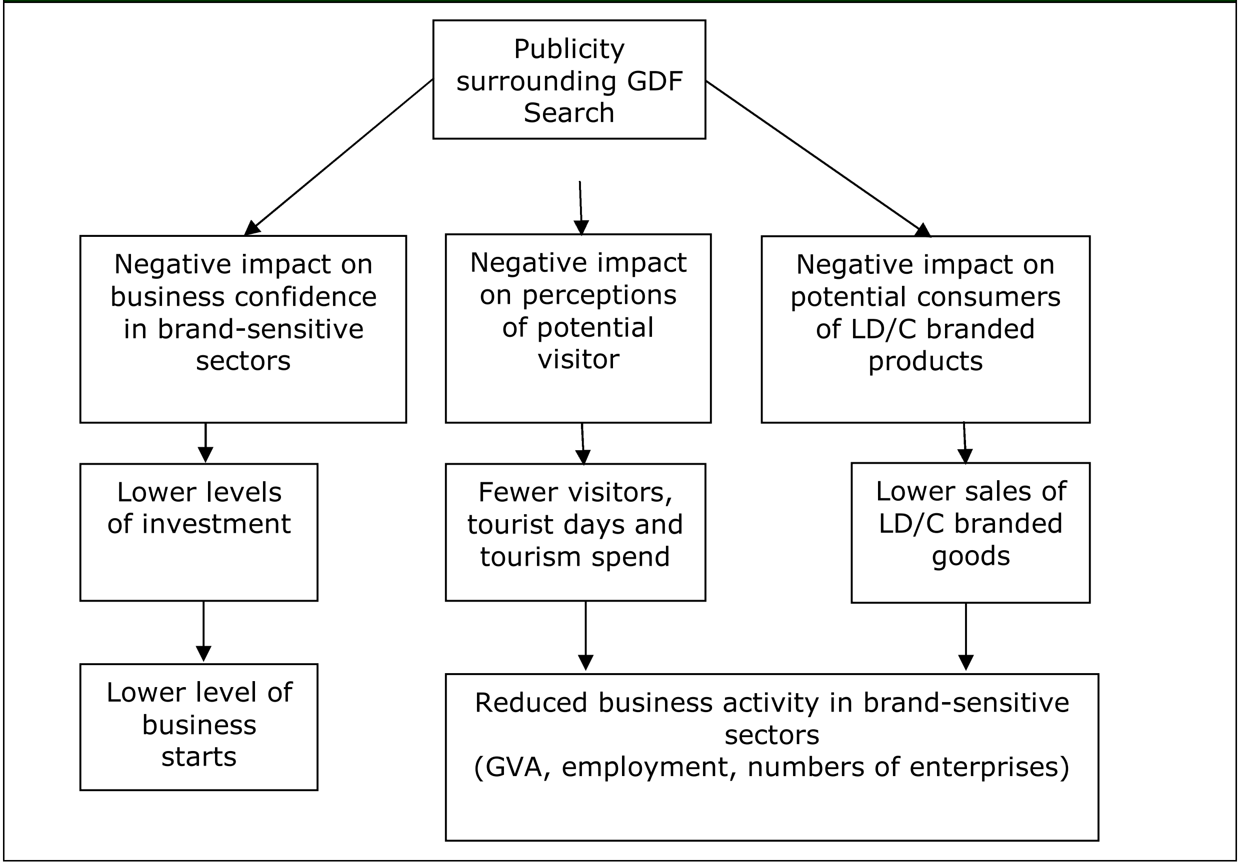
Rationale for selection of indicators

3.2 The requirement as specified in the brief for this study is to define indicators that will measure any effects that the search for a repository site might be "having on businesses that benefit from the brands, particularly in tourism and food and drink sectors".

3.3 The focus of attention, therefore, is on indicators that relate to the level of business activity specifically (though not exclusively) in these particular sectors. The selection of indicators set out below has been guided by assumptions about the ways in which publicity surrounding GDF might impact upon choices made by businesses, potential visitors to the County and those that consume products branded as Lake District or Cumbrian. This is summarised in Figure 3.1 overleaf. Three parallel impacts are possible:

- Publicity surrounding GDF has a **negative impact on business confidence** and their perceptions of growth prospects resulting in **cautious investment plans** and **lack of inducement to start new enterprises**.
- Publicity surrounding GDF has a **negative impact on the perceptions of potential visitors** resulting in **fewer visitors** and **lower visitor spend** leading to **reduced business activity** in tourist-dependent activities.
- Publicity surrounding GDF has a **negative impact on perceptions of potential consumers** of Lake District and Cumbrian branded products which **reduces sales** and leads to **reduced business activity** in brand-sensitive sectors.

Figure 3.1: Hypothetical Impacts of GDF Publicity on brand sensitive businesses in Cumbria



3.4 If these hypothetical negative effects do occur, the model suggests this may be detected by observing trends over time in a range of different sources of evidence and data. In terms of the sources used, the baseline has been developed to make use of three general sources of evidence and data:

- First, **economic data from official sources** (such as ONS). The use of these data (for employment, business stock and GVA) provides assurances about the quality and robustness of data, and also enables straightforward comparability with other relevant areas as the data is available across the country.
- Second, additional **proprietary data specifically about tourism** – i.e. STEAM. The use of data from STEAM allows a broader set of indicators about tourism to be used, whilst maintain the possibility to benchmark Cumbria and the Lake District against other appropriate areas in the UK (i.e. other comparator areas that also use STEAM). In addition, other tourism specific sources (occupancy surveys as well as general business surveys) can be drawn on to provide additional sources of evidence.
- Third, the use of **data drawn from the baseline business survey** – i.e. the primary research that was carried out as part of this baseline study. Whilst the data from the survey does not enable comparisons/benchmarks beyond Cumbria, it does provide a more detailed and specific understanding of the issues around the use of branding by local businesses as well as perceptions about the impact of the publicity surrounding the GDF process on sales.

3.5 The approach adopted for the development of the baseline does not rely on any one of the above sources, but deliberately draws on all of them – thereby providing evidence around each of the hypothetical impacts set out in Figure 3.1 – something that any one single source alone would not be able to do.

3.6 In terms of the specific data **drawn from official data series** (including sources such as BRES, IDBR, DEFRA, ONS, etc.) this includes[4]:

- Levels of employment in tourism, land-based and food & drink sectors.
- Number of enterprises in tourism, land-based and food & drink sectors.
- Total farm labour in Cumbria.
- Levels of economic activity (measured by Gross Value Added - GVA) in tourism, land-based and food & drink sectors.
- The rate of new business start-up in Cumbria.
- The rate of business closure in Cumbria.

3.7 In terms of the specific data from proprietary **tourism sources**, including STEAM[5] but also additional sources to assess occupancy (e.g. the England Occupancy Survey and Cumbria Tourism Occupancy Survey) as well as Cumbria Tourism bespoke business surveys (e.g. the 6 monthly business survey carried out by Cumbria Tourism) this includes:

- Numbers of visitors to Cumbria (and to the Lake District National Park).
- Number of tourism days in Cumbria (and to the Lake District National Park).
- Tourism spend in Cumbria (and to the Lake District National Park).
- Employment in tourism in Cumbria (and to the Lake District National Park).
- Levels of occupancy in accommodation in Cumbria.
- Tourism business perceptions about performance (turnover, profit, and visitor numbers).
- Tourism business perceptions about the level of forward bookings.

3.8 One important consideration for both the official datasets and also much of the proprietary tourism data is that the datasets from which the indicators are drawn are published with a time delay which can be up to two years after collection. The exception to this is the tourism occupancy data which is available in a relatively quick timescale, and is also available on a monthly as well as an annual basis. As such, this data could be a useful source for identifying any early signs of impact on tourism businesses.

3.9 In terms of the specific data from the **business survey** carried out as part of this baseline study, the measures selected relate back to the potential impacts set out in Figure 3.1 and also bear in mind the issue around the representativeness of survey respondents discussed in Section 2 of this report. Therefore, they include:

- **GDF Impact -** Percent of business that use Cumbria and Lake District brands that say publicity surrounding the possibility of hosting a GDF has had a very negative impact on sales.

[4] The specific definitions used for each of these indicators are set out in Annex 4 to this report alongside discussion about the availability of data at specific geographies.

[5] STEAM is the acronym for the Scarborough Tourism Economic Activity Monitor, operated by Global Tourism Solutions (UK) recognised as one of the most reliable methods of accurately measuring tourism activity within a defined destination. More information about STEAM and the other tourism sources is provided in Annex 4.

- **Employment -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Employment compared with this time last year.
- **Sales -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Sales compared with this time last year.
- **Profit Margins -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Profit Margins compared with this time last year.
- **Investment -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Investment compared with this time last year.
- **Business confidence -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Business confidence compared with this time last year.
- **Customer/Visitor Numbers -** Percent of business that use Cumbria and Lake District brands that reported a decrease in Customer/Visitor Numbers compared with this time last year.

Rationale for selection of comparators

3.10 A conventional approach to the development of an economic baseline is to identify possible comparators that can be used to benchmark change in Cumbria with other areas. The choice of benchmarks needs to reflect the specific types of economic change that are anticipated and the sectors likely to be affected alongside practical considerations regarding data availability at different spatial scales.

3.11 The use of comparators/benchmarks also enables future research to assess whether any changes were the result of discussions about a possible GDF or were due to other factors e.g. general economic conditions, weather, market trends etc.

3.12 In terms of the context, the baseline specifically focuses on the potential impacts of GDF on business that currently make use of Lake District and Cumbrian brands. It is logical, therefore to seek to define benchmark areas that meet the following general criteria:

- Similar territorial scale (Counties or Unitary Authorities).
- Contain within them a National Park.
- Comparable in terms of economic structure.

3.13 The benchmarks are defined for a specific purpose related to the relationship between the brand associated with a National Park in relation to the County within which it is located. Many other national parks, however straddle the boundaries of several local authority areas (e.g. the Cairngorms, Loch Lomond and the Trossachs, Peak District, Snowdonia, Brecon Beacons). This not only makes the situations less comparable, but is also likely to complicate the data gathering processes. Others, however, do fit this criterion (**Northumberland** (Northumberland National Park), **North Yorkshire** (North Yorkshire Moors), **Devon** (Dartmoor plus part of Exmoor) and **Pembrokeshire** (Pembrokeshire Coast)). These Counties were investigated further for their suitability using data on economic structure.

3.14 Table 3.1 shows the structure of the economies of these selected Counties using employment totals by industrial sector. Compared to Cumbria (222,863), two of these benchmarks are larger in terms of employment totals (North Yorkshire (255,112) and Devon (318,351)) while the other two are smaller (Northumberland (100,816) and Pembrokeshire (43,196)). In terms of economic structure (table 3.2), there are some key similarities that make them suitable as comparators. In particular, all the proposed benchmarks have significantly more employment in accommodation and food services (I). The proportion of employment in this sector ranges from 11.8% in Cumbria to 9.8% in Devon which is well above the national average of only 6.8%.

Table 3.1: Cumbria and Benchmark areas Employment Totals 2011

	Cumbria	N'bland	N Yorks	Devon	Pemb
1: Agriculture, forestry & fishing (A)	795	406	435	1,298	150
2: Mining, quarrying & utilities (B,D, E)	2,365	2,008	3,769	5,231	502
3: Manufacturing (C)	36,230	11,426	26,542	25,720	3,259
4: Construction (F)	14,104	6,694	14,070	19,172	3,753
5: Motor trades (Part G)	4,629	2,456	5,867	8,734	735
6: Wholesale (Part G)	6,875	2,112	12,618	11,883	965
7: Retail (Part G)	26,884	11,211	27,952	41,025	5,472
8: Transport & storage (inc postal) (H)	9,632	3,807	11,870	14,592	2,400
9: Accommodation & food services (I)	26,346	10,631	25,471	31,339	5,296
10: Information & communication (J)	3,016	2,057	9,428	9,211	362
11: Financial & insurance (K)	2,784	1,070	6,809	5,366	439
12: Property (L)	2,868	1,241	4,528	6,171	536
13: Prof, scientific & technical (M)	10,815	5,437	17,476	19,222	1,779
14: Business admin & support serv (N)	9,571	4,386	12,167	18,514	1,740
15: Public admin & defence (O)	10,593	5,617	10,887	16,511	2,254
16: Education (P)	16,753	8,755	21,685	28,198	4,619
17: Health (Q)	29,380	15,631	31,368	43,168	6,541
18 : Arts, ent, recreation etc	9,223	5,868	12,171	12,998	2,394
Column Total	222,863	100,816	255,112	318,351	43,196

Source: BRES Accessed via NOMIS

3.15 The other key feature of Cumbria and its comparators concerns the fact that while the presence of National Parks in these Counties tends to emphasise rurality, the data suggests that industrial employment is also significant. With the exception of Pembrokeshire, all the benchmark Counties have above average employment in manufacturing. This figure is particularly high in Cumbria due to the fact that employees at Sellafield are classified under "processing of nuclear fuels". If the extraction, production and construction categories are combined (codes B, C, D, E and F) (Table 3.3), all the benchmark counties have above average employment in these industries including Pembrokeshire where employment in construction (8.7%) is particularly high).

Table 3.2: Cumbria and Benchmark areas Employment Structure 2011						
	Cumbria	N'bland	N Yorks	Devon	Pemb	GB
1 : Agriculture, forestry & fishing (A)	0.4%	0.4%	0.2%	0.4%	0.3%	1.7%
2 : Mining, quarrying & util (B,D,E)	1.1%	2.0%	1.5%	1.6%	1.2%	1.3%
3 : Manufacturing (C)	16.3%	11.3%	10.4%	8.1%	7.5%	8.5%
4 : Construction (F)	6.3%	6.6%	5.5%	6.0%	8.7%	4.8%
5 : Motor trades (Part G)	2.1%	2.4%	2.3%	2.7%	1.7%	1.8%
6 : Wholesale (Part G)	3.1%	2.1%	4.9%	3.7%	2.2%	4.0%
7 : Retail (Part G)	12.1%	11.1%	11.0%	12.9%	12.7%	10.3%
8 : Transport & storage (H)	4.3%	3.8%	4.7%	4.6%	5.6%	4.5%
9 : Accommodation & food serv (I)	11.8%	10.5%	10.0%	9.8%	12.3%	6.8%
10 : Information & communication (J)	1.4%	2.0%	3.7%	2.9%	0.8%	3.8%
11 : Financial & insurance (K)	1.2%	1.1%	2.7%	1.7%	1.0%	3.8%
12 : Property (L)	1.3%	1.2%	1.8%	1.9%	1.2%	1.7%
13 : Prof, scientific & technical (M)	4.9%	5.4%	6.9%	6.0%	4.1%	7.5%
14 : Business admin & support (N)	4.3%	4.4%	4.8%	5.8%	4.0%	8.0%
15 : Public admini & defence (O)	4.8%	5.6%	4.3%	5.2%	5.2%	5.0%
16 : Education (P)	7.5%	8.7%	8.5%	8.9%	10.7%	9.1%
17 : Health (Q)	13.2%	15.5%	12.3%	13.6%	15.1%	12.9%
18 : Arts, entert, recreation etc	4.1%	5.8%	4.8%	4.1%	5.5%	4.6%
Column Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Source: BRES Accessed via NOMIS						

Table 3.3 Cumbria and benchmark areas Industrial Employment 2011						
	Cumbria	N'bland	N Yorks	Devon	Pemb	GB
2 : Mining, quarrying & util (B,D,E)	1.10%	2.00%	1.50%	1.60%	1.20%	1.30%
3 : Manufacturing (C)	16.30%	11.30%	10.40%	8.10%	7.50%	8.50%
4 : Construction (F)	6.30%	6.60%	5.50%	6.00%	8.70%	4.80%
Total	23.70%	19.90%	17.40%	15.70%	17.40%	14.60%
Source: BRES Accessed via NOMIS						

3.16 The structure of the economies of these areas defined by GVA shows similar features, indicating that these sub-regions differ from the national economy in a consistent manner. Table 3.4 shows the structure of GVA for Cumbria and the comparator areas. As with the pattern of employment, GVA in the retail and tourism-related code (distribution, transport, accommodation and food) is above the national average in all cases while GVA in finance and business services is under-represented quite significantly in most cases. GVA associated with "production" is more varied. However when extractive, production and construction categories are combined (Table 3.5), the data shows a similar over-representation in the benchmarks for Cumbria.

Table 3.4: Structure of GVA by NUTS level 2/3 2010						
	CUMBRIA	N'bland	N Yorks C	DEVON	SW Wales	UK
Agriculture, forestry fishing	1.9%	3.0%	4%	1.6%	1.1%	0.6%
Production	29.6%	22.9%	18%	14.5%	15.1%	16.1%
Construction	7.6%	8.2%	7%	8.1%	9.5%	6.4%
Distribution; transport; accom, food	21.5%	19.3%	22%	21.1%	22.4%	18.9%
Information and communication	2.0%	1.7%	4%	3.0%	1.8%	5.7%
Financial and insurance activities	2.3%	2.4%	5%	3.6%	2.3%	9.4%
Real estate activities	5.8%	6.8%	6%	10.6%	7.4%	8.0%
Business service activities	6.8%	7.3%	11%	8.0%	6.7%	11.6%
Public admin; education; health	19.4%	24.6%	19%	25.8%	29.5%	19.9%
Other services and household activities	3.2%	3.7%	3%	3.7%	4.2%	3.4%
Total GVA	100%	100%	100%	100%	100%	100%
Source: GVA Accessed via NOMIS						

Table 3.5: GVA associated with primary, production and construction activities by NUTS level 2/3 2010						
	CUMBRIA	N'bland	N Yorks C	DEVON	SW Wales	UK
Agriculture, forestry and fishing	1.9%	3%	4%	1.6%	1.1%	0.6%
Production	29.6%	22.9%	18%	14.5%	15.1%	16.1%
Construction	7.6%	8.2%	7%	8.1%	9.5%	6.4%
Sub-Total	39.1%	34.1%	29%	24.2%	25.7%	23.1%
Source: GVA Accessed via NOMIS						

3.17 It should be noted that GVA data presented above distinguishes between NUTS 2 and NUTS 3 levels of territorial definitions. The benchmark counties vary in their position within this classification which means that the level of dis-aggregation of GVA data differs between areas. Cumbria and Devon are both NUTS 2 areas and therefore benefit from more detailed breakdown of data. Northumberland, North Yorkshire County and both NUTS 3 areas (although note that the NUTS 2 area titled "North Yorkshire" actually included the City of York). Pembrokeshire is part of NUTS 3 area "SW Wales" which includes neighbouring counties of Ceredigion and Carmarthenshire. These definitions affect which indicators are available for different benchmark areas.

Table 3.6: Definition of benchmark areas under NUTS Classification

NUTS 2	Code	NUTS 3	
Northumberland and Tyne and Wear	UKC2	**Northumberland**	UKC21
		Tyneside (Newcastle upon Tyne, Gateshead, South Tyneside, North Tyneside)	UKC22
		Sunderland	UKC23
Cumbria	UKD1	West Cumbria (Allerdale, Barrow-in-Furness, Copeland)	UKD11
		East Cumbria (Carlisle, Eden, South Lakeland)	UKD12
North Yorkshire	UKE2	York	UKE21
		North Yorkshire CC	UKE22
Devon	UKK4	Plymouth	UKK41
		Torbay	UKK42
		Devon CC	UKK43
West Wales and the Valleys	UKL1	South West Wales (Ceredigion, Carmarthenshire, **Pembrokeshire**)	UKL14

Summary of Baseline

3.18 Based upon the overarching framework and the rationale set out in this section for both the selection of baseline indicators and the selection of comparator areas the Baseline is set out below.

3.19 The rationale for the selection of the comparator areas as set out above is appropriate to both the official economic data, and also the proprietary tourism data (i.e. STEAM). The indicators drawn from the business survey do not have any geographic comparators, although the extent to which other sub-sets of survey respondents (for the baseline study and/or for future potential research) could be used as benchmarks/comparators is considered when the baseline are baseline presented in Section 4.

3.20 Table 3.7 overleaf summarises the structure of the Baseline Framework.

Table 3.7: Structure of Baseline Framework

Theme	Indicator	Measure	Source/Definition
Employment – land based	Numbers employed in land based activities (2011)	Calculate % change from the baseline using future BRES surveys	Business Register and Employment Survey (BRES) accessed via NOMIS (Combination of SIC codes as defined by Alliance of Sector Skills Councils, Scotland)
Employment – land based	Total farm labour (2010)	Calculate % change from the baseline using future Farm survey data	DEFRA Annual June Farm Survey (Total includes Full and part time farmers plus managers and other farm workers)
Employment – tourism	Number employed in tourism-related activities (2011)	Calculate % change from the baseline using future BRES surveys	Business Register and Employment Survey (BRES) accessed via NOMIS (Sector defined using ONS tourism definition)
Employment – food and drink	Numbers employed in food and drink industries (2011)	Calculate % change from the baseline using future BRES surveys	Business Register and Employment Survey (BRES) accessed via NOMIS (Sector defined by 2007 SIC codes 10 and 11)
Business Stock – land based	Number of enterprises in "agriculture, forestry and fishing" (2012)	Calculate % change from the baseline using future IDBR surveys	Inter-Departmental Business Register (IDBR) accessed via ONS (Data for this industry is available for County/Unitary Authorities)
Business Stock – tourism	Number of enterprises in "accommodation and food services" (2012)	Calculate % change from the baseline using future IDBR surveys	Inter-Departmental Business Register (IDBR) accessed via ONS (Data for this industry is available at County/Unitary Authority level)
Business Stock – general	Rate of "births" of new enterprises (2011)	Calculate annual birth rates in future years for comparison	Inter-Departmental Business Register (IDBR) accessed via ONS (Dataset available for all industry at County/Unitary Authority level)
Business Stock – general	Rate of "deaths" in existing enterprises (2011)	Calculate annual death rates in future years for comparison	Inter-Departmental Business Register (IDBR) accessed via ONS (Dataset available for all industry at County/Unitary Authority level)
GVA – land based	Level of GVA (£m) in "agriculture, forestry and fishing" (2010)	Calculate % change from the baseline using future GVA data	Gross Value-Added at current basic prices accessed via ONS (GVA is published for NUTS regions. Benchmark areas vary in their status.)
GVA - tourism	Level of GVA (£m) in "accommodation and food services" (2010)	Calculate % change from the baseline using future GVA data	Gross Value-Added at current basic prices accessed via ONS (GVA is published for NUTS regions. Benchmark areas vary in their status.)
Tourism – tourist numbers	Number of tourist visitors ((i) for Lake District (ii) for Cumbria) (2011)	Calculate % change from the baseline using future data	STEAM (definitions based on STEAM methodology)
Tourism – tourist days	Number of tourist days ((i) for Lake District (ii) for Cumbria) (2011)	Calculate % change from the baseline using future data	STEAM (definitions based on STEAM methodology)

Table 3.7: Structure of Baseline Framework			
Theme	**Indicator**	**Measure**	**Source/Definition**
Tourism – tourism revenue	Tourism revenue ((i) for Lake District (ii) for Cumbria) (2011)	Calculate % change from the baseline using future data	STEAM (definitions based on STEAM methodology)
Tourism – tourism jobs	Tourism jobs (FTEs) ((i) for Lake District (ii) for Cumbria) (2011)	Calculate % change from the baseline using future data	STEAM (definitions based on STEAM methodology)
Tourism – occupancy	Serviced Accommodation Occupancy Levels (2012)	Calculate % change from the baseline using future data	England Occupancy Survey; Cumbria Tourism Occupancy Survey
Tourism – occupancy	Self Catering Accommodation Occupancy Levels (2012)	Calculate % change from the baseline using future data	Cumbria Tourism Occupancy Survey
Tourism – occupancy	Caravan and Camping Occupancy Levels (2012)	Calculate % change from the baseline using future data	Cumbria Tourism Occupancy Survey
Tourism businesses – performance	Turnover (Sept 2012)	Calculate % change in the proportion of businesses reporting a decrease in turnover in the preceding 6 months	Cumbria Tourism Business Performance Survey (carried out every 6 months – March and September each year)
Tourism businesses – performance	Profit (Sept 2012)	Calculate % change in the proportion of businesses reporting a decrease in turnover in the preceding 6 months	Cumbria Tourism Business Performance Survey (carried out every 6 months – March and September each year)
Tourism businesses – performance	Visitor Numbers (Sept 2012)	Calculate % change in the proportion of businesses reporting a decrease in turnover in the preceding 6 months	Cumbria Tourism Business Performance Survey (carried out every 6 months – March and September each year)
Tourism businesses – performance	Forward Bookings (Sept 2012)	Calculate % change in the proportion of businesses reporting a decrease in turnover in the preceding 6 months	Cumbria Tourism Business Performance Survey (carried out every 6 months – March and September each year)
Businesses that use Cumbria and Lake District Brands	Business Performance - GDF Impact (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that say publicity surrounding the possibility of hosting a GDF has had a <u>very negative</u> impact on sales	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)
Businesses that use Cumbria and Lake District Brands	Business Performance - Employment (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Employment compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)
Businesses that use Cumbria and Lake District Brands	Business Performance – Sales (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Sales compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)

Table 3.7: Structure of Baseline Framework

Theme	Indicator	Measure	Source/Definition
Businesses that use Cumbria and Lake District Brands	Business Performance - Profit Margins (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Profit Margins compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)
Businesses that use Cumbria and Lake District Brands	Business Performance – Investment (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Investment compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)
Businesses that use Cumbria and Lake District Brands	Business Performance - Business confidence (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Business confidence compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)
Businesses that use Cumbria and Lake District Brands	Business Performance - Customer/Visitor Numbers (Jan 2013)	Change in percent of business that use Cumbria and Lake District brands that reported a decrease in Customer/Visitor Numbers compared with this time last year	Survey of Cumbrian Businesses carried out for this study (results would need to be compared to same question asked in future surveys)

SECTION 4: PRESENTATION OF BASELINE RESULTS/FINDINGS

4.1 This section presents the results of the economic baseline – drawing on the main sources of data and evidence used to present an overview of the findings from the baseline and provide a narrative around the key baseline results.

4.2 The purpose of this section is threefold:

- To illustrate the baseline by comparing trends and structures in Cumbria with the benchmark areas.
- To test the robustness of the selected comparators and indicators as a basis for evaluating any future GDF impacts.
- To inform our recommendations regarding future developments of a monitoring and evaluation framework.

Comparisons between Cumbria and Benchmark Areas

4.3 We have demonstrated elsewhere that while there is no single ideal comparator for Cumbria, there are broad structural similarities between the County and each of the benchmark areas. Each comparator contains a National Park and economic activity measures indicate above average dependence on tourism and land-based activity. Our interest here focuses on recent changes in the selected indicators.

4.4 Viewing these economies as a whole, some of the headline indicators for the economy suggest that the recent performance of Cumbrian has been favourable compared to the selected benchmark areas. There has been downward pressure on total employment in all areas, reflecting national conditions. However, total employment in Cumbria fell by only 1% between 2009 and 2011 which was similar to Pembrokeshire (0.9%) but much less negative that in the other three areas (Northumberland -5.3%; Devon -3.3%; North Yorkshire -2.8%) (Table 4.1).

Table 4.1: Employment in Cumbria and Comparator areas 2009-11

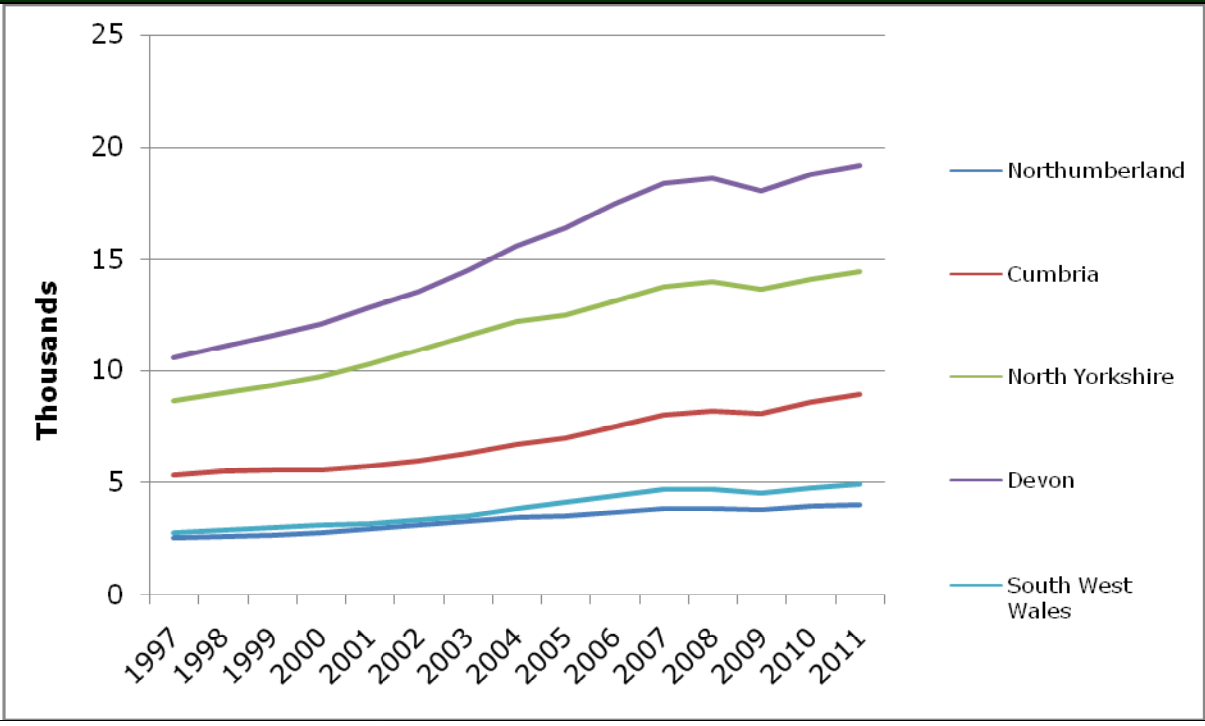
	Cumbria	Northumberland	Devon	N Yorkshire	Pemb'shire
2009	225,181	106,493	329,143	262,408	42,824
2010	225,415	106,815	324,594	258,994	42,065
2011	222,863	100,816	318,351	255,112	43,196
change 09-11	-2,318	-5,677	-10,792	-7,296	372
% Change	-1.0	-5.3	-3.3	-2.8	0.9

Source: BRES accessed via NOMIS

4.5 Trends in GVA also show that Cumbria has performed favourably against these benchmark areas in recent years. Figure 4.1 illustrates the relative size of these economies as well as changes over time. The time series shows that all areas experienced an absolute decline in GVA during 2009 but all have recovered in the subsequent 2 years. Table 4.2 shows, however, that Cumbria has performed comparatively well (+10.4%) compared to all other areas.

4.6 This analysis demonstrates the value of GVA data in comparing trends in local economies. However, there are delays in publication of new releases of data and shocks to local economies are not immediately apparent due to the use of a 5-year moving average which is used to smooth the data series.

Figure 4.1: Trends in GVA in Cumbria and Comparator areas 1997-2011



Source: GVA data accessed via ONS

Table 4.2: Change in GVA in Cumbria and Comparator areas 2009-11 (£m)					
	2009	**2010**	**2011**	**Change 09-11**	**% Change**
Northumberland	3,805	3,953	4,031	226	5.9
Cumbria	8,110	8,617	8,950	840	10.4
North Yorkshire	13,685	14,104	14,456	771	5.6
Devon	18,078	18,797	19,210	1,132	6.3
South West Wales	4,551	4,774	4,918	367	8.1

Source: GVA data accessed via ONS

4.7 While recent trends in GVA and employment place Cumbria in a generally favourable position relative to comparator areas, this is not reflected in trends in numbers of businesses. The stock of businesses fell in Cumbria by 4.6% between 2009 and 2011 which was a faster rate of decline than most other areas (see Table 4.3). This data source can also be used to measure the rate on new enterprise "births" and business "deaths". All comparators show birth rates well below the national average, but in recent years, Cumbria has generally had a lower birth rate than Northumberland, North Yorkshire and Devon (Table 4.4). Birth rates for Pembrokeshire are, however the lowest. The "death rates" of all areas are similar and also well below the national average (Table 4.5). This is typical of most rural areas in the UK where there tends to be higher rates of business survival and less churn in the number of businesses.

Table 4.3: Stock of businesses					
	2009	**2010**	**2011**	**Change**	**% Change**
Northumberland	9,795	9,850	9,705	-90	-0.9
Cumbria	22,190	21,745	21,175	-1,015	-4.6
North Yorkshire	28,945	28,515	28,345	-600	-2.1
Devon	34,590	33,725	33,465	-1,125	-3.3
Pembrokeshire	5,580	5,420	5,235	-345	-6.2
Source: IDBR Business Demography data accessed via ONS					

Table 4.4: "Births" of enterprises in Cumbria and Comparator areas 2009-11									
	2009			**2010**			**2011**		
	Births	**Stock**	**Rate**	**Births**	**Stock**	**Rate**	**Births**	**Stock**	**Rate**
Northumb'd	890	9,795	9.1	840	9,850	8.5	890	9,705	9.2
Cumbria	1,580	22,190	7.1	1,340	21,745	6.2	1,585	21,175	7.5
N Yorks	2,300	28,945	7.9	2,295	28,515	8.0	2,370	28,345	8.4
Devon	2,440	34,590	7.1	2,295	33,725	6.8	2,575	33,465	7.7
Pemb'shire	330	5,580	5.9	275	5,420	5.1	360	5,235	6.9
UK			11.0			11.2			12.6
Source: IDBR Business Demography data accessed via ONS									

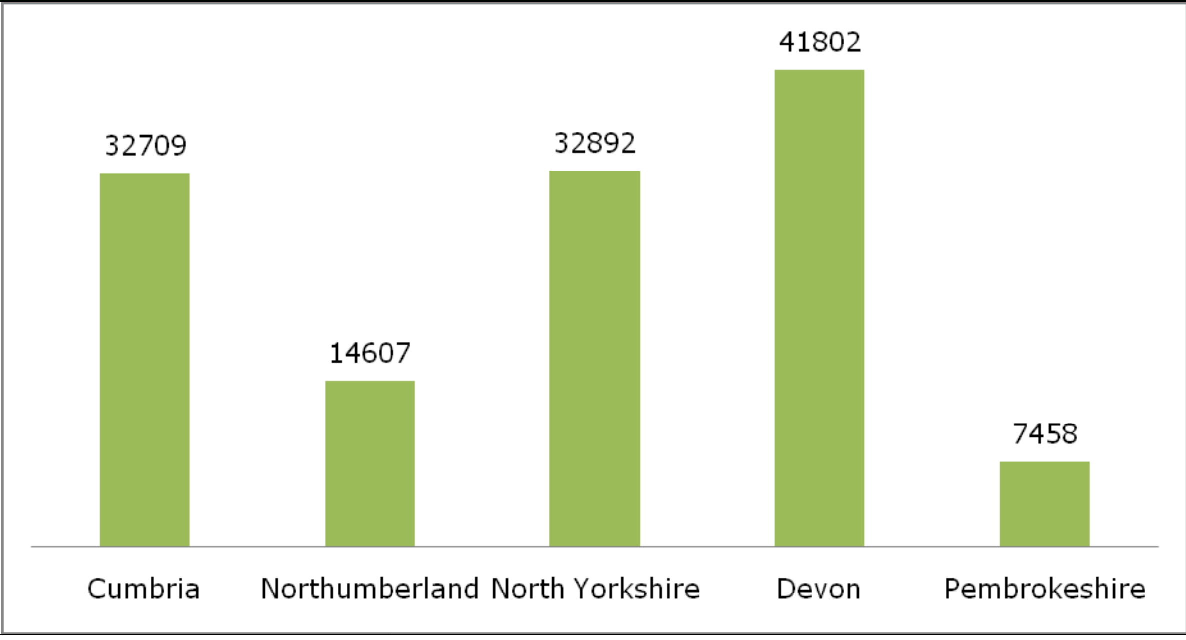
Table 4.5: "Deaths" of enterprises in Cumbria and Comparator areas 2009-11									
	2009			**2010**			**2011**		
	Deaths	**Stock**	**Rate**	**Deaths**	**Stock**	**Rate**	**Deaths**	**Stock**	**Rate**
Northumb'd	940	9,795	9.6	910	9,850	9.2	800	9,705	8.2
Cumbria	1,860	22,190	8.4	1,910	21,745	8.8	1,795	21,175	8.5
NYorks	2,685	28,945	9.3	2,490	28,515	8.7	2,215	28,345	7.8
Devon	3,280	34,590	9.5	2,760	33,725	8.2	2,685	33,465	8.0
Pemb'shire	470	5,580	8.4	440	5,420	8.1	400	5,235	7.6
UK			12.9			12			11.0
Source: IDBR Business Demography data accessed via ONS									

Indicators of Tourism Business Activity

4.8 Figure 4.2 shows that employment in tourism-related SIC codes in Cumbria in 2011 was comparable with North Yorkshire and Devon while much larger than the other two areas. As regards changes over time, BRES data suggests quite varied trends in recent years (Figure 4.3). Cumbria and Northumberland have experienced employment growth in the most recent year (against the general trend) while Devon and North Yorkshire have experienced a fall. The change over 2 years shown in Figure 4.4 indicates quite significant swings in employment data.

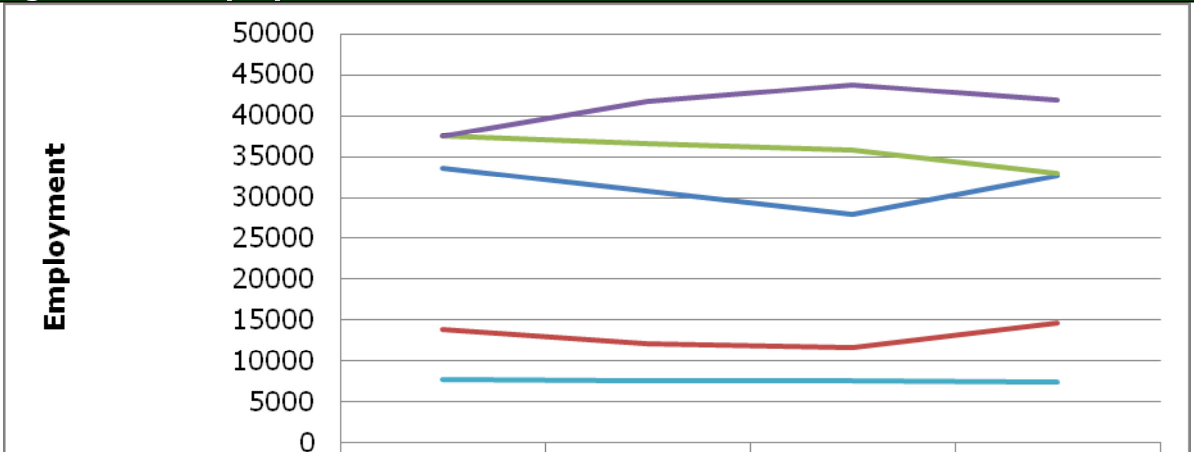
4.9 This can be compared with the pattern of change in GVA for "accommodation and food services" which show much less volatility from year to year, partly reflecting the nature of the data which is calculated on a moving average (see Figure 4.5). This data is only available for NUTS 2 areas (so note that North Yorkshire includes the City of York). The trend in Cumbria appears broadly similar to Devon but has performed well compared to North Yorkshire.

Figure 4.2: Employment in Tourism Related SIC codes 2011



Source: BRES data accessed via NOMIS

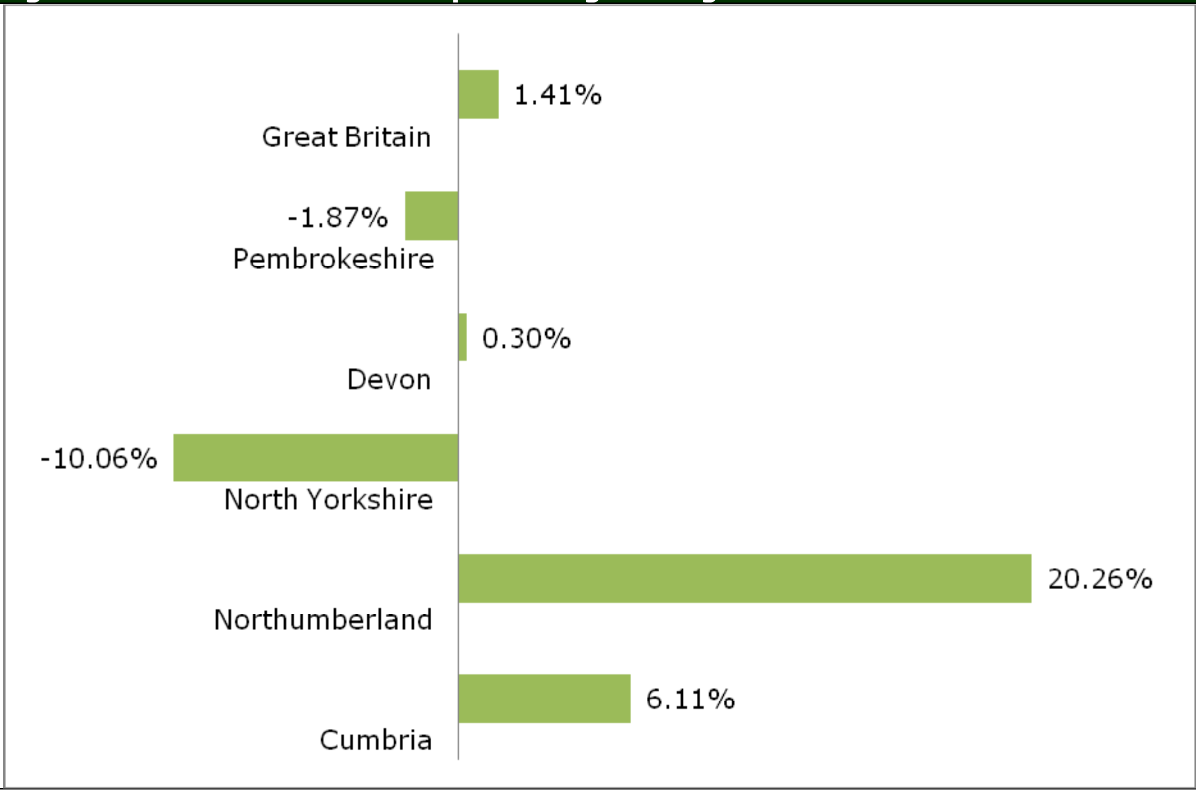
Figure 4.3: Employment in Tourism Related SIC codes



	2008	2009	2010	2011
Cumbria	33609	30826	27956	32709
Northumberland	13794	12146	11591	14607
North Yorkshire	37522	36571	35780	32892
Devon	37459	41677	43674	41802
Pembrokeshire	7677	7600	7585	7458

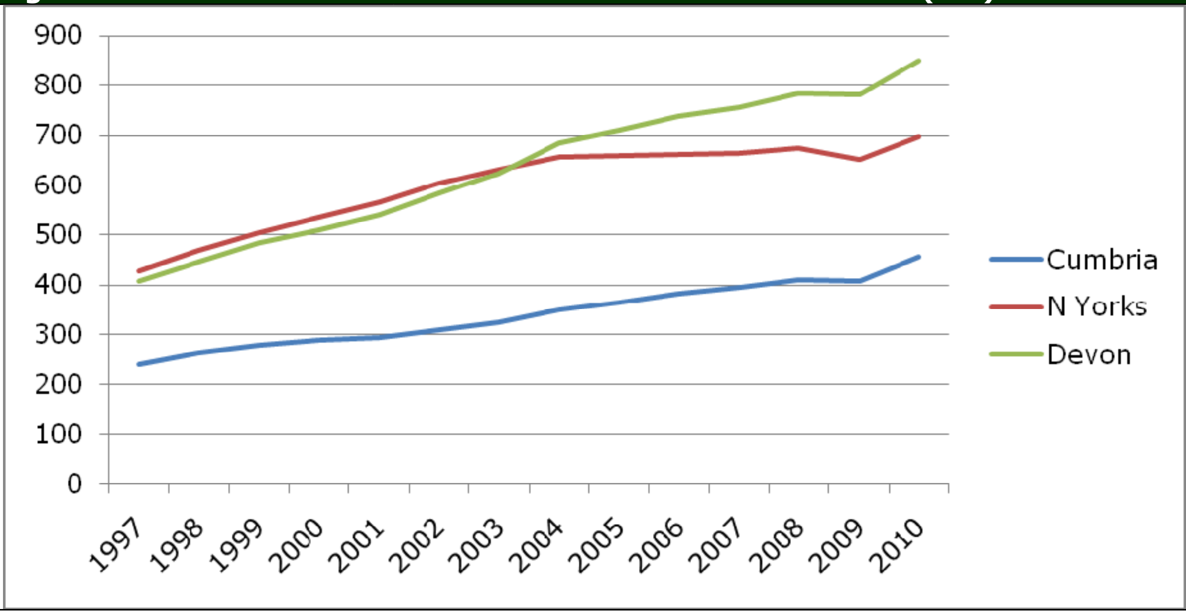
Source: BRES data accessed via NOMIS

Figure 4.4: Tourism SIC code percentage change 2009-2011



Source: BRES data accessed via NOMIS

Figure 4.5: Trends in GVA Accommodation and food services (£m)



Source: GVA data accessed via NOMIS

4.10 The baseline for tourism also makes use of data from the STEAM model which is shown in Tables 4.6 to 4.8. This provides estimates of key indicators including tourist visitor numbers, tourist days, revenues and jobs using a consistent method applied to different National Parks and related Counties within England. Comparative data is available for three other relevant areas (Pembrokeshire, Northumberland and Devon). The data for 2011 shows that visitor numbers, tourist days and revenues are of similar order of magnitudes in Cumbria and Devon but much lower in the other two areas (Table 4.6). Data for the National Parks in these Counties, however, shows quite a different picture (Table 4.7). **The Lake District attracts far more tourists than any of the others including Dartmoor and Exmoor combined**.

Table 4.6: Tourism activity for Cumbria and Available County Comparators 2011				
Definition	**Cumbria**	**Pembrokeshire**	**Northumb'ld**	**Devon**
N of tourist visitors	40.10 m	4.20 m	9.15 m	33.68 m
N of tourist days	52.74 m	13.79 m	14.01 m	53.48 m
Tourism revenue	£2,201.90 m	£544.00 m	£706.30 m	£2,527.71 m
Tourism jobs (FTEs)	33,090	16,393	13,230	42,190
Source: STEAM Model, Cumbria Tourism				

Table 4.7: Tourism activity for Lake District and other National Parks					
Definition	**L District**	**N York Moors**	**Northumbl'd**	**Dartmoor**	**Exmoor**
	2010	**2011**	**2011**	**2011**	**2011**
N of tourist visitors	15.22 m	5.58 m	1.37 m	2.28 m	1.33 m
N of tourist days	21.96 m	7.01 m	1.62 m	2.95 m	2.02 m
Tourism revenue	£934.87 m	£263.64 m	£66.14 m	£119.20 m	£92.99 m
Tourism jobs (FTEs)	14,865	4,495	1,120	2,172	2,057
Source: STEAM Model, Cumbria Tourism					

4.11 Data from the STEAM model provide a useful source that has comparators in other relevant areas of the country. However, this data depends on analyses that take time to complete and there are inevitable delays and some gaps in data series. There are, however, other sources that provide supplementary measures of activity. These include tourist accommodation occupancy data (Table 4.8) and business performance indicators (Table 4.9) that are collated locally by Cumbria Tourism. These sources may have value in providing measures of more current trends in the sector in advance of the release of official government data. This is especially true of occupancy data which is available on monthly basis (as well as annual data) and is collected and released relatively quickly in relation to the time period it relates to.

4.12 In addition, Table 4.7 shows a larger number of tourist days for the Lake District (proportionately the second highest of the five areas being compared) – due to the significant number of staying visitors. This pattern, where staying visitors are an important element of the visitors to the Lake District, adds further weight to the inclusion of occupancy data as an appropriate indicator within the baseline.

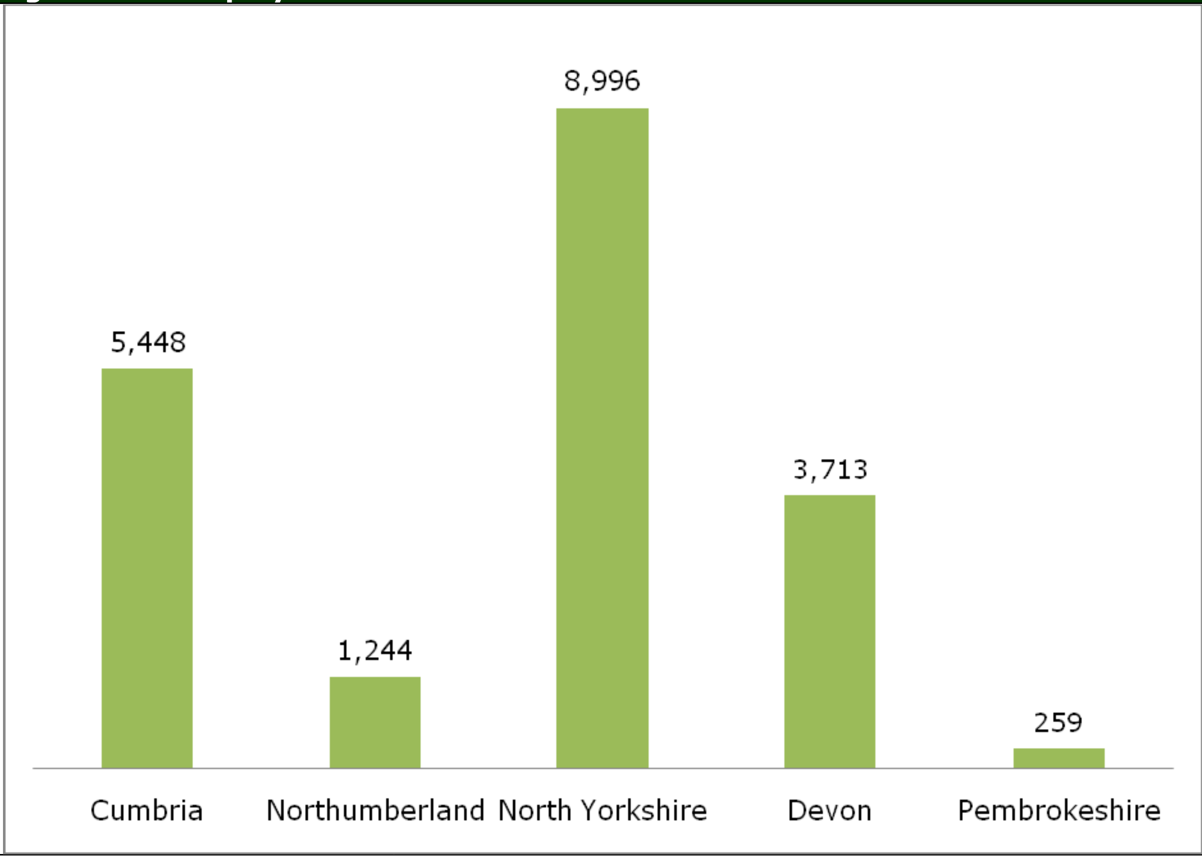
Table 4.8: Rates of occupancy of tourist accommodation 2011-12				
Accommodation type	**Cumbria – 2011**	**Cumbria - 2012**	**England - 2011**	**England - 2012**
Serviced Accommodation	55.90%	56.6%	66.0%	not available yet
Self Catering	53.40%	51.1%	N/A	N/A
Caravan and Camping	45.90%	42.0%	N/A	N/A
Source: England Occupancy Survey; Cumbria Tourism Occupancy Survey				

Table 4.9: Tourism Business Performance indicators, 2012			
Definition	**Cumbria - Down**	**Cumbria - Up**	**Cumbria- No Change**
Turnover	63.00%	17.0%	20.0%
Profit	75.00%	11.0%	14%
Visitor Numbers	68.00%	15.0%	17%
Forward Bookings – 2013	50%	12%	37%
Source: Cumbria Tourism Business Performance Survey - September 2012			

Food and Drink

4.13 The Food and Drink sector is a particularly important provider of employment in North Yorkshire as well as Cumbria and to a lesser extent in Devon (Figure 4.7). This sector provided employment for over 5,400 people in Cumbria during 2011. This is of significance for the baseline study as many small and medium-sized businesses produce food and drink in the County and many will make use of Lake District and Cumbrian brands. These figures, however, also include employment in large food processing plants operated by national and international firms where local brands are likely to be less important.

Figure 4.7: Employment in Food & Drink related SIC codes 2011

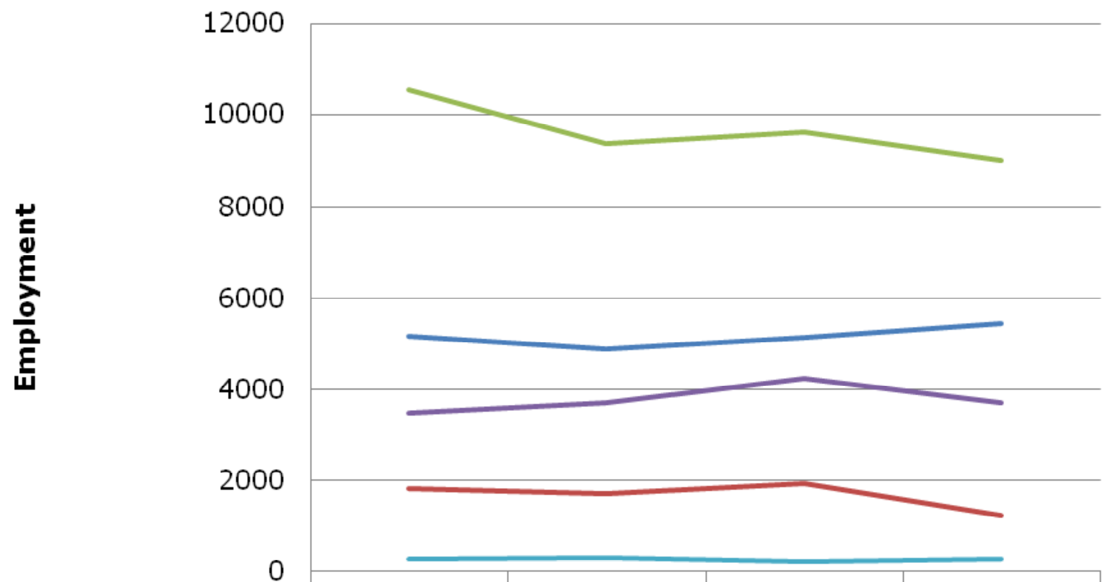


Source: BRES data accessed via NOMIS

4.14 Interpreting changes in these employment figures needs to be informed by an understanding of corporate structures and also local events (major closures and rationalisation in large processing plants, in particular). The importance of this is demonstrated in Figures 4.8 and 4.9 which reveal quite varied patterns of change which need careful interpretation which is beyond the scope of the present study. Between 2009 and 2011, BRES data suggests that employment levels in these industries expanded in the County by 11.6% while the trend in other areas has been either fairly static or substantial decline, particularly in North Yorkshire.

4.15 These trends need close scrutiny and use of local knowledge to check for the effects of single events such as new opening and closures of larger processing plants which can have large impacts on data at local levels. It suggests caution is required in relying solely on this source of information to detect impacts of GDF debates on businesses in this sector.

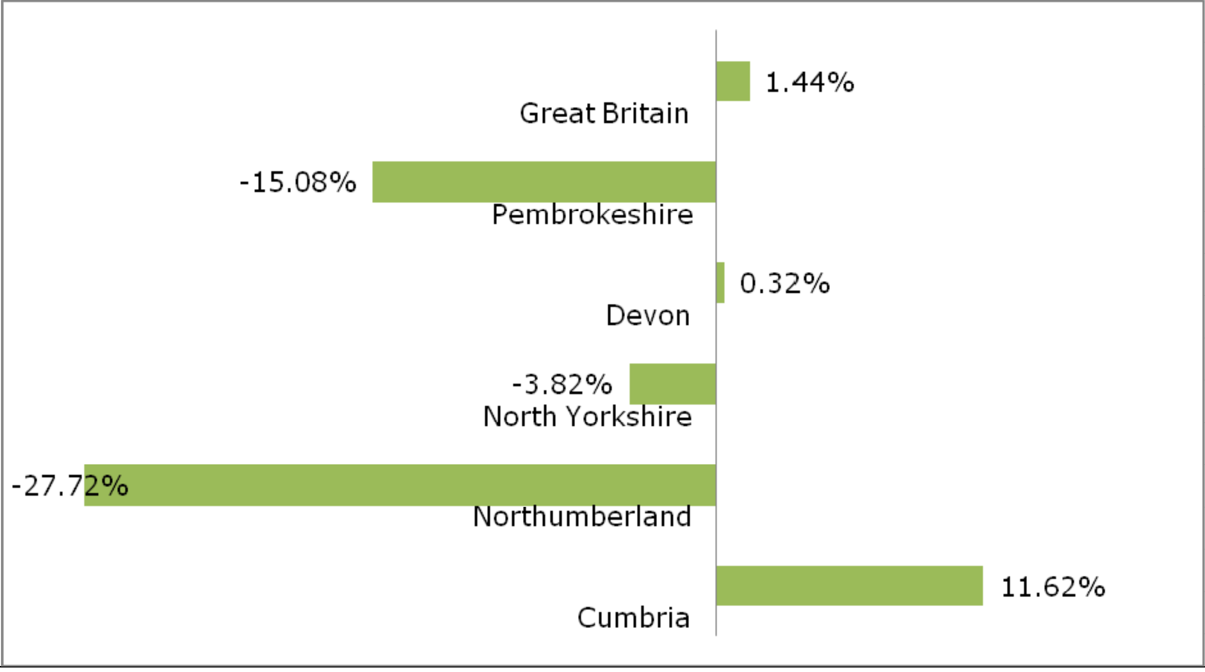
Figure 4.8: Employment in Food and Drink SIC codes



	2008	2009	2010	2011
Cumbria	5174	4881	5147	5448
Northumberland	1830	1721	1930	1244
North Yorkshire	10527	9353	9610	8996
Devon	3482	3701	4240	3713
Pembrokeshire	272	305	212	259

Source: BRES data accessed via NOMIS

Figure 4.9: Food & Drink SIC code percentage changes



Source: BRES data accessed via NOMIS

Land Based Industries

4.16 Indicators of change in the land-based sector generally show similar trends in Cumbria relative to comparator areas. Using most recent data (2009 compared to 2010), the number of farm holdings in Cumbria fell (-11.4%) by a rate close to the national average. This trend was less severe in Northumberland and North Yorkshire but worst in Devon (-15%). However, total farm labour declined slightly faster in Cumbria (-1.7%) compared to other areas (Table 4.10).

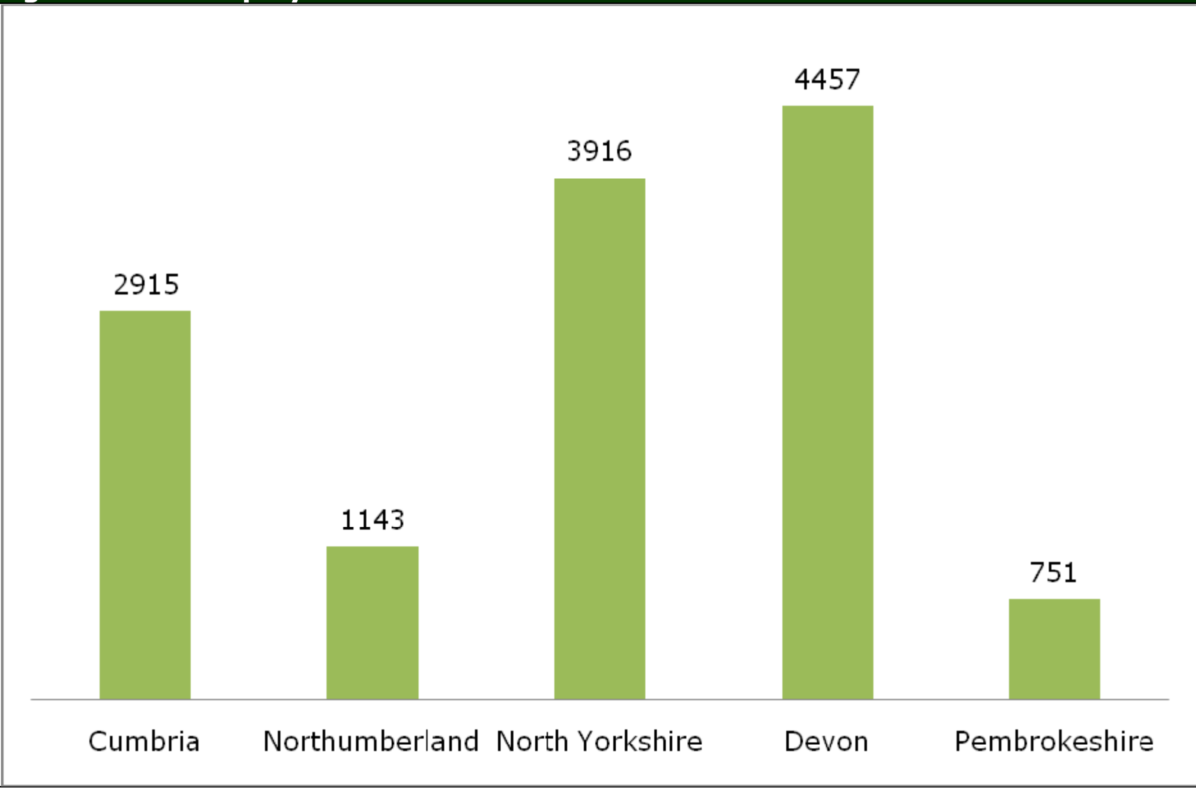
Table 4.10: Total Farm Holdings 2010				
	Number of holdings			Farmed area (hectares)
	2009	2010	% change	2010
Northumberland	2 095	1 923	-8	371 395
Cumbria	5 382	4 768	-11.4	450 697
North Yorkshire CC	7 141	6 500	-9	600 882
Plymouth & Torbay & Devon CC	9 627	8 162	-15	485 752
England			**-11**	
Source: DEFRA Annual Survey of Agriculture				

Table 4.11: Total Farm Labour 2010			
	2009	2010	Change
Northumberland	4 851	4 824	-0.6
Cumbria	11 473	11 281	-1.7
North Yorkshire CC	16 377	16 560	1.1
Plymouth & Torbay & Devon CC	18 629	18 577	-0.3
England	**292 653**	**293 170**	0.2
Source: DEFRA Annual Survey of Agriculture			

4.17 Data from BRES can be analysed to monitor trends in employment in some of the non-farm land-based activities. Figure 4.10 shows that land-based activities outside the farm sector employ at least a further 2,915 people in Cumbria although these totals are considerably higher in both North Yorkshire and Devon. Patterns of change over time are also quite distinctive in displaying quite sharp swings from year to year, particularly in North Yorkshire. Levels drop to a low point in 2009 in most areas, recover in 2010 but then fall back again during 2011.

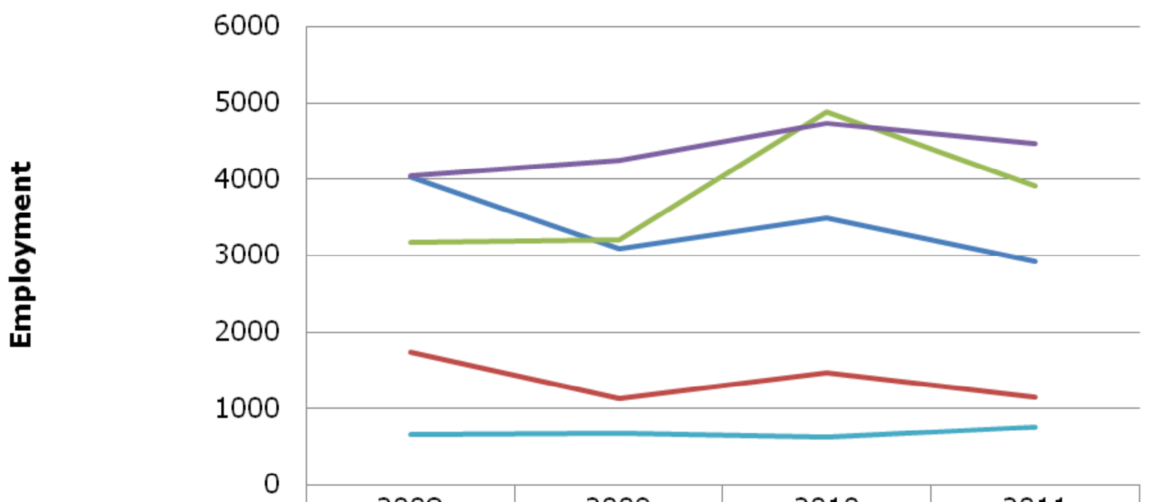
4.18 For this particular data series, it may be important to select an appropriate base year for calculating change over time. 2011 figures were all above the low point recorded in 2009 with the exception of Cumbria which recorded a significant fall of over 5 % (Fig 4.12).

Figure 4.10: Employment in Land Based related SIC Codes 2011



Source: BRES data accessed via NOMIS

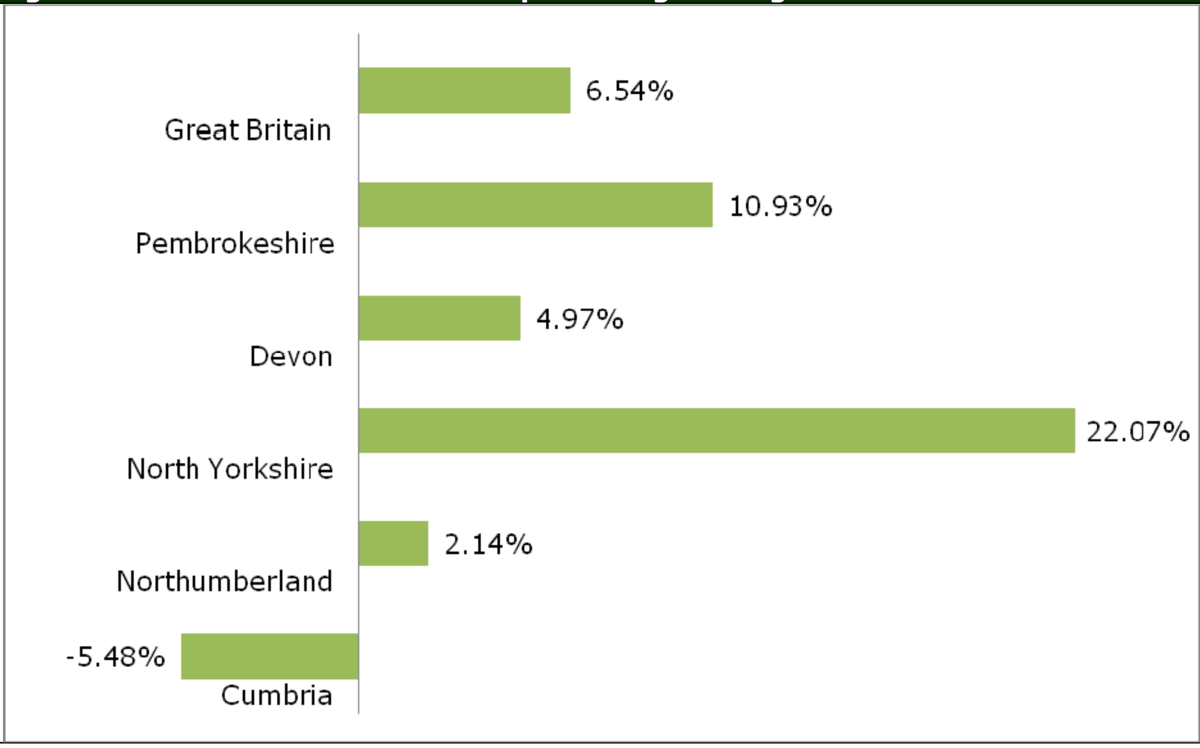
Figure 4.11: Employment in Land Based SIC codes



	2008	2009	2010	2011
Cumbria	4020	3084	3478	2915
Northumberland	1737	1119	1458	1143
North Yorkshire	3171	3208	4880	3916
Devon	4037	4246	4731	4457
Pembrokeshire	650	677	624	751

Source: BRES data accessed via NOMIS

Figure 4.12: Land Based SIC code percentage change 2009-2011

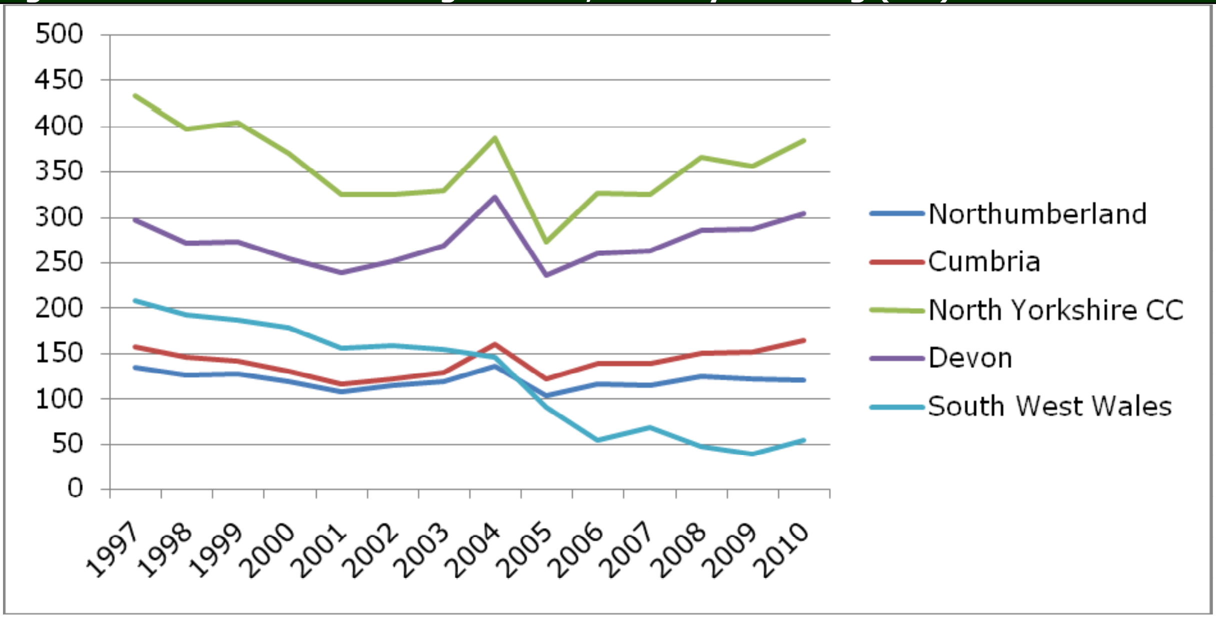


Source: BRES data accessed via NOMIS

4.19 ONS provide data on the contribution of agriculture, forestry and fishing to GVA. This data is available for NUTS 3 regions (Figure 4.13). The data shows that GVA in this sector in 2010 was much greater in North Yorkshire (£385m) and Devon (£304m) compared to Cumbria (£164m), Northumberland (£120m) and Pembrokeshire (£54m). These differences reflect not only geographical scale, but also variations in agricultural activities and types of farm enterprises in these contrasting areas of the UK.

4.20 While there are significant differences between these areas in absolute terms, the pattern of change over time displays some common features, including a significant fall in GVA during 2005 and for most areas, recovery between 2006 and 2010.

Figure 4.13: Trends in GVA Agriculture, forestry & fishing (£m)



Source: GVA data accessed via NOMIS

Businesses that use Cumbria and Lake District Brands

4.21 The model of possible impacts of GDF publicity includes specific reference to the negative effects that might be experienced by businesses that make use of Cumbria and Lake District brands. Some of these impacts might be observed in the indicators outlined above, but this data has shortcomings, as has been noted in the discussions above. First of all, there are time lapses in this data becoming available. Secondly, while it is likely that such businesses are more common in tourism, food & drink and land-based sectors, by no means all such businesses rely on such brands and some businesses in other sectors may also be brand-sensitive. Furthermore, the trends presented above have complex causes including wider patterns of corporate change, changes in technology and employment in larger businesses that tend to rely much less on local brands.

4.22 To address this shortcoming in readily-available data series, the baseline therefore includes a survey that provides data specifically on businesses that use Cumbria and Lake District brands. The survey also provides an opportunity to gather data in a timely fashion on business confidence, employment and investment in brand sensitive businesses and to assess business perceptions of the effects of the publicity surrounding GDF on levels of sales and/or visitor numbers. We suggest that this data is used in combination with official data series to improve the veracity of any interpretation of trends.

4.23 The baseline survey results indicate that the general trading conditions for a high proportion of such businesses continue to be quite challenging. 55% report reduced profitability and 43% report a decline in sales in the past 12 months. 45% are less confident about business performance than experienced this time last year. Within this difficult trading environment, 17% felt that the publicity surrounding the possibility of a search for a site for the GDF has had a very negative impact on sales.

Table 4.13: Survey responses of Businesses that use Cumbria & Lake District Brands		
Definition	**Users of LD/C Brands**	**All survey respondents**
Percent of business that use Cumbria and Lake District brands that say publicity surrounding the possibility of hosting a **GDF has had a very negative impact on sales**	17%	15%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Employment** compared with this time last year	17%	17%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Sales** compared with this time last year	43%	40%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Profit Margins** compared with this time last year	55%	50%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Investment** compared with this time last year	26%	23%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Business confidence** compared with this time last year	45%	41%
Percent of business that use Cumbria and Lake District brands that reported a decrease in **Customer/Visitor Numbers** compared with this time last year	50%	44%
Source: Survey of Businesses in Cumbria 2013 (DC Research, CRED, Red Research Survey (January 2013))		

4.24 Not unexpectedly, compared with the overall survey, a higher proportion of the businesses who said "very negative" are brand sensitive and are also aware of GDF issues. Negative replies are overrepresented from Allerdale and from those that said they operate from sites within the Lake District National Park, although not for Allerdale and South Lakeland together.

4.25 In terms of business types (assessed in terms of the 'main business activity' of respondents), of the 47 "very negative" replies where the business type is known, 28 involved visitor accommodation providers and 11 others are clearly associated with the visitor economy (e.g. museum, gift shop, guided walks). This suggests that 83% of the businesses that replied "very negative" are involved directly, or strongly associated, with tourism and the visitor economy.

4.26 In terms of the responses to the open-ended follow-on question that asked businesses to explain their answer to the 'impact' question, an assessment of these replies shows that a wide variety of responses have been provided in the 166 businesses that provided some type of answer to this question.

4.27 The comments received provide a wide variety of explanations and reactions to the question asked, with some respondents explaining where they have felt the impact so far (e.g. in bookings/sales), some respondents talking specifically about impacts on their own business, some respondents giving answers relating to the

Cumbrian economy more generally, some respondents providing comments about GDF in general, some offering explanations around concerns about future anticipated impacts of GDF, some noting that the question itself is difficult to answer at the current time, and so on.

SECTION 5: SUMMARY & ISSUES FOR CONSIDERATION

5.1 This section summarises the findings from the Economic Baseline and highlights issues for consideration in terms of any research that may be carried out in the future to assess any changes in this baseline.

5.2 The Tables overleaf present the findings from each of the main sources of evidence used for the Economic Baseline. In terms of assessing progress against this baseline at any point in the future, the key issue to be considered is around the **timeliness** of the data used in the baseline.

5.3 As explained in Sections 3 and 4, the different data sources used in the baseline are updated at different points of time, and at different regularities (i.e. some are updated more frequently than others) and as such, it will be **important to assess progress against this baseline at appropriate points in the future when updated sets/subsets of the baseline data have become available**.

5.4 Working on this principle:

- The **economic data from official sources** (on employment, business stock, GVA etc.) is updated on an annual basis, although the date for release of each different source will vary. In addition, there is a time lag in terms of the data release and the time period to which it relates. (For example, the employment data is drawn from BRES. The most recent release from BRES was in September 2012, and this release provided data for 2011. As such, the BRES employment data that will be realised in September 2013 will relate to 2012 (and will effectively be a more accurate (i.e. up to date) baseline for this research), and it will not be until the September 2014 release that data for 2013 will be available. It is this 2014 release that will provide the first point at which progress against an end of 2012 baseline can be measured).
- The **first proprietary tourism data source (STEAM)** is commissioned by partners in Cumbria (and is managed by Cumbria Tourism). Assuming that this commission continues, STEAM data is updated on an annual basis, and is typically available four or five months after the year end. This means that data for 2012 should be available in May/June 2013. Again this 2012 data will effectively be a more accurate (i.e. up to date) baseline for this research, and it will not be until the release of the 2013 data (in May/June 2014) that the first point at which progress against an end of 2012 baseline can be measured.
- **The second tourism data source (occupancy data)**, is collected by Cumbria Tourism on a monthly basis and results are published on both a monthly and annual basis. Monthly data is typically published four weeks after month end. The national comparison data (available through the England Occupancy Survey and the UK Occupancy Survey) are collected monthly, and results published on a monthly and annual basis. Monthly data is published typically two months in arrears. Therefore the occupancy data is the most up to date data and is typically available one to two months after collection. This would mean that data is already starting to emerge now (February 2013) for the end of 2012. This data could be updated on a regular, monthly basis.
- **The third tourism data source (Cumbria Tourism Business Survey)** is a long running survey that operates as a biannual online survey, conducted around the key seasons for tourism businesses (at the end of March, and again at the end of September). Results are produced by Cumbria Tourism and are available within 2-3 weeks of the research being undertaken. For example, the March 2013 results (which will cover September 2012 to March

2013) should be available by the end of April 2013, and this data could be updated on a six-monthly basis thereafter. The September 2012 survey results effectively form the baseline for this source (and have been used as such in Section 4 of this report), and the March 2013 results would enable progress against this baseline to be assessed in Spring 2013.

- **The data drawn from the baseline business survey** – i.e. the primary research used in this study – would, naturally, **require additional primary research** (in the form of the survey) to be re-commissioned in order to update this element of the baseline. This is, as discussed in Sections 3 and 4, a key element of the baseline as it covers specific issues and provides evidence on these issues that are not available from other sources.

5.5 In terms of updating this element (the primary research business survey) of the baseline there are some wider considerations/alternative approaches. **First**, consideration could be given to the **development of a business panel**. The survey used in this research asked businesses if they would be happy to be contacted in the future regarding the questions raised in the survey and more than half (52%) replied positively – i.e. 177 businesses said they would be willing. These businesses could form the basis for a business panel that could be used to assess the key baseline issues over time. This would allow a detailed understanding of both cross-section (e.g. sectoral and geographic issues) and also temporal issues (i.e. changes over time) to be assessed and analysed. The development of such a panel would need to include consideration of ensuring that the panel is representative of the businesses that the research needs to cover.

5.6 **Second**, an alternative approach could be to **link this primary research into a pre-existing/alternative Cumbrian business survey** (e.g. one carried out by another organisation such as Cumbria Chamber of Commerce, Cumbria Observatory etc.). This approach could address three issues - (1) the issues around representativeness as discussed in Section 2 of this report (by being part of a larger survey it would be more likely to be representative of all Cumbrian businesses); (2) it would help to minimise additional primary research costs; and (3) it could also be used to provide a control group/local comparator drawing on responses to this wider survey from Cumbrian businesses that do not use Cumbria and Lake District brands.

5.7 Reflecting on all of the above, the timescales for updating this baseline and assessing change against the baseline indicators could be carried out as follows:

- In **April 2013** – update the occupancy data and Tourism Business Survey data (to provide the first measure of progress against the baseline for occupancy Tourism Business Survey indicators set out in this report)
- In **May/June 2013** – update the STEAM data (to provide a more up to date 2012 baseline)
- In **November 2013** – update the official economic data (to provide a more up to date 2012 baseline position)
- In **November 2013** – update the occupancy data and Tourism Business Survey data (to provide a second measure of progress against baseline for these indicators)
- In **May/June 2014** - update the STEAM data (to provide a the first measure of progress against the 2012 baseline)
- In **May/June 2014** – update the occupancy data and Tourism Business Survey data (to provide the third measure of progress against the baseline for occupancy Tourism Business Survey indicators set out in this report)

- In **November 2014** – update the official economic data (to provide the first measure of progress against the 2012 baseline position)
- In **November 2014** – update the occupancy data and Tourism Business Survey data (to provide a fourth measure of progress against baseline for these indicators)
- This pattern could then be repeated at six monthly intervals as required.

5.8 The only issue to resolve would be the approach to be adopted to update the primary research element (the baseline business survey that has been carried out as part of this research). This would need to be agreed by partners, bearing in mind the options set out above.

Table 5.1: Baseline for key indicators

Indicator	Cumbria	Northumbld	N Yorks	Devon	Pembroke
Numbers employed in land based activities (2011)	2915	1143	3916	4457	751
Total farm labour (2010)	11,281	4,824	16,560	18,577	NA
Number employed in tourism-related activities (2011)	32709	14607	32892	41802	7458
Numbers employed in food and drink industries (2011)	5448	1244	8996	3713	259
Number of enterprises in "agriculture, forestry and fishing" (2012)	4,565	1,830	5,985	7,360	1,410
Number of enterprises in "accommodation and food services" (2012)	2,355	960	2,450	2,820	670
Number/Rate of "births" of new enterprises (2011)	1,585 Rate=7.5	890 Rate=9.2	2,370 Rate=8.4	2,575 Rate=7.7	360 Rate=6.9
Number/Rate of "deaths" in existing enterprises (2011)	1,795 Rate=8.5	800 Rate=8.2	2,215 Rate=7.8	2,685 Rate=8.0	400 Rate=7.6
Level of GVA (£m) in "agriculture, forestry and fishing" (2010)	£164m	£120m	£385m	£304m	£54m (SW Wales)
Level of GVA (£m) in "accommodation and food services" (2010)	£457m	N/A	£697m (NUTS 2 includes city of York)	£850m	N/A
Note: the rate of "births"/"deaths" of enterprises is a percentage, calculated as a proportion of the total stock of enterprises.					

Table 5.2: Cumbrian Businesses that use Cumbria and Lake District Brands - Business Performance				
Theme	**Measure**	**Definition**	**Baseline Survey result (2013)**	**Comparator - all survey respondents**
Cumbrian Businesses that use Cumbria and Lake District Brands - Business Performance	GDF Impact	Percent of business that use Cumbria and Lake District brands that say publicity surrounding the possibility of hosting a GDF has had a very negative impact on sales	17%	15%
	Employment	Percent of business that use Cumbria and Lake District brands that reported a decrease in Employment compared with this time last year	17%	17%
	Sales	Percent of business that use Cumbria and Lake District brands that reported a decrease in Sales compared with this time last year	43%	40%
	Profit Margins	Percent of business that use Cumbria and Lake District brands that reported a decrease in Profit Margins compared with this time last year	55%	50%
	Investment	Percent of business that use Cumbria and Lake District brands that reported a decrease in Investment compared with this time last year	26%	23%
	Business confidence	Percent of business that use Cumbria and Lake District brands that reported a decrease in Business confidence compared with this time last year	45%	41%
	Customer/Visitor Numbers	Percent of business that use Cumbria and Lake District brands that reported a decrease in Customer/Visitor Numbers compared with this time last year	50%	44%

Table 5.3: Tourism by National Park

Theme	Measure	Definition	Lake District	North York Moors NP	Northumberland NP	Dartmoor National Park	Exmoor National Park
Tourism: National Parks	Tourist numbers	Number of tourist visitors	15.22 m	5.58 m	1.37 m	2.28 m	1.33 m
	Tourism days	Number of tourist days	21.96 m	7.01 m	1.62 m	2.95 m	2.02 m
	Tourist spend	Tourism revenue	£934.87 m	£263.64 m	£66.14 m	£119.20 m	£92.99 m
	Employment	Tourism jobs (FTEs)	14,865	4,495	1,120	2,172	2,057

Table 5.4: Tourism by County

Theme	Measure	Definition	Cumbria	Pembrokeshire	Northumberland	Devon
Tourism: Counties	Tourist numbers	Number of tourist visitors	40.10 m	4.20 m	9.15 m	33.68 m
	Tourism days	Number of tourist days	52.74 m	13.79 m	14.01 m	53.48 m
	Tourist spend	Tourism revenue	£2,201.90 m	£544.00 m	£706.30 m	£2,527.71 m
	Employment	Tourism jobs (FTEs)	33,090	16,393	13,230	42,190

Table 5.5: Tourism Businesses by Occupancy Type

Theme	Measure	Definition	Cumbria - 2011	Cumbria - 2012	England - 2011	England - 2012
Tourism: Businesses	Occupancy	Serviced Accommodation Occupancy	55.90%	56.6%	66.0%	not avail yet
		Self Catering Accommodation Occupancy	53.40%	51.1%	N/A	N/A
		Caravan and Camping Occupancy	45.90%	42.0%	N/A	N/A

Table 5.6: Tourism Business Performance					
Theme	**Measure**	**Definition**	**Cumbria - Down**	**Cumbria - Up**	**Cumbria- No Change**
Tourism: Businesses	Performance	Turnover	63.00%	17.0%	20.0%
		Profit	75.00%	11.0%	14%
		Visitor Numbers	68.00%	15.0%	17%
		Forward Bookings - 2013	50%	12%	37%

ANNEX 1: LESSONS FROM INTERNATIONAL COMPARISONS

This section of the report considers experience in some other countries where plans for the development of ground disposal of nuclear waste is being considered and actively pursued. It is stressed that the national and regional circumstances surrounding these developments are very varied hence none of the case selected can be regarded as a direct comparator to the situation in Cumbria. The purpose of this chapter, rather, is to consider available evidence of the possible socio-economic impacts of the decisions taken to participate in site selection.

The International Atomic Energy Agency (IAEA)[6] identifies four stages in the development of a nuclear repository. Stage 1 involves initial "planning and siting" phase involving a national decision on the type of repository and initial conversations with possible host communities. The stage 2 "review and approval" phase involves a consultation and approval of site location. Subject to such approval, this is followed construction (phase 3) and operation (phase 4).

A recent report from DECC[7] provides a list of sites at various stages in this process. The two most relevant examples in terms of stage in development are in Scandinavia. Olkiluoto in Finland is the most advanced case with access tunnels completed in 2011. Forsmark in Sweden provides another which in 2011 was selected as the Swedish Spent Fuel Repository (see Figure A1.1). Both these sites have therefore been through the site selection process that is currently taking place in Cumbria. A third site at Kincardine in Bruce County in Canada (see Figure A1.2) provides an example at an earlier stage than the Finnish and Swedish cases having just completed its impact assessments in 2011.

While the sites chosen vary in significant ways to Cumbria, there have some common features. All sites are in regions that have relatively sparse populations. At the level of the municipality, population densities are very low in the Finnish example 12.8 per sq km, also in Sweden (14.5 per sq km) and in Canada (20.88 per sq km). These figures are all much lower than the equivalent figure for Copeland (96.68) and Allerdale (77.6). At the wider regional scale, population densities in the Finnish and Canadian examples are still comparatively low, but the Swedish site at Forsmark lies within Uppsala County which has a population over 338,000. The population density in Uppsala (154.7 per sq km) is more than twice the level in Cumbria (73.8).

[6] IAEA (Sep 2002) "Socio-economic and other non-radiological impacts of the near surface disposal of radioactive waste"
[7] Department of Energy & Climate Change (2012) Managing Radioactive Waste Safely: Implementing Geological Disposal Annual Report April 2011 – March 2012

Figure A1.1: Osthammar Sweden and Olkiluoto Finland

Source: Googlemaps

Figure A1.2: Kincardine Canada

Source: Googlemaps

Table A.1.1 Population comparisons				
	Cumbria UK[8]	Olkiluoto Finland	Forsmark Sweden	Bruce County Canada
Population of municipality	Copeland: 70,600 Allerdale: 96,400	Eurajoki [9] 5,886	Osthammar 21,387[10]	Kincardine 11,174[11]
Area of municipality	Copeland : 731 sq km /Allerdale: 1242 sq km	458.77 sq km	1,471 sq km[12]	538 sq km[13]
Population density of municipality	Copeland: 96.6/ Allerdale:77.6	12.8	14.5	20.8[14]
Population of region	Cumbria 499800	Satakunta[15] 226,567	Uppsala county 338,630[16]	Bruce County 66,102[17]
Area of region	6767 sq km	8412 sq km	2189 sq km[18]	4087 sq km
Population density of region	73.8	26.9	154.7	16.2[19]
Source: See footnotes below				

In terms of the local economy adjacent to these sites, it is significant that all have some previous association with the nuclear industry. Forsmark in Sweden is already operating as a disposal site for intermediate-level waste and a nuclear power plant operates at Olkiluoto in Finland. The economy of Kincardine in Southern Ontario is also dominated by a nuclear power station situated on the shore of Lake Huron.

These sites are all in relatively under-populated areas where the nuclear industry is already a major employer of local people. Even so, tourism does feature in the economies of these territories to varying degrees. The Finnish site is located adjacent to the Rauma region with a population of 39,802 where the principle town (Rauma) is a UNESCO world heritage site[20] renowned for its historic lace-making industry and distinctive old wooden architecture. The Canadian site is located next to the Bruce Peninsular National Park[21] and the municipality of Kincardine actively promotes the community as a centre for tourism and retirement[22]. The Swedish case is located within Uppsala County which contains Sweden's fourth largest town (Uppsala) with a population of 200,000 and one of the oldest universities in Sweden.

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[8] Cumbria Economic Assessment 2011
[9] http://www.eurajoki.fi/html/en/Statistics.html
[10] http://www.scb.se/Pages/TableAndChart____308469.aspx
[11] http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3541024&Geo2=CD&Code2=3541&Data=Count&SearchText=Kincardine&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1
[12] http://en.db-city.com/Sweden--Uppsala--%C3%96sthammar
[13] http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3541024&Geo2=CD&Code2=3541&Data=Count&SearchText=Kincardine&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1
[14] http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3541024&Geo2=CD&Code2=3541&Data=Count&SearchText=Kincardine&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1
[15] http://www.satakunta.fi/fp_satakunta.aspx?lang=en-us
[16] http://www.scb.se/Pages/TableAndChart____308469.aspx
[17] http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3541024&Geo2=CD&Code2=3541&Data=Count&SearchText=Kincardine&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1
[18] http://en.db-city.com/Sweden--Uppsala--Uppsala
[19] http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3541024&Geo2=CD&Code2=3541&Data=Count&SearchText=Kincardine&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1
[20] http://www.microsofttranslator.com/BV.aspx?ref=IE8Activity&a=http%3A%2F%2Fwww.visitrauma.fi%2Findex.php%3Foption%3Dcom_content%26task%3Dview%26id%3D2%26Itemid%3D55
[21] http://www.pc.gc.ca/eng/pn-np/on/bruce/index.asp
[22] http://www.kincardine.net/

In terms of trajectory, population data shows contrasts between areas. West Cumbria's population shows a slight increase over the past decade while the contrasting localities have experienced either slow growth or decline, particularly in the Scandinavian examples (with the obvious exception of the region of Uppsala).

Table A1.2: Population change Cumbria and International Comparators

		2000	2001	2002	2010	2011	Percentage Change
UK	Allerdale	93,600	93,500	93,700	94,100	96,400	2.99%[1]
	Copeland	69,400	69,300	69,100	69,500	70,600	1.73%[1]
	Cumbria	487,600	487,800	488,800	494,400	499,800	2.50%[1]
Finland	Eurajoki	5,910	5,791	5,760	5,923		0.22%[2]
	Satakunta	233,918	232,653	231,801	227,031	226,567	-3.14%[1]
Sweden	Osthammar			21,811	21,383	21,394	-1.91%[3]
	Uppsala			298,735	335,623	338,466	13.30%[4]
Canada	Kincardine		11,030			11,174	1.31%[4]
	Bruce County		65,680			66,102	0.64%[4]

Sources:
- UK data from ONS Mid-Year Population Estimates
- Finland data from Statistics Finland :http://www.stat.fi
- Sweden data from Statistics Sweden http://www.scb.se
- Canada data from Community Information Database http://data.cid-bdc.ca

Note: 1. 2000-2011, 2. 2000-2010, 3. 2002-2011, 4. 2001-2011

Kincardine, Bruce County, Ontario, Canada

Kincardine is located close to the shores of Lake Huron in the province of Ontario, Canada. The community has a relatively small population (11,174) and the economy is dominated by the Bruce nuclear power station situated on the shore of the Lake. The power plant was constructed between 1970 and 1987 and currently employs 3,800 workers and provides 30 percent of Ontario's power requirements[23].

In 2002 Canada's Nuclear Waste Management Organization (NWMO) was set up under the 2002 Nuclear Fuel Waste Act by the nuclear utilities operating in conjunction with AECL. Its mandate was to explore options for storage and disposal, to then make proposals to the government and to implement what was decided. .[24] For high-level wastes, in 2005 NWMO published three conceptual designs for the technical options specified in the Nuclear Fuel Waste Act. A Deep Geological Repository, known as *adaptive phased management*, was the one recommended by NWMO and chosen by the government in June 2007. NWMO is now responsible for progressing these plans.[25]

Following a positive response to polling of local residents, Ontario Power Generation (OPG) in 2005 proceeded with plans to construct a Deep Geologic Repository for 200,000 cubic metres of its low- and intermediate-level wastes. The repository would be located 680 metres beneath OPG's Western Waste Management Facility, which it has operated since 1974.[26] Early in 2007, NWMO stated that a final repository would probably be in Ontario, Quebec, New Brunswick or Saskatchewan, and host localities would need to volunteer for the role. NWMO designed a siting process by the end of 2009.

[23] http://www.brucepower.com/
[24] http://www.world-nuclear.org/info/default.aspx?id=25401&terms=nuclear%20power%20in%20canada
[25] http://www.world-nuclear.org/info/default.aspx?id=25401&terms=nuclear%20power%20in%20canada
[26] http://www.world-nuclear.org/info/default.aspx?id=25401&terms=nuclear%20power%20in%20canada

Environmental assessment and licensing has proceeded since, and in April 2011 OPG submitted its 12,500-page environmental assessment to CNSC. (NWMO) commenced technical and socio-economic assessment of potential candidate sites late in 2012.[27]

Forsmark, Osthammar, Sweden

The Swedish Nuclear Fuel and Waste Management Company (Svensk Kärnbränslehantering AB, SKB) was set up by the nuclear utilities following the Waste Legislation (Stipulation Act) in 1977 to develop a comprehensive concept for the management and disposal of used fuel and other radioactive wastes. It is owned 36% by Vattenfall, 30% Forsmark, 22% OKG and 12% E.ON Sweden.[28]

The interim repository for used fuel (treated as high-level waste) has been operating since 1985 at Oskarshamn, and its original 5,000 tonne capacity has been expanded to 8000 tonnes to cater for all the fuel from all the present reactors. In mid-2009 about 5,000 tonnes of used fuel was stored at CLAB.[29] In addition, a final underground repository (SFR) for operational (up to intermediate-level) radioactive waste and medical and industrial radioactive wastes has been operating near Forsmark since 1988. It has 63,000 cubic metre capacity and receives about 1,000 cubic metres per year. This was also one of the locations proposed by the local Östhammar community for a final high-level waste (HLW) repository.[30]

In the 1990s the Swedish Nuclear Fuel and Waste Management Company (SKB) conducts geological surveys on regional and local levels in order to select a site for the repository.[31] In 2002 they had narrowed their investigations to the municipalities of Oskarshamn and Östhammar[32] and in 2007, the site investigations were finally completed.[33] In June 2009 SKB, the Swedish Nuclear Fuel and Waste Management Company, declared Forsmark as the preferred location and in March 2011, the company applied for permits to build a final deposit for spent nuclear fuel in Forsmark, in the northern part of the municipality of Östhammar. The applications were submitted to The Swedish Radiation Safety Authority and The Land and Environmental Court in Stockholm.[34]

Olkiluoto Finland

Our third example also has existing associations with the nuclear industry. The first reactors were constructed on Olkiuoto Island on the shores of the Gulf of Bothnia within the municipality of Eurajoki in 1977. In 2005, the Finnish government approved plans to construct two new nuclear power plants one of which is located at Olkilouto. Finland's nuclear waste management program was initiated in 1983, soon after the first four Finnish reactors started commercial operation.[35] Preliminary site investigations took place between 1986 and 1992. Detailed site investigations and an environmental impact assessment procedure were carried out between 1993 and 2000 for four sites: Romuvaara in Kuhmo, Kivetty in Äänekoski, Olkiluoto in Eurajoki, and Hästholmen in Loviisa.

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[27] http://www.world-nuclear.org/info/default.aspx?id=25401&terms=nuclear%20power%20in%20canada
[28] http://www.world-nuclear.org/info/inf42.html
[29] http://www.world-nuclear.org/info/inf42.html
[30] http://www.world-nuclear.org/info/inf42.html
[31] http://www.stralsakerhetsmyndigheten.se/In-English/About-the-Swedish-Radiation-Safety-Authority1/The-site-for-a-spent-nuclear-fuel-repository1/News/We-wont-say-yes-until-the-safety-issue-has-been-solved/
[32] http://www.osthammar.se/en/Review-of-possible-repository-for-spent-nuclear-fuel/Background/
[33] http://www.stralsakerhetsmyndigheten.se/In-English/About-the-Swedish-Radiation-Safety-Authority1/The-site-for-a-spent-nuclear-fuel-repository1/News/We-wont-say-yes-until-the-safety-issue-has-been-solved/
[34] http://www.osthammar.se/en/Review-of-possible-repository-for-spent-nuclear-fuel/
[35] http://www.posiva.fi/en/nuclear_waste_management/selecting_the_site_the_final_disposal_at_olkiluoto and http://www.world-nuclear.org/info/default.aspx?id=328&terms=nuclear%20power%20in%20Finland

An application for a decision-in-principle from the Government was submitted by Posiva in 1999. In this application, Posiva proposed Olkiluoto in Eurajoki as the site for the repository. For the decision, the Government requested statements from the municipality of Eurajoki (which had a right of veto in the question) and from the Radiation and Nuclear Safety Authority. The municipal council of Eurajoki approved Olkiluoto as the site for the repository by 20 votes to 7. After having received these statements, the Government saw no obstacle to a positive decision-in-principle, which was made in December 2000. The proposal was further discussed by the Parliament, which, in May 2001, ratified the Government's positive decision-in-principle by 159 votes to 3.[36]

Posiva Oy an expert organisation responsible for the final disposal of spent nuclear fuel of the owners was established in 1995.[37] Phase 1 (2004–09) focused on excavation of the large access tunnel to the facility, reaching downward to a depth of 420 metres (1,380 ft). Phase 2 (2009–11) continued the excavation to a final depth of 520 metres (1,710 ft). In 2012, contracts for the technical level of ONKALO were signed. These included the construction of the building systems for the technical facilities of ONKALO and the Posiva underground characterization facility.

Evidence of socio-economic impacts in host localities

In all three case outlined above, there has already been significant investment in nuclear power facilities and the industry is a significant influence on the local economy in terms of employment and local supply chains. As part of the site selection processes for underground disposal, there have been extensive technical assessments of sites and environmental impact assessments (EIAs) of proposed developments. These EIAs have drawn on a wide range of data and evidence including consultations and public hearings.

The importance of the nuclear industry for the local economies in these municipalities is reflected in some of the findings of these assessments. In the Finnish case,[38] it was acknowledged that "attitudes toward nuclear waste in municipalities containing a nuclear power plant continued to be more positive than the average in the country" (p10). The case study on the impact on the economy focused on the local population of Eurajoki where residents perceive that there will be a positive impact on the local economy due to the employment around the construction and maintenance of the project.

The Swedish Environmental Impact Statement[39] also focuses on the area immediately around Forsmark and argued that the impact on the cultural environment is likely to be low (p.250). The statement also concludes that the impact on the landscape will be low because there is already a nuclear facility in place (p251) and the noise and vibration impact on residents will be low because they are already impacted by existing industry and the supply road to that industry (p253). The Canadian Environmental Assessment Agency is still conducting their EIA on the Kincardine site but there is already extensive documentation on the consultation process.[40]

These EIAs include reference to the likely economic benefits of the development of GDFs for local communities. In the Finnish example [41] input-output data is used to estimate the job impacts of the operating phase of the development. This suggests that the effect on employment would be a maximum of 30-60 persons in Eurojoki and 110-120 persons in the municipality as a whole. Reference is also made to the likely business supply opportunities in the construction and operation phases.

[36] http://www.posiva.fi/en/nuclear_waste_management/selecting_the_site_the_final_disposal_at_olkiluoto
[37] http://www.posiva.fi/en
[38] http://www.posiva.fi/files/519/Posiva_YVA_selostusraportti_en_lukittu.pdf
[39] http://www.skb.se/upload/publications/pdf/21014-MKB%20ENG%20webb%20150dpi.pdf
[40] http://www.ceaa.gc.ca/050/documents-eng.cfm?evaluation=17520
[41]

Despite the extensive nature of these EIAs, however, there is little evidence of the impacts of these developments on businesses in other sectors of the economy. The most relevant data comes from surveys of residents that report on public perceptions of local economic impacts. In Finland, Kojo, Kari & Litmanen (2010)[42] conducted a piece of research on the socio economic impact of the GDF development. Their research was based on a survey of 3,000 residents with 1,200 from Eurajoki where the GDF is based but includes 300 replies from residents in Rauma which is the UNESCO site. A positive effect was estimated by 63%, while 11% estimated a negative in the case of employment. In economic development 61% envisaged a positive impact and 10% a negative impact. Services (40%/11%) and transportation (41%/15%) were also estimated fairly widely to benefit from the construction of the facility.

The impact on the wider economy was perceived less positively. According to the survey data, the final disposal facility was widely considered to have a negative impact on rural non-farm livelihoods (fishing, hunting, forest product gathering etc.), the state of the natural environment near the facility and the image of the area (to outsiders). A negative effect was estimated by 52% and a positive effect by 12% in the case of the rural non-farm livelihoods. In the case of the state of the natural environment near the facility, 54% anticipated a negative effect and 15% a positive effect. Negative consequences for the image of the area were anticipated by 52% but positive consequences by 15%. For some respondents, the disposal facility was also perceived to have a negative effect on recreational opportunities (39%/16%) and on agriculture and forestry (36%/15%).

In the case of Sweden, in April 2008 an independent poll in both communities involved in the site selection (N=900 in each) showed that 83% of Oskarshamn residents and 77% of those in Östhammar supported having the future repository in their own locality. Six neighbouring localities were also surveyed in 2008 and, while the majority of residents were in favour of a final repository in the neighbouring municipalities, support diminished as distance from ongoing nuclear power operations increased.[43]

Summary and Conclusion

Experience in other countries where plans for the development of ground disposal of nuclear waste are being actively pursued indicate some parallels with the situation in Cumbria. Three selected cases (Sweden, Finland, Canada) involve communities that have existing associations with the nuclear industry either as sites of nuclear power stations and/or existing facilities for storage of nuclear waste. The communities are relatively small (generally smaller than in Cumbria) and the nuclear industry is by far the largest local employer. As a consequence, there is a general positive attitude towards the economic benefits of hosting nuclear facilities.

None of these sites is adjacent to a tourist destination as significant as the Lake District, but even so the tourism and leisure sectors are an important part of the local economy. In some cases, surveys of local residents show that the potential negative impacts of GDF siting on other sectors (land-based, visitor economy, outdoor recreation) are recognised but host communities tend to believe that the benefits will outweigh these costs to the local economy. In all these cases, despite considerable documentation and literature on the consultation processes, there is little tangible evidence of actual business impacts either negative (effects on other sectors) or positive (impacts via nuclear supply chain.). In this regard, the attempt to baseline negative impacts on businesses that use Lake District and Cumbrian brands can be regarded as distinctive.

[42] "The socio-economic and communication challenges of spent nuclear fuel management in Finland The post site selection phase of the repository project in Eurajoki2 (2010) Matti Kojo a, Mika Kari b, Tapio Litmanen b, Progress in Nuclear Energy 52 168–176

[43] http://www.world-nuclear.org/info/inf42.html

ANNEX 2: LIST OF CONSULTEES

Names of Business Consulted
Augill Castle
Bank Mill Nurseries
Cartmel Racecourse
Castlerigg Hall Caravan Site
Cranstons
Creative Textiles
Cumberland & Westmorland Sausage Company
Cumbria Tourism
English Lakes Hotels
Forestry Commission
George Fisher
Holker Estates
Honister Slate Mine
Iggesund
Impact International
K Village
Lake District Cheese Company
Lake District Estates
Lakeland Arts
Lakeland Spring Water
Lakelovers
Lakes Free Range Egg Company
Langdale Hotel
Lindeth Howe Country House Hotel
Muncaster Castle
NFU
Pioneer Foods
Rheged
Second Nature
Skelwith Fold Caravan Park
South Lakes Cottages
Stagecoach
Stobart Air/Carlisle Airport
The Coppermines and Lakes Cottages
The Knack Design
The Rum Story
The Strand Inn & Brewery (Wasdale)
Theatre by the Lake
Thornbank Farm
Thornby Moor Dairy
Tullie House, Carlisle
United Biscuits
Windermere Lake Cruises
Woolclip Ltd

ANNEX 3: SUMMARY OF BUSINESS SURVEY RESULTS

This Annex presents the key summary tables from the results of the business survey.

Where does your business operate?		
	Response Percent	**Response Count**
From one location in Cumbria	84.5%	370
From several locations with HQ in Cumbria	12.3%	54
From several locations with HQ outside Cumbria	3.2%	14
Source: DC Research, CRED, Red Research Survey (January 2013) n= 438		

Where is your main business location within Cumbria?		
	Response Percent	**Response Count**
Allerdale	33.2%	145
Barrow-in-Furness	2.3%	10
Carlisle	11.0%	48
Copeland	4.3%	19
Eden	12.8%	56
South Lakeland	36.4%	159
Source: DC Research, CRED, Red Research Survey (January 2013) n= 437		

Do you operate from any sites within the Lake District National Park?		
	Response Percent	**Response Count**
Yes	51.3%	223
No	48.7%	212
Source: DC Research, CRED, Red Research Survey (January 2013) n= 435		

How long has your business been operating in Cumbria?		
	Response Percent	**Response Count**
Less than 1 year	2.0%	9
1-4 years	15.2%	67
5-9 years	16.8%	74
10-14 years	15.7%	69
15 years+	50.2%	221
Source: DC Research, CRED, Red Research Survey (January 2013) n= 440		

What is your main business activity?

Categories	Response Count	Response Percent
Tourism	228	51%
Food and drink	12	3%
Land based	12	3%
Leisure	15	3%
Commerce/services	68	15%
Retail	21	5%
Production/manufacturing	21	5%
Education	6	1%
Culture and Creative	16	4%
Not for profit, charity, public sector	11	2%
Other (property, transport)	4	1%
Not spec	30	7%
Total	444	100%

Source: DC Research, CRED, Red Research Survey (January 2013) n= 444

Note: respondents were asked to describe their main business activity and the responses were allocated to the above categories by the study team. The word cloud below presents the same information in an alternative format. Both formats show that the majority of respondents are from the tourism (and tourism related) sectors, with tourism accommodation providers accounting for the vast majority of these respondents.

What is your main business activity?

Source: DC Research, CRED, Red Research Survey (January 2013) n= 444

How many people (including yourself) work in your business in Cumbria? (please state as FTE's - full time equivalents)		
Number of employees (categories)	**Response Count**	**Response Percent**
5 or fewer	279	71.5%
6 to 10	32	8.2%
11 to 25	28	7.2%
26 to 50	20	5.1%
51 to 100	14	3.6%
101 to 250	9	2.3%
more than 250	8	2.1%
Total	390	100.0%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 390		

Please specify/estimate the annual turnover of your business in Cumbria (most recent year)		
Annual Turnover (categories)	**Response Count**	**Response Percent**
Under £250,000	261	66.6%
Between £250,000 and £500,000	39	9.9%
Between £500,000 and £1million	29	7.4%
Between £1million and £2.5million	24	6.1%
Between £2.5million and £5million	16	4.1%
Between £5million and £10million	9	2.3%
Between £10million and £25million	9	2.3%
Between £25million and £50million	2	0.5%
More than £100million	3	0.8%
Total	392	100.0%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 392		

What proportion of sales is accounted for by customers in Cumbria?		
	Response Count	**Response Percent**
Up to 5%	137	41%
6% to 25%	55	16%
26% to 50%	46	14%
51% to 75%	32	10%
76% to 100%	65	19%
Total	335	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 335		

What proportion of sales is accounted for by customers in the rest of the UK?		
	Response Count	**Response Percent**
Up to 5%	19	5%
6% to 25%	40	11%
26% to 50%	61	17%
51% to 75%	52	15%
76% to 100%	180	51%
Total	352	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 352		

What proportion of sales is accounted for by customers outside the UK?		
	Response Count	**Response Percent**
Up to 5%	129	47%
6% to 25%	115	42%
26% to 50%	16	6%
51% to 75%	7	3%
76% to 100%	5	2%
Total	272	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 272		

What proportion of your purchasing is accounted for by suppliers in Cumbria?		
	Response Count	**Response Percent**
Up to 5%	23	6%
6% to 25%	33	9%
26% to 50%	49	14%
51% to 75%	62	17%
76% to 100%	190	53%
Total	357	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 357		

What proportion of your purchasing is accounted for by suppliers in the rest of the UK?		
	Response Count	**Response Percent**
Up to 5%	34	11%
6% to 25%	135	43%
26% to 50%	75	24%
51% to 75%	26	8%
76% to 100%	41	13%
Total	311	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 311		

What proportion of your purchasing is accounted for by suppliers outside the UK?		
	Response Count	**Response Percent**
Up to 5%	86	68%
6% to 25%	28	22%
26% to 50%	6	5%
51% to 75%	6	5%
76% to 100%	1	1%
Total	127	100%
Source: DC Research, CRED, Red Research Survey (January 2013) n= 335		

What is the current direction of change (compared with this time last year) for your business for each of the following business indicators?				
	Decreased	**No change**	**Increased**	**Response Count**
Employment	65 (17%)	272 (71%)	47 (12%)	384 (100%)
Sales	154 (40%)	106 (27%)	128 (33%)	388 (100%)
Profit margins	192 (50%)	126 (33%)	69 (18%)	387 (100%)
Investment	88 (23%)	186 (49%)	107 (28%)	381 (100%)
Business confidence	160 (41%)	163 (42%)	65 (17%)	388 (100%)
Customer/Visitor Numbers	169 (44%)	91 (24%)	126 (33%)	386 (100%)
Source: DC Research, CRED, Red Research Survey (January 2013) n= 391				

Does your business make use of any Cumbria and Lake District brands/branding?		
	Response Percent	**Response Count**
Yes - For all products and markets	28.3%	110
Yes - For some products and markets	39.6%	154
No - not at all	32.1%	125
Source: DC Research, CRED, Red Research Survey (January 2013) n= 389		

Note: The questions on this page were only asked for those businesses that said they do make use of Cumbria and Lake District brands/branding:

Do you use any of the following Cumbria and Lake District Brands?			
	Yes	**No**	**Response Count**
Cumbria	179	38	217
Lake District	190	32	222
Any other geographic/place based brands	65	69	134
Source: DC Research, CRED, Red Research Survey (January 2013) n= 248			

How important is this/are these brand(s) to your business?		
	Response Percent	**Response Count**
Vitally important	50.0%	123
Important though not vital	33.7%	83
Of some importance	9.3%	23
Of minor importance only	6.9%	17
Source: DC Research, CRED, Red Research Survey (January 2013) n= 246		

Do you think your use of these Cumbria and Lake District brands has any tangible effect on the following:			
	Yes	**No**	**Response Count**
Price of your product or service	129	106	235
Turnover of your business	162	69	231
Source: DC Research, CRED, Red Research Survey (January 2013) n= 238			

To what extent do you think your business clients and suppliers rely upon Cumbria and Lake District brands/branding?		
	Response Percent	**Response Count**
Vital for all businesses	11.1%	37
Vital for most businesses	21.6%	72
Vital for some businesses	42.9%	143
Vital for only a few, if any, businesses	24.3%	81
Source: DC Research, CRED, Red Research Survey (January 2013) n= 333		

How sensitive is your business to changes in Cumbria and Lake District brands?		
	Response Percent	**Response Count**
Very sensitive – changes have a major impact on our business	22.3%	78
Sensitive - changes have a moderate impact on our business	21.2%	74
Slightly sensitive - changes have a minor impact on our business	28.9%	101
Not at all sensitive – changes have no impact on our business	27.5%	96
Source: DC Research, CRED, Red Research Survey (January 2013) n= 349		

To what extent is the performance of your business in Cumbria affected by the following?							
	Very Negative Effect	**Negative Effect**	**No Effect**	**Positive Effect**	**Very Positive Effect**	**Don't Know/Not Relevant**	**Response Count**
The natural environment of Cumbria	1 (0%)	2 (1%)	50 (14%)	97 (28%)	190 (54%)	10 (3%)	350 (100%)
The rural characteristics of Cumbria	4 (1%)	17 (5%)	43 (12%)	107 (31%)	167 (48%)	11 (3%)	349 (100%)
The quality of life in Cumbria	1 (0%)	7 (2%)	46 (13%)	149 (42%)	139 (40%)	10 (3%)	352 (100%)
The peace and tranquillity of Cumbria	1 (0%)	4 (1%)	59 (17%)	112 (32%)	166 (47%)	11 (3%)	353 (100%)
Presence of the nuclear industry in Cumbria	55 (16%)	59 (17%)	144 (41%)	34 (10%)	20 (6%)	36 (10%)	348 (100%)
The presence of large multinational companies in Cumbria	17 (5%)	44 (13%)	178 (51%)	53 (15%)	10 (3%)	47 (14%)	349 (100%)
The availability of labour in Cumbria	10 (3%)	63 (18%)	161 (47%)	57 (17%)	11 (3%)	44 (13%)	346 (100%)
The cost of labour in Cumbria	7 (2%)	40 (11%)	178 (51%)	64 (18%)	9 (3%)	52 (15%)	350 (100%)
The supply of appropriate business premises in Cumbria	7 (2%)	43 (12%)	163 (47%)	52 (15%)	13 (4%)	68 (20%)	346 (100%)
The cost of appropriate business premises in Cumbria	24 (7%)	77 (22%)	137 (40%)	38 (11%)	13 (4%)	55 (16%)	344 (100%)
The availability of suitable suppliers in Cumbria	5 (1%)	36 (10%)	124 (36%)	126 (36%)	38 (11%)	20 (6%)	349 (100%)
The cost of supplies in Cumbria	9 (3%)	99 (28%)	162 (47%)	45 (13%)	9 (3%)	24 (7%)	348 (100%)
Being located in/close to the Lake District National Park	4 (1%)	9 (3%)	73 (21%)	94 (27%)	160 (45%)	13 (4%)	353 (100%)
Transport infrastructure	29 (8%)	132 (28%)	69 (20%)	82 (24%)	25 (7%)	8 (2%)	345 (100%)
ICT infrastructure	32 (9%)	86 (25%)	105 (31%)	49 (14%)	22 (6%)	50 (15%)	344 (100%)
Proximity to market/customer base	9 (3%)	42 (12%)	110 (32%)	109 (32%)	33 (10%)	40 (12%)	343 (100%)
Source: DC Research, CRED, Red Research Survey (January 2013) n= 355							

Government is currently in discussion with Allerdale Borough Council, Copeland Borough Council and Cumbria County Council about the possibility that an underground disposal facility for radioactive waste could be built in the County. How much do you feel you know about this?		
	Response Percent	**Response Count**
I know a lot about it	16.6%	59
I know a fair amount about it	36.9%	131
I know just a little about it	26.8%	95
I have heard of this but know almost nothing about it	16.1%	57
I have never heard of it	2.0%	7
Don't know	1.7%	6
Source: DC Research, CRED, Red Research Survey (January 2013) n= 355		

To what extent do you think that sales in your business have been affected by the publicity surrounding the possibility of hosting an underground disposal facility in Cumbria?		
	Response Percent	**Response Count**
Very negative effect	14.5%	51
Negative effect	15.3%	54
No effect	49.1%	173
Positive effect	1.7%	6
Very positive effect	0.6%	2
Don't know	10.8%	38
Not relevant	8.0%	28
Source: DC Research, CRED, Red Research Survey (January 2013) n= 352		

Overall, how important do you think Cumbria and Lake District Brands are to the following:								
	Critical	**Very imp.**	**Moderately imp.**	**Minor imp.**	**Low imp.**	**Don't know**	**Not relevant**	**Total**
Your own business	76 (22%)	94 (27%)	77 (22%)	41 (12%)	27 (8%)	1 (0%)	27 (8%)	343 (100%)
Your competitors	65 (19%)	82 (24%)	64 (19%)	39 (12%)	30 (9%)	22 (7%)	35 (10%)	337 (100%)
Your sector in Cumbria	85 (25%)	95 (28%)	60 (18%)	43 (13%)	28 (8%)	6 (2%)	23 (7%)	340 (100%)
Your customers	73 (22%)	104 (31%)	81 (24%)	34 (10%)	21 (6%)	4 (1%)	22 (6%)	339 (100%)
The Cumbrian economy in general	106 (31%)	149 (44%)	47 (14%)	20 (6%)	8 (2%)	5 (1%)	7 (2%)	342 (100%)
Source: DC Research, CRED, Red Research Survey (January 2013) n= 345								

Would you be willing for one of our research team to contact you in future regarding the questions raised in this survey?		
	Response Percent	**Response Count**
Yes	52.2%	177
Prefer Not	47.8%	162
Source: DC Research, CRED, Red Research Survey (January 2013) n= 339		

ANNEX 4: BASELINE: BACKGROUND DEFINITIONAL INFORMATION

This annex presents an overview of the background definitional information around some of the key official UK economic data series indicators that have been used in the development of the baseline. It also presents an overview of the background definitional information for the key tourism indicators used in the baseline.

(1) INDICATORS BASED ON OFFICIAL UK ECONOMIC DATA SERIES

Official data series are available at various geographies for employment, business enterprises and gross value-added (GVA). There are distinct advantages in using official data series, not least their coverage of the UK in a consistent format and the likelihood that such data series will continue in the future to provide a basis for monitoring. There are, however, disadvantages that need to be considered. First, the datasets are often subject to delays in publication. While some series are fairly current (counts of enterprises by sector are now available for 2012) other datasets can be subject to delays in publication of up to 18 months and sometimes longer.

Employment data (BRES)

Employment data is available from the Business Register and Employment Survey (BRES) which can be accessed via NOMIS. This data provides a detailed breakdown of employment for local areas using the Standard Industrial Classification (SIC) (Latest version 2007). Using this source, it should be possible to monitor employment changes in Cumbria in total and by industry type. These trends in specific sectors of employment can be contrasted with benchmark areas across the UK at the level of individual local authority areas (Districts and Counties).

The brief indicates that specific sectors are more likely to make use of Lake District and Cumbrian Place-based brands. These have been identified in the brief as the "visitor, land-based and food & drink sectors". Our proposed framework therefore includes measures of employment levels in these sectors based on data from BRES (latest data currently available is for 2011).

- Numbers employed in tourism-related activities (2011)
- Numbers employed in land based activities (2011)
- Numbers employed in food and drink industries (2011)

The activities that are central to this baseline need to be defined in terms of the categories within the Standard Industrial Classification (2007). Food and Drink industries are most straightforward involving combination of the following two-digit codes:

- SIC 10: Manufacture of food products
- SIC 11: Manufacture of beverages

The definition of tourism is more complex as visitor activities can have impacts on a wide range of business types. We propose to use a definition developed by ONS that forms the basis of an internationally recognised definition used by Eurostat, OECD and UN

World Tourism Organisation[44]. The method involves combining data using SIC 2007 5-digit codes as follows:

Table A5.1: ONS definition of "Tourism" based on SIC 2007 codes

Industry	SIC 2007 Code
Passenger rail transport, interurban	49100
Taxi operation/Other passenger land transport	49320, 49390
Sea and coastal passenger water transport/Inland passenger water transport	50100, 50300
Scheduled passenger air transport/Non-scheduled passenger air transport	51101, 51102
Accommodation and food service activities	55100, 55201, 55202, 55209, 55300, 55900, 56101, 56102, 56103, 56210, 56290, 56301, 56302
Travel agencies & other reservation services activities	79110, 79120, 79901, 79909
Transport Equipment Rental	77110, 77341, 77351,
Sporting and recreational activities	77210, 92000, 93110, 93199, 93210, 93290
Country-specific tourism characteristic activities	82301, 82302, 68202
Cultural Activities (various categories)	90010, 90020, 90030, 90040, 91020, 91030, 91040

There are similar issues related to use of the SIC to define the land-based sector. One key point is that the data from BRES excludes employment directly in farm agriculture but provides coverage of all other land-based activities that includes, for instance, farm support services, forestry and saw mill activity, fish farming, farm machinery, veterinary services, nature reserves and botanical gardens, . Excluding farm agriculture, the land-based sector as defined by the Alliance of Sector Skills Councils, Scotland (2009) includes the following SIC codes:

Table A5.2: Definition of "land-based activity" (excluding farming)

Industry description (as in SIC 2003)	SIC 2007*
Agricultural service activities	81300
Animal husbandry service activities, except veterinary activities	01629
Hunting, trapping and game propagation including related service activities	01700
Forestry and logging	02100
Forestry and logging related service activities	02400
Operation of fish hatcheries and fish farms	03210
Saw milling and planing of wood, impregnation of wood	16100
Wholesale agricultural machinery and accessories/implements	46610
Veterinary activities	75000
Botanical and zoological gardens and nature reserve activities	91040

*Update to SIC 2007 using Companies House[45]

44 http://www.ons.gov.uk/ons/rel/tourism/the-supply-side-of-tourism/2009/rpt-supplyside2009.html#tab-Defining-the-Tourism-Industries

45 http://www.companieshouse.gov.uk/infoAndGuide/sic/sicConversionTable.shtml

Labour force in Agriculture (Defra June Survey)

BRES data excludes employment totals in farming. This is recorded in a separate survey conducted annually by Defra and latest data is available only up to June 2010. The "land-based sector" needs to include data to monitor trends in farming. Data includes the number of holdings and total labour force in farming which is available for all Counties in England including all our benchmark areas excluding Pembrokeshire.

Enterprise data (IDBR)

Data on the number of enterprises by size and sector can be obtained for a variety of scales from the Inter-Departmental Business Register (IDBR) accessed via ONS. IDBR contains counts of enterprises or local units based on VAT Registrations or businesses registered or operating a PAYE scheme (i.e. employing staff). The disadvantage of the dataset is that it does not include the smallest businesses that operate below the VAT threshold and employ no staff. Microbusinesses are therefore largely excluded. Even so, this is a useful source that can be used to compare trends over time and benchmark against different areas of the Country in a consistent manner.

IDBR data contains counts of enterprises by sector, size, turnover bands and by region / sub-region. At lower geographies, however, the sectoral breakdown is quite broad. For some indicators using this source, therefore, available published data allows only limited sectoral definition. At county level, counts of businesses engaged in "agriculture, forestry and fishing" and "accommodation and food services" can be identified. Data on food and drink manufacturing, however, is not available at this spatial scale.

IDBR data can however, be used to infer the rate of change in businesses by recording new registrations and de-registrations. These data can be used to measure "birth" and "death" rates in enterprises at county level for all sectors combined.

GVA Data

Gross Value-Added" (GVA) is the dataset used by government to measure economic growth in the UK and its constituent regions and sub-regions. This data is published annually (£m at current prices). GVA is a useful dataset in that it places a financial value on the size of local economies that can be used for comparative purposes. There are shortcomings in this data. First of all, early releases at national level tend to be revised at later stages as more information becomes available. The methodology is complex and sector breakdown of data for local areas can take 2 years before release. The most recent data from this source provides headline figure for 2011 but sector breakdown for 2010. Despite this, GVA provides a means of measuring the size of different sectors in Cumbria compared to other sub-regions across the UK.

One particular feature of GVA data is that it is collated within NUTS geographical units which are used by the European Office for Statistics on a consistent basis across the European Union. This has implications for the definition of benchmarks and the availability of this data at different spatial scales.

(2) TOURISM INDICATORS

STEAM

STEAM (the Scarborough Tourism Economic Activity Monitor), operated by Global Tourism Solutions (UK) has long been recognised as one of the most reliable methods of accurately measuring tourism activity within a defined destination. It has been used in England since the early 1990s, and is currently used by nearly 200 destinations, including throughout Scotland and Wales, regions in the North West (encompassing Cumbria, Merseyside, Manchester, Cheshire and Lancashire/Blackpool), many of the National Parks, and numerous local authorities of all sizes, and all types, whether urban, rural, resort or industrial.

STEAM is a spreadsheet model, allowing for detailed, local level data inputs. At a minimum, the implementation of STEAM depends on:

- Information on occupancy percentages each month for each type of accommodation;
- Bed stock for each type of accommodation within the areas to be surveyed;
- Attendance at attractions/major events by month;
- TIC visitor figures by month.

STEAM outputs include:

- Tourism revenue (by sector and visitor type)
- Number of tourist visitors
- Number of tourist days
- Jobs supported by tourism activity

In 1999, a partnership of Cumbria Tourism, Cumbria's County and District Councils and the Lake District National Park Authority, first commissioned Global Tourism Solutions (UK) to estimate the economic impact of tourism in Cumbria using the STEAM model. This economic impact assessment has taken place each year since then. The project is managed by Cumbria Tourism. Data is typically available four or five months after the year end.

Occupancy

Cumbria Tourism carry out occupancy surveys to monitor performance in the three main visitor accommodation sectors - serviced accommodation (hotels, guesthouses, and b&bs), self catering accommodation (including houses, cottages, flats, chalets, lodges and static caravans), and touring caravan and camping pitches. Over 500 businesses currently participate in these surveys, providing data on a monthly basis.

Cumbria's serviced accommodation occupancy survey has been in operation since 1997, and the others since 2004/5. Key indicators are room, unit, or pitch occupancy, expressed as a percentage of available lets. Data is collected monthly, and results published on both a monthly and annual basis. Monthly data is published on Cumbria Tourism's corporate website typically four weeks after month end:

http://www.cumbriatourism.org/research/accommodation.aspx

National comparisons are available through the England Occupancy Survey (EOS) for the serviced accommodation sector. This is commissioned by VisitEngland and operated by The Research Solution (TRS). In the UK, each of the four national tourist boards undertakes its own serviced accommodation occupancy survey. The results from these four surveys are combined to deliver the UK Occupancy Survey (UKOS). As well as occupancy levels for the country as a whole, results are also available by establishment type, destination type, room size, tariff, and a number of other variables. The England Occupancy and UK Occupancy Surveys are Official Statistics, and are produced in adherence with the Code of Practice for Official Statistics (2009).

Data is collected monthly, and results published on a monthly and annual basis. Monthly data is published on VisitEngland's corporate website typically two months in arrears: http://www.visitengland.org/insight-statistics/major-tourism-surveys/accommodations/Occupancy_Survey/occupancy2012/index.aspx

Tourism Business Performance Research

Cumbria Tourism has been operating a Tourism Business Survey for around 15 years, in various formats, including postal, telephone, and online surveys. Currently this is operating as a biannual online survey, conducted around the key seasons for tourism businesses - at the end of March, and again at the end of September.

All tourism businesses known to Cumbria Tourism are invited to complete the short, anonymous survey. The survey covers key questions about business performance including changes in turnover, costs, profit and visitor numbers, as well as factors affecting performance in either a positive or negative way. Typically around 200 businesses respond.

Results are produced by Cumbria Tourism and are available within 2-3 weeks of the research being undertaken.