Options to Improve Coastal Access in England: Study to Investigate Costs

Final Report (revised)

prepared for
The Countryside Agency
on behalf of the
Natural England Partnership

RPA

October 2006

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(part of Natural England from 2 October 2006)

by

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EXECUTIVE SUMMARY

1. Introduction

Defra has an overall vision of "*a coastal environment where rights to walk along the length of the English coast lie within a wildlife and landscape corridor that offers enjoyment, understanding of the natural environment and a high quality experience; and is managed sustainably in the context of a changing coastline.*"

The three Natural England confederation partners (NEP): the Countryside Agency's Landscape, Access and Recreation (LAR) Division, English Nature and the Rural Development Service (RDS) are working together to undertake research into which access option can best deliver secure and enjoyable access along the length of the English coastline.

The Countryside Agency (on behalf of NEP) has appointed RPA Ltd to advise on the costs of options for improving access on foot to coastal land in England. Four options have been identified for achieving better access to the coast:

- Option 1 – Use of Highways Legislation to Create a Public Right of Way;
- Option 2 – Use of CROW Section 3;
- Option 3 – Voluntary Approaches to Create Permissive Access; and
- Option 4 – Unmapped Approach.

Four study areas (selected by the NEP) have been be used to explore existing access provision for Options 1 and 3, whilst Options 2 and 4 are assessed on a national basis. Table 1 presents the total net present value costs over 20 years (discounted at 3.5%) for each of the Options.

Table 1: NPV Costs over 20 Years for Improving Coastal Access by Option (£ million)

Cost Component	Option 1 (Four study areas + national information)	Option 2 (National)	Option 3 (Four study areas + national information)	Option 4 (National)
Implementation Costs				
Introducing new access along the coast	3.6 - 4.9	10.8 - 26.5	1.3 - 2.1	4.9 - 15.4
Introducing new access links to the coast		0.6 - 2.0		0.6 - 2.0
Accommodation works along the coast	0.1 - 3.5	1.7	0.1 - 2.1	1.8
Accommodation works to the coast		0.03 - 1.3		0.03 - 1.3
Restrictions Regime (Set-up)	n/a	0.9	n/a	2.0
Total Implementation Costs	**3.7 - 8.4**	**14.1 - 32.2**	**1.4 - 4.3**	**9.3 - 22.2**
Management Costs				
Management and Maintenance Works	3.7	5.1 - 11.5	4.0 - 3.5*	5.5 - 12.5
Provision of Public Information	1.2	1.2	1.2	Inc.
Total Management Costs	**4.9**	**6.2 - 12.6**	**5.2 - 4.6***	**5.5 - 12.5**
Total NPV Costs of Option	**8.6 - 13.3**	**20.3 - 44.9**	**6.6 - 8.9**	**14.8 - 34.3**

* The 'low' cost approach results in higher management costs because a proportion of the management costs for the 'high' cost approach (agri-environment schemes) are included in the implementation costs.

The assumptions on which these costs are based are set below.

2. Option 1 – Use of Highways Legislation to Create a Public Right of Way – based on study areas

Introducing new access along, and access links to, the coast:

- A coastal route has been identified based on the hierarchy of existing coastal PROW, existing coastal paths or routes which appear to have permissive access, other existing tracks/paths and, where there is no existing access, a route as close to the coast as possible has been identified.
- Statutory Public Rights of Way (PROW) are costed for the gaps identified to complete the PROW coastal route, including across existing open access land. Where survey data suggest that paths are likely to be eroded, a rolling path agreement has been costed.
- New access links to the coast have been costed where the length of the coastal route without access links exceeds 5km. New access links are assumed to be 1km in length.
- The number of landowners, and whether the land is privately or publicly owned, has been estimated from Ordnance Survey maps and Countryside Agency data on public ownership.
- Each study area is assumed to have a 4-yr period of consultation and approval before implementation begins. For cost purposes this may be considered to be similar to the preparation of ROWIPs, at £40,000. Following this period, 50% of the required PROW is assumed to be implemented within three years and a further 30% is implemented in the next three years. The remaining 20% is distributed over the remaining 10 years of the 20-year timescale, at a minimum of one section per year.
- PROW can be created by Public Path Creation Order, Public Path Creation Agreement, or Rolling Path Agreement. The average staff and administrative cost across all mechanisms is £3,000 per arrangement, legal fees range from £3,150 for a Creation Agreement to £4,800 for an Order or Rolling Path Agreement, and all Orders are assumed to result in a public inquiry at an average cost of £5,000.
- A range of costs is derived by assuming that all paths on private land are created by Creation Agreement (low cost) or by Order (high cost). All paths on public land are assumed to be created by Agreement.
- Appropriate Assessments are undertaken for designated coastal sites (SSSIs, SACs and SPAs) at a cost of £300-£500 per site.
- Compensation is paid at a rate of £14.10 per linear metre for all agreement mechanisms on private land, with a rate of £50 per liner metre as an upper bound cost for routes through caravan parks.

Accommodation works along, and to the coast:

- The costs of construction are based on survey data of existing routes, assuming that these are adequately furnished. A key assumption is the length of accessible path surface, ranging from none (low cost) to 62%-90% depending on the study area (high cost), where this is based on gradient as a limiting factor. The total costs range from £7,900 - £2.6 m.

Management and maintenance works:

- Routes are maintained at a cost of £580 per km, based on the average maintenance cost of coastal National Trails.

Provision of Public Information:

- The cost of providing public information is based on the cost of producing the Countryside Code, at £1.33 million.

3. Option 2 – Use of CROW Section 3

If the statutory right of access for open-air recreation was to be extended to coastal land, then a methodology for defining this land would need to be considered. This Option assesses the costs of mapping coastal land at a national level, based on the following assumptions.

Introducing new access along the coast:

- The total area of coastal land is approximately 431,800 ha (288,410 ha of foreshore; 143,390 ha of other coastal land).
- Previous experience with the Open Access project provides a basis for estimating the costs of a coastal mapping exercise; however, it should be noted that this is based on only one approach to mapping coastal land and there are other approaches which could be followed and which could affect the total costs of this Option. There is uncertainty associated with applying such costs to coastal land – whilst this cannot be quantified there is a suggestion that costs could be twice as high as those based on previous experience.
- The costs of the previous mapping exercise suggests an average cost of £1.15 per mapped ha of registered common land (applicable to the foreshore) and £44.05 per mapped ha of open countryside (applicable to other coastal land), resulting in a total mapping cost of £6.6 - £13.3 million;
- A communications strategy and information to landowners is provided at a cost of £2.4 million (based on previous experience) to £3.6 million.
- Appropriate Assessments are undertaken for 924 designated coastal sites (SSSIs, SACs and SPAs) at a total cost of £280,000 - £450,000.
- It is assumed that the mapping of coastal land may result in 800-2,000 appeals, at a cost of £2,800 to £5,600 per appeal, giving a range of £2.2 - £11.2 million.

Introducing new access links to the coast:

- 90 new access links to the coast are introduced, at a cost of £0.7 - £2.4 million (based on assumptions under Options 1-2.

Accommodation works along, and to the coast:

- The construction and preparation costs for coastal land are £2 million, based on the first three years' costs of the Access Management Grant Scheme (AMGS).
- The construction of the access links costs in the region of £0.03 - £1.3 million.

Management and Maintenance Works:

- The restrictions regime is assumed to have 10% of the set-up costs of the existing Open Access Contact Centre, i.e. £1.1 million, with running costs of £0.80 - £1.60 per ha, resulting in total annual running costs of £5.5 - £12. 1 million.
- Annual maintenance costs are based on the AMGS costs, assuming that the AMGS continues after three years or that some similar level of maintenance payment is paid by some other mechanism. Maintenance costs may be paid for the total area of coastal land or the area excluding the foreshore, therefore annual maintenance costs range from £2.0 - £6.0 million

Provision of Public Information:

- The cost of providing public information is based on the cost of producing the Countryside Code, at £1.33 million.

4. Option 3 – Voluntary Approaches to Create Permissive Access

Permissive rights routes exist where landowners have agreed with the local authority for access to be available to particular categories of user under certain conditions, and the permission may be withdrawn at any time.

Introducing new access along, and access links to, the coast:

- Permissive access routes may be created by agri-environment schemes (AES), such as the Higher Level Environmental Stewardship Scheme, which provides area and linear based payments for access, or Section 16 of the CROW Act, which provides the opportunity to voluntarily dedicate land for public access. Whilst Section 16 generally applies to area dedication rather than linear route dedication, wide access corridors (5-10m wide) could be created.
- The identification of new routes under Option 3 generally follows the same approach (and new routes) discussed above for Option 1. However, permissive routes have only been costed where there is informal, or no existing, access. For this reason, a shorter distance of new permissive access is required compared to Option 1.
- The range of costs under Option 3 is based on the assumptions that either all permissive access is created by land dedication (low cost) or access on agricultural land is created by AES and the remaining access by land dedication (high cost).
- AES agreements have an administrative set-up cost of £1,000 with ongoing staff management costs. Land dedications are assumed to have staff costs of £3,000 per dedication.
- There are no legal fees associated with AES. Land dedication legal fees are assumed to be £900 per dedication.
- Appropriate Assessments are undertaken for designated coastal sites (SSSIs, SACs and SPAs) at a cost of £300-£500 per site.
- Annual payments of £45 per 100m (linear access) and £100 per 100m (access for people with reduced mobility) are paid under an AES, plus £350 per agreement. Payment per land dedication is £4,000, based on the minimum payment.

Accommodation works along, and to the coast:

- The costs of construction are similar for Options 1 and 3.
- However, under Option 3 it is assumed that the costs of clearance is met by the annual agri-environment payment, thus no clearance costs are included for agricultural sections of Option 3.
- The total costs range from £6,200 - £1.4 million across the study areas.

Management and Maintenance Works:

- Maintenance costs under Option 3 are included within the annual AES payment and are not considered separately.
- Access created by land dedication has an annual maintenance cost of £580 per km, based on the average maintenance cost of coastal National Trails. Total costs range from £24,000 - £164,000.

Provision of Public Information:

- The cost of providing public information is based on the cost of producing the Countryside Code, at £1.33 million.

5. Option 4 – Unmapped Approach

This approach is not yet fully developed by NEP, but it would provide legal rights of access to coastal land, supported by guidance on how to recognise coastal land. No maps would be produced for this Option; however, access markers 'on the ground' may be provided.

Introducing new access along the coast:

- The total area of coastal land is approximately 431,800 ha (288,410 ha of foreshore; 143,390 ha of other coastal land).
- An unmapped approach would provide a description of types of coastal land, communicated to the landowners and general public through a national campaign
- The costs of these communication exercises can be assessed based on previous experience.
- However, there is uncertainty associated with applying such costs to coastal land for an approach which has not yet been fully developed
- Some markers may be provided 'on the ground' – this is assumed to be addressed through general maintenance of the areas
- A communications strategy and information to landowners is provided at a cost of £2.4 million (based on previous experience) to £4.8 million.
- A national publicity campaign is critical for the implementation of this Option and is costed at £1.3 - £2.6 million, based on the Countryside Code costs.
- Appropriate Assessments are undertaken for 924 designated coastal sites (SSSIs, SACs and SPAs) at a total cost of £280,000 - £450,000.
- Some form of dispute resolution would be required for Option 4. The lack of previous experience (both CA and landowners) with a descriptive approach may result in more disputes under Option 4 than for Option 2.
- It is assumed that there may be 800 - 3,000 disputes at a cost of £1,500 - £2,800 per dispute, resulting in total costs of £1.2 - £8.4 million. These costs are highly uncertain, and should be viewed as indicative only.

Introducing new access links to the coast:

- 90 new access links to the coast are introduced, at a cost of £0.7 - £2.4 million (based on assumptions under Options 1-2.

Accommodation works along, and to the coast:

- The construction and preparation costs for coastal land are estimated at £2 million, based on the first three years' costs of the Access Management Grant Scheme (AMGS).
- The construction of these access links costs in the region of £0.03 - £1.3 million.

Management and Maintenance Works:

- The restrictions regime is assumed to have 20% of the set-up costs of the existing Open Access Contact Centre, i.e. £2.1 million, as it may be more complicated than under Option 2. Running costs of £0.80 - £1.60 per ha are assumed, resulting in total annual running costs of £5.8 - £11.7 million (Option 4 begins a year earlier than Option 2). There is uncertainty as to the number of restrictions which may be made.
- Annual maintenance costs are based on the AMGS costs, assuming that the AMGS continues after three years or that some similar level of maintenance payment is paid by some other mechanism. Maintenance costs may be paid for the total area of coastal land or the area excluding the foreshore, therefore annual maintenance costs range from £2.2 - £6.5 million.

6. Conclusions

The key conclusion for this study is that a centralised approach to improving coastal access would appear to provide a lower cost option than developing new rights of way or permissive routes at a local level, given that the costs for Options 1 and 3 are only based on four study areas, compared to the national costs of Options 2 and 4. However, consideration should also be given to the quality and security of the improvements provided, and the provision for an onward journey along the English coast.

There are a number of uncertainties underlying the cost assumptions, which may need to be investigated further, depending on how the approach to improving coastal access is taken forward.

- The lower bound costs of the mapped and unmapped options are based largely on previous experience under the Open Access project. However, it is noted that there is the potential for approaches to vary considerably from those used in the Open Access project, therefore the costs presented in this Report, in relation to mapping, appeals/disputes and restrictions may vary according to how the approaches are implemented in practice. Whilst the upper bound costs attempt to reflect this uncertainty, there is little evidence to suggest how these costs may vary in practice.

- Different approaches to mapping coastal land may be followed, and aspects such as data availability, the use of local officers and site visits etc. may affect the costs. If the option to map coastal land is pursued further, a pilot study may help to refine the costs further.

- The unmapped approach is not fully developed, and further refinements to the approach may affect the costs presented in this Report. A pilot study may also help to refine the costs for this Option. The timescale to be followed under Option 4 (assumed to start one year earlier than Option 2) also has an affect on the relative costs of Options 2 and 4.

- For Options 1 and 3, the key uncertainties are the actual length of path required, the pattern of land ownership and the willingness to pursue Agreements/voluntary approaches vs. Creation Orders, which can only be resolved at the local level.

- For Option 3, the staff costs for land dedication are uncertain; any change in this cost may affect the relative costs at the low end of the range.

- In relation to agri-environment schemes, the requirement for a continued commitment of resources beyond the 20-year timescale just to retain access, suggests that this approach should not be pursued at the expense of other options. However, at the local level there may be locations where agri-environment schemes provide the best, or only, option for creating access.

- The requirement to provide an accessible surface for new routes (at an assumed cost of £15/m^2) accounts for a considerable proportion of the difference between low and high estimates in Options 1 and 3. In fact, it can increase the costs of construction by a factor of 20 to 90. Whilst this is likely to be a necessary cost, further consideration should be given to options for providing accessible routes on the coast, i.e. suitability of different surfaces, relative costs, practicability, etc.

CONTENTS

1. INTRODUCTION

1.1 Background to Study

In December 2004, the Department for the Environment, Food and Rural Affairs (Defra) produced a Five Year Strategy, *Delivering the Essentials of Life*, which emphasised that "*everyone should have good opportunities to enjoy the natural environment*". Furthermore, the Strategy states that "*action to improve access to coastal land will be our first priority*". Defra has an overall vision of:

> "*a coastal environment where rights to walk along the length of the English coast lie within a wildlife and landscape corridor that offers enjoyment, understanding of the natural environment and a high quality experience; and is managed sustainably in the context of a changing coastline.*"

The definition of the coast in the Countryside and Rights of Way Act 2000 (CROW Act 2000) is:

- the foreshore, and
- land adjacent to the foreshore (including in particular any cliff, bank, barrier, dune, beach or flat which is adjacent to the foreshore).

There are 4,090 km of coastline in England, and much of this is accessible by an existing network of footpaths and bridleways, including a number of long distance coastal paths, as well as general footpaths on the coast. Many beaches (generally regarded as the backshore) are owned by local authorities and are dedicated for public use. Many others have been used by the public over time and are presumed to have been dedicated for public use. However, the foreshore is slightly different; this is defined as the area lying between the high tide and low tide line[1]. About half of the foreshore belongs to the Crown Estate. There is not necessarily any right of public access to the foreshore, but in most cases the public are not barred from walking on it because there is an absolute right of navigation along it when the tide is in, which prevents the erection of barriers to access. Land adjacent to the foreshore may be under private or public ownership and there are a number of different land uses on the coast, such as ports, towns, caravan sites, nature conservation areas, Ministry of Defence training grounds, etc., which may restrict access to areas of the coast.

The three Natural England confederation partners (NEP): the Countryside Agency's Landscape, Access and Recreation (LAR) Division, English Nature and the Rural Development Service (RDS) are working together to undertake research into which access option can best deliver:

- secure access along the length of the English coastline, accepting that this may be subject to some exceptions. Changes in landform such as erosion, growth and realignment will also be considered;

[1] http://cms.countrysideaccess.gov.uk

- a more accessible coastline, by creating physical routes to access the coast and by encouraging more people to enjoy the coast; and

- improvements for coastal wildlife, the landscape and protection of the historic environment, as well as encouraging people to enjoy and understand this environment.

The confederation partners are currently working on an information gathering and research exercise. Four key aspects of this work are:

- collecting data on a national basis to gain a comprehensive picture of the natural and developed coast and existing access provision;

- gaining an understanding of how coastal access works in selected European countries and what might be learnt from these other countries;

- assessing current usage and demand for coastal access on both a national and local level; and

- in-depth investigation, testing and costing of the access options and ways to maximise landscape, historic environment and wildlife benefits in a series of study areas, namely:

  % the County Durham and Hartlepool Coast;
  % the North Devon, Exmoor and West Somerset Coast;
  % the Southern Cumbrian Coast and Morecambe Bay; and
  % the Suffolk Coast;

NEP will report to Defra on their findings on all four key areas of the research phase. The results from this phase will inform a public consultation on the options for improving access to the English coast.

As yet, no decision has been taken on how to achieve better access to the coast, and the Countryside Agency has appointed Risk & Policy Analysts Ltd (RPA) to advise on the costs of options for improving access on foot to coastal land in England. The four study areas will be used to explore existing access provision, to identify and address any barriers to achieving the three research outcomes identified above, and to evaluate the possible options.

1.2 Objectives of Study

Four options have been identified for achieving better access to the coast:

- **Option 1 – Use of Highways Legislation to Create a Public Right of Way**: statutory improvements to the Public Rights of Way (PROW) network;
- **Option 2 – Use of CROW Section 3**: mapping under Section 3 of the Countryside and Rights of Way Act 2000 (CROW Act 2000);

- **Option 3 – Voluntary Approaches to Create Permissive Access**: non-statutory improvements using voluntary/permissive agreements with landowners; and
- **Option 4 – Unmapped Approach**: a descriptive approach which identifies the extent and location of coastal land.

It is noted that the approach recommended to achieve more and better access to the coast may be based on one of these options or on a combination of them.

The main purpose of this study is to establish, for the four study areas identified above, the estimated total implementation and maintenance costs for each of the options for improving coastal access, singly or in combination. In summary, the objectives of this study are to:

- assess and advise on the estimated implementation and maintenance costs of each access option in relation to the study areas;
- advise on the estimated costs of a national coastal mapping exercise, appeals process and restrictions regime if a CROW Act Section 3 approach were to be adopted; and
- advise on the estimated costs of achieving a wider environmental benefits corridor in relation to the study areas.

1.3 Approach to Study

The approach to this study was set out in RPA's proposal dated 23 February 2006. It comprised collecting generic costs relating to the four options identified above and then applying them to the study areas identified.

It should be noted that Defra has appointed Asken Ltd to provide information to enable the completion of a partial Regulatory Impact Assessment (RIA). The RIA will focus on the social, environmental and external economic costs and benefits, and will assess the overall national costs of the options for improving coastal access.

Therefore, RPA and Asken agreed to share information received from their respective consultation; with RPA collecting data relating to creating and maintaining National Trails, whilst Asken approached coastal highway authorities. Further contacts have been made with various Countryside Agency, English Nature and Rural Development Service staff, and relevant literature has been reviewed.

The study areas are as follows:

- the Suffolk Coast (Lowestoft to Cattawade on the River Stour) – including stretches of the Suffolk Coasts and Heaths Path and several estuaries/river mouths;

- Southern Cumbrian Coast and Morecambe Bay (from Whitehaven to Fleetwood) – including stretches of the Cumbria Coastal Way and the Lancashire Coastal Way;

- County Durham and Hartlepool Coast (from Seaham to the River Tees, south of Hartlepool) – a relatively short stretch with some major development in the Hartlepool area; and

- North Devon, Exmoor and West Somerset Coast (from Instow near Barnstaple to the River Parrett, south of Burnham on Sea) – including a stretch of the South West Coast Path (a National Trail).

Data on the study areas were collected and provided to RPA by the Countryside Agency; these comprised survey data on sections of existing PROW in the study areas, maps with data on land designations, coastal habitats, potential blocks on access etc., and GIS data collated from consultation with local stakeholders, which identified potential gaps and access issues in each of the study areas. Due to the volume of information received from the Countryside Agency, RPA did not undertake additional consultation in the study areas.

All costs data collated for this study have been adjusted to 2006 prices, using the Retail Price Index (Office of National Statistics, 2006) to account for inflation. Estimated costs for the future, under each Option, are presented as total costs and also as net present values (discounted at 3.5%, Treasury rate) over a 20-year period (Years 0-19). The costs presented provide an indication only of the level of costs that may be incurred under different options. Although they are based on the best available information, different approaches to implementing the options in practice and local conditions may result in different costs than those presented here.

This Final Report also takes into account comments received from the Steering Group and local highways authority stakeholders on the Draft Final Report.

1.4 Overview of Options

1.4.1 Option 1 – Use of Highways Legislation to Create a Public Right of Way

The National Parks and Access to the Countryside Act 1949 gave people legitimate access to defined and recorded pathways in England. More recent legislation, the Highways Act 1980, provides the current, principal framework for creating Public Rights of Way (PROW). PROW comprise footpaths, bridleways, restricted bridleways and byways open to all traffic; these are all legally protected. All PROW are highways and, as such, are managed by the local highways authorities (LHA).

There are four main ways to create a public path under the Highways legislation:

- Public Path Creation Orders made by the local authority;
- Public Path Creation Agreement between the landowner and local authority;
- dedication by the landowner (express dedication); and
- public use which has been unchallenged by the landowner (presumed dedication).

The principal legislation used in the creation of PROW in England and Wales, and of relevance to this option, is the Highways Act 1980, sections 25 and 26, which deal with the creation of PROW by Agreement and Order respectively. These form the statutory approach to improving coastal access. In addition, for PROW located on land which is subject to erosion or submersion by dunes or changing tides, the local authority or other relevant body may be able to enter into a rolling path agreement with the landowner. The rolling agreements secure the right for a PROW to be moved inland should erosion occur, allowing for a path to remain above the high water mark, following the line of the coast.

1.4.2 Option 2 – Use of CROW Section 3

The CROW Act 2000 has five parts; the first of these considers access to the countryside. Before access land can be opened up to the public, the boundaries of the access land should be defined. If the statutory right of access for open-air recreation was to be extended to coastal land, then a methodology for defining this land would need to be considered.

The process set out in the CROW Act and regulations requires the relevant authority to follow a three stage process for mapping open countryside and registered common land:

- the first stage is to produce a draft map, which is taken out to consultation with the public. After considering comments from the public, appropriate changes are made;
- secondly, a provisional map is issued. Those with a legal interest in the land on the provisional map then have the opportunity to appeal against its inclusion. The appeals are determined by the Planning Inspectorate; and
- finally, once any decisions have been received from the Planning Inspectorate, a conclusive map is produced (Countryside Agency, 2005).

However, it is possible that the approach to data collection and mapping of coastal land could follow a different methodology to that followed for open countryside and registered common land.

In order to safeguard land management, nature conservation and other interests, the CROW Act also provides for a regime of restrictions and exclusions to CROW access land. In order to assist with the general management of access land, an Access Management Grant Scheme (AMGS) was launched in 2004/05 to support Access Authorities in preparing for the new rights of access. Similar regimes and processes will be considered for access to coastal land.

1.4.3 Option 3 – Voluntary Approaches to Create Permissive Access

Permissive rights routes exist where landowners have agreed with the local authority for access to be available to particular categories of user under certain conditions. No rights of way are established under permissive rights, and the landowner can still use the land for its primary purpose. The permission may be withdrawn at any time,

either temporarily or permanently, and this can have implications for local authorities wishing to invest money to improve or maintain permissive routes that cross land that they do not own.

Agri-environment schemes such as the Higher Level Environmental Stewardship Scheme, operated by Defra, provide for permissive access by providing area and linear-based payments.

In addition, Section 16 of the CROW Act gives both public and private free holders and long leaseholders the opportunity to voluntarily dedicate land for public access on any type of countryside. The Countryside Agency has set up a three-year research project to test how landowners will respond to the opportunity to voluntarily dedicate additional areas of land for access. Dedication of land as access land under the CROW Act differs from the Public Path Creation Agreement or Orders in that, for example, land managers are allowed to close access land for up to 28 days each year, and for longer purposes by agreement with the relevant authorities; the same cannot be done with a PROW. This means that, in some situations, land owners/managers may prefer to dedicate land for access rather than create a PROW. Whilst Section 16 generally applies to area dedication rather than linear route dedication (which is addressed under Section 25 of the Highways Act), wide access corridors (5-10m wide) could be created.

1.4.4 Option 4 – Unmapped Approach

The fourth option for improving access is a descriptive approach to identify the extent and location of coastal land. This approach is not yet fully developed by NEP, but it would provide legal rights of access to coastal land, supported by guidance on how to recognise coastal land. No maps would be produced for this Option; however, access markers 'on the ground' may be provided. This approach would also allow for some form of dispute resolution process and a restrictions regime, as under Option 2.

1.5 Structure of this Report

The four options require consideration of similar costs and, therefore, structuring this Report according to the Options would lead to much repetition. Instead, this Report has been structured according to groups of cost components which are common across two or more options. This is illustrated by Table 1.1 overleaf. Thus, the structure of this Report is as follows:

- the costs of creating and constructing new access along and to the coast in the four study areas are presented in Section 2, where these cover similar cost components under Options 1 and 3;
- Section 3 identifies the costs associated with taking a mapping or unmapped approach (Options 2 and 4) on a national basis to improve coastal access;
- Section 4 identifies the annual maintenance costs which will be incurred under all four options, where these are assessed on a national (Options 2 and 4) and study area (Options 1 and 3) basis;

- the costs of a wider benefits corridor and for providing public information are given in Section 5, in relation to all four options on a national basis; and
- Section 6 compares the total costs across the options and amongst the study areas, and presents the study's conclusions.

Table 1.1: Identification and Grouping of Option Costs Components				
Cost Issue	**Option 1: Use of Highways Legislation**	**Option 3: Voluntary Approaches**	**Option 2: Use of CROW Section 3**	**Option 4: Unmapped Approach**
Introducing new access along the coast	• Staff costs • Legal costs • Compensation costs • Public inquiry costs	• Staff/management costs • Legal costs • Annual payments/compensation costs	• National coastal mapping exercise • Appeals process	• Unmapped approach • Dispute resolution process
Introducing new access links to the coast	• Staff costs • Legal costs • Compensation costs • Public inquiry costs	• Staff/management costs • Legal costs • Annual payments/compensation costs	• Staff costs • Legal costs • Annual payments/ compensation costs • Public inquiry costs	• Staff costs • Legal costs • Annual payments/ compensation costs • Public inquiry costs
Accommodation works (Disability Discrimination Act 1995 compliant) for new onward access along (and to) the coast	Construction costs: • Clearance • Path surface • Furniture • Signing • Fencing	Construction costs: • Clearance • Path surface • Furniture • Signing • Fencing	• Access Management Grant Scheme/other construction costs	• Access Management Grant Scheme/other construction costs
Management and maintenance costs for new onward access along the coast			On a national basis: • Restrictions regime • Access Management Grant Scheme	On a national basis: • Restrictions regime • Access Management Grant Scheme
	• Annual maintenance costs	• Annual maintenance costs	On a trial area basis: • Annual maintenance costs	On a trial area basis: • Annual maintenance costs
Wider benefits corridor	• Improving environmental quality • Improving visitor experience	• Improving environmental quality • Improving visitor experience	• Improving environmental quality • Improving visitor experience	• Improving environmental quality • Improving visitor experience
Public information	• Coastal access code	• Coastal access code	• Coastal access code	• Coastal access code

2. IMPROVEMENTS TO COASTAL ACCESS USING HIGHWAYS LEGISLATION AND VOLUNTARY APPROACHES

2.1 Overview

This Section identifies the key costs for Option 1 – use of highways legislation to create a public right of way and Option 3 – voluntary approaches to create permissive access.

The cost components for these two Options are:

- introducing new access along, and access links to, the coast, covering:
  a. staff costs;
  b. legal costs;
  c. public inquiry costs;
  d. compensation costs/annual payments;

- accommodation works (Disability Discrimination Act 1995 compliant, where applicable) for new onward access along (and to) the coast, covering:
  e. construction costs (including clearance, path surface, furniture, signing, fencing);

- management and maintenance costs for new onward access along (and to) the coast, covering:
  f. annual maintenance costs to National Trail standards;

- a wider benefits corridor, covering:
  g. improvements in environmental quality;
  h. improvements in visitor experience; and

- public information, covering:
  i. a coastal access code

This Section addresses components *a* to *e*. Section 4 considers component *f* (maintenance), compared to maintenance costs under the other options and Section 5 covers components *g* to *i* which are essentially the same across all options, however, components *g* and *h* could vary by study area.

For each cost component, the key assumptions and costs data are presented in summary tables at the beginning of each section, to provide a clear picture of the main issues. These data are then described in more detail below, and additional data can be found in the Report's Annexes as indicated.

All costs data collated for this study have been adjusted to 2006 prices, using the Retail Price Index (Office of National Statistics, 2006) to account for inflation. Estimated costs for the future, under each Option, are presented as total costs and also as net present values (discounted at 3.5%, Treasury rate) over a 20-year period.

2.2 Overview of Study Area Approaches and Results

2.2.1 Option 1 – Use of Highways Legislation to Create a Public Right of Way

The following approach and assumptions have been used to identify a coastal route in each of the study areas and the associated need to create public rights of way (PROW) on the coast to provide better access:

- existing coastal PROW have been followed to the extent possible;
- where these do not appear to provide a 'coastal experience', either as suggested by the survey work undertaken (by the Countryside Agency) or by studying maps and aerial photographs, an alternative route has been identified;
- routes for new PROW have been costed to follow existing coastal paths or routes, where possible, which appear to have permissive access, or other existing tracks/paths;
- as agreed with the Countryside Agency, new PROW have also been costed across existing open access land[2];
- where survey data suggest that paths are likely to be eroded, a rolling path agreement has been costed;
- where no existing access (either statutory or permissive) has been identified, a route as close to the coast as possible has been costed;
- new access links to the coast have been costed where the length of the coastal route without access exceeds 5km. New access links are assumed to be 1km in length;
- the number of landowners, and whether the land is privately or publicly owned, has been estimated from Ordnance Survey maps and Countryside Agency data on public ownership; and
- the length of time taken to create a coastal route will depend upon a number of factors, including availability of resources and landowner priorities. Experience from the Cotswold Way National Trail (pers. comm.) indicates that 50% of the route was implemented within three years (following a four-year period of planning and consultation), and a further 30% was implemented in the next three years. These proportions have been used in this analysis. The remaining 20% is distributed over the remaining 10 years of the 20-year timescale, at a minimum of one section per year. This means that, in the case of the Durham study area, the route is completed within 14 years, whilst the others take the full 20 years to complete. However, in practice, implementation of coastal routes could take longer than this timescale, i.e. the South West Coast Path began implementation 40 years ago and still has some gaps.

It should be noted that the route and the number of landowners identified (and therefore the suggested costs for additional PROW) is the result of a desk-based

[2] This accounts for 4% of the costed route in the Durham study area, 14% in the Devon study area, 21% in the Cumbria study area and 1% in the Suffolk study area.

assessment of maps and aerial photographs. As such, the route, and associated assessment, is only indicative of the level of costs that might be incurred and, in practice, variations to the route and the actual pattern of land ownership are likely to result in different costs to those indicated here.

Table 2.1 sets out the estimated length of existing PROW and new PROW required for each study area, where the new PROW length is subdivided by the type of ownership and existing level of access. Table 2.2 sets out the number of sections of PROW required by land type. It is assumed that each of these will require its own arrangement to create new PROW, i.e. each is owned by a different landowner, however, this may not be the case in practice.

It should be noted that the total estimated lengths of coastal routes set out in Table 2.1 (which incorporate the new length of PROW to be costed) are greater than the actual lengths of coastline for the study areas[3] (derived by the Countryside Agency) by between 5% (Durham) and 50% (Suffolk). These differences reflect the need to cost a route further inland from the coast (for example, due to the topography), which may be longer, as well as working from different scale maps and a degree of uncertainty in the approach taken (such as measurement errors). This should be noted when considering the total costs across the Options.

Table 2.1: Estimated Requirement for Creation of New Access Along, and Access Links to, the Coast under Option 1 - Use of Highways Legislation to Create a Public Right of Way

Type of Access		**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Access links to the coast					
New PROW required		1.0 km	4.0 km	4.0 km	2.0 km
Access along the coast					
Existing PROW		21.5 km	141.6 km	108.8 km	68.0 km
New PROW required		19.0 km	64.7 km	170.2 km	69.9 km
Existing access (non-PROW) and/or public land	*Private*	*3.0 km*	*6.4 km*	*27.3 km*	*15.7 km*
	Public	*6.4 km*	*30.7 km*	*71.0 km*	*28.3 km*
Eroding path	*Private*	*2.2 km*	*11.0 km*	*1.8 km*	*10.3 km*
	Public	*1.3 km*	*3.8 km*	*0.0 km*	*2.4 km*
No apparent access	*Private*	*6.1 km*	*12.8 km*	*70.1 km*	*13.2 km*
Total estimated length of coastal route		40.5 km	206.4 km	279.1 km	137.9 km
Total length of new PROW to be costed		**20.0 km**	**68.7 km**	**174.2 km**	**71.9 km**
Note: Numbers may not add up due to rounding					

[3] The lengths of coastline derived by the Countryside Agency are: County Durham 38.5km; North Devon and West Somerset 150.6km; Cumbria and Morecambe Bay 202.3km and Suffolk 92km.

Table 2.2: Estimated Number of PROW Sections Requiring Costing under Option 1 - Use of Highways Legislation to Create a Public Right of Way					
Type of Access		**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Access Links to the Coast					
No apparent access	Private	1	4	4	2
Access Along the Coast					
Existing access (non-PROW) and/or public land	Private	3	6	26	18
	Public	9	12	19	11
Rolling Path Agreement	Private	2	13	4	15
	Public	1	1	0	3
No apparent access	Private	7	13	64	35
Total Estimated Number of Sections		**23**	**49**	**117**	**84**

The Cumbrian study area has the longest stretch of coastline and requires the greatest length of new PROW (more than 60% of the entire route) to be costed. Although much of the coastline is covered by existing coastal paths, these are not always PROW and the suggested route also provides a coastal path in a number of areas where there is no existing access. In addition, the large number of agricultural holdings in this study area means that there are a large number of potential landowners with which to make agreements/orders.

The Devon and Somerset study area also has a considerable length of coastline; however, this is mostly covered by the South West Coast Path (a National Trail) and there are fewer gaps in access to fill than elsewhere (accounting for 31% of the total route). Significant barriers to access in this area are MoD land and the topography, which require PROW to be located further inland than would otherwise be desired.

The Durham study area has the shortest coastline and much of the route is covered by existing rights of way or the Durham Coastal Path. However, nearly 50% of the route is identified as requiring new PROW to formalise existing access, to improve the coastal experience by bringing the route closer to the coastline, or to provide an onward journey. There are some places where the coast is eroding and in a number of places there are no better alternatives to the existing rights of way due to development or the topography of the coastline.

The Suffolk study area also has a relatively long coastline, due to a number of estuaries. These rivers are largely navigable, thus it may be more costly to put bridges in place than to provide a route along the river to the nearest crossing. In some cases, however, the new routes have made use of existing ferry crossings[4]. In

[4] For the Suffolk study area, it has been possible to identify existing ferry crossings which may be used by pedestrians to traverse estuaries under Options 1 and 3. This provides an alternative to building bridges whilst maintaining the coastal experience. Under Options 2 and 4 (see Section 3), costs are based on the total area of coastal habitats, e.g. mudflats, which may extend further inland of the estuary.

comparison to Durham, there are greater opportunities to improve the coastal experience in Suffolk by placing rights of way closer to the coastline. A larger number of individual dwellings are passed by the suggested route and, although it is not clear from the maps whether this route would actually require land associated with people's property, this could potentially result in a controversial, and costly, route. Of course, an alternative route further inland could be followed, reducing the costs, but also reducing the experience.

2.2.2 Option 3 – Voluntary Approaches to Create Permissive Access

The identification of new routes under Option 3 generally follows the same approach (and routes) discussed above for Option 1. However, where there are existing statutory and non-statutory access arrangements (such as open access land, publicly owned land, coastal paths, etc.) which provide coastal access, no new permissive routes have been costed. However, it should be noted that where some kind of informal access appears to exist, voluntary approaches to permissive access have been costed in order to 'formalise' the coastal access. For this reason, a shorter distance of new permissive access is required compared to PROW, although the distance is greater than that with no apparent access (given in Table 2.1). It is assumed that, under land dedication agreements, wide corridors of 5m are created to provide an onward journey.

Table 2.3 (overleaf) sets out the estimated requirement for permissive routes on agricultural land and other land for each study area, in terms of length and number of sections. This generally reflects the relative lengths costed for Option 1 and the characteristics of the areas. For example, the Durham study area only requires a short distance (12 km) of permissive access to be costed and only 4% of this is agricultural land, due to the developed nature of the area and public land ownership.

Table 2.3: Estimated Requirement for Creation of New Access Along, and Access Links to, the Coast under Option 3 – Voluntary Approaches to Create Permissive Access					
Type of Access		**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Access links to the coast					
New path required		1.0 km	4.0 km	4.0 km	2.0 km
No. of Sections		1	4	4	2
Access along the coast					
Existing PROW		21.5 km	141.6 km	108.8 km	68.0 km
Existing 'formal' access		7.7 km	19.9 km	92.0 km	35.9 km
New path required		11.3 km	44.8 km	78.2 km	33.9 km
Agricultural land	*Length*	*0.5 km*	*22.9 km*	*40.4 km*	*33.2 km*
	No. of Sections	*1*	*22*	*42*	*41*
Other land	*Length*	*10.9 km*	*21.9 km*	*37.8 km*	*0.8 km*
	No. of Sections	*11*	*12*	*32*	*20*
Total estimated distance of coastal route		40.5 km	206.4 km	279.1 km	137.9 km
Total length of new permissive access to be costed		**12.3 km**	**48.8 km**	**82.2 km**	**35.9 km**
Note: Numbers may not add up due to rounding					

2.3 Introducing New Access Along the Coast and to the Coast

2.3.1 Staff Time and Administrative Costs

Summary

Key Assumptions	Estimated Costs	Data Sources
• Under Option 1 and 3, each study area has a 4-yr period (Years 0-3) of consultation and approval before implementation begins. For cost purposes this may be considered to be similar to the preparation of ROWIPs • Staff time and associated administrative costs will be incurred for all types of access creation mechanisms • For statutory improvements, staff and administrative costs are the same across all mechanisms, where this includes costs for highways authority land agency, project officer time, ROW staff time and management time • Staff time and administrative costs for land dedication are assumed to be the same as for statutory mechanisms • New routes are implemented over Years 4-19	• £40,000 over four years (Years 0-3) for initial planning • Costs range from £1,000 to £5,000 per creation mechanism • The average staff and administrative cost of all mechanisms, excluding agri-environment schemes, is £3,000 • Agri-environment schemes have an administrative set up cost of £1,000 with ongoing staff management costs	• Consultation with National Trail officers and LHAs • Rural Development Service • *Countryside Agency (2005b)* • IPROW

Explanation of Costs Data

Option 1 requires statutory improvements to the public rights of way network. Experience with the recent development of new National Trails, such as the Cotswold Way, suggests that a period of consultation is required for each route, followed by approval by the Secretary of State, before the implementation can begin. Although no costs have been obtained for this process for the National Trails, it can be assumed that such costs are similar to those for preparing Rights of Way Improvement Plans (ROWIP), which have followed a similar process. Data from IPROW (2006) suggests that the preparation of a ROWIP may cost in the region of £40,000 over a period of three years; the Cotswold National Trail development lasted four years (pers. comm.). Therefore, it is assumed that planning a coastal route in each study area costs £40,000 over four years. It is assumed that similar planning is undertaken for Option 3 in order to ensure that an onward route could be created. This will incur the same costs over the same timescale. It should be noted that additional staff costs are considered below, which allow for further consultation on and development of individual sections of the route.

There are five mechanisms for creating access under Options 1 and 3:

- Public Path Creation Order (Option 1);
- Public Path Creation Agreement (Option 1);
- Rolling Path Agreement (Option 1);
- agri-environment scheme (Option 3); and
- land dedication (Option 3).

Whichever method of creation is chosen, there will be associated staff time and administrative costs, including Countryside/Project officer time, ROW staff and management time. Data on staff/administrative costs have been obtained from relevant literature, and consultation with National Trail Officers, Local Highways Authorities (LHAs) and the Rural Development Service (RDS). However, comments received on the draft report for this study suggest that the staff time spent on all statutory mechanisms is likely to be the same, with variations in costs observed for legal fees (see below). Table 2.4 presents staff and administrative costs for creating new access; further details can be found in Annex 1, Tables A1.1 and A1.2.

Table 2.4: Staff and Administrative Costs Associated with Creating New Access (£2006)

<table>
<tr><th colspan="3">Option 1: Statutory Improvements</th><th colspan="2">Option 3: Voluntary Improvements</th><th rowspan="3">Land dedication</th></tr>
<tr><th rowspan="2">Public Path Creation Order</th><th rowspan="2">Public Path Creation Agreement</th><th rowspan="2">Rolling Path Agreement</th><th colspan="2">Agri-environment Scheme</th></tr>
<tr><th>AES Set-up Costs (year 0)</th><th>AES Annual Management Cost</th></tr>
<tr><td colspan="3" rowspan="3">£3,000 (average) - £5,000 (upper limit)</td><td rowspan="3">£1,000</td><td>£280</td><td rowspan="3">£3,000</td></tr>
<tr><td>+£70 for 5% of agreements</td></tr>
<tr><td>+£190 for 15% of agreements</td></tr>
</table>

Whilst £5,000 is given as the upper limit under Option 1, encompassing all staff costs, it should be noted that the planning stage would include some costs for consultation with landowners. There may be some double counting if this higher cost were to be used, thus it is suggested that the average cost of £3,000 is used instead. Furthermore, it is not yet clear what the staff and administrative costs of Section 16 land dedication may be, but this is assumed to have the same average cost as for statutory mechanisms.

2.3.2 Legal Fees

Summary

Key Assumptions	Estimated Costs	Data Sources
• Legal costs will be incurred for all types of access creation mechanisms except agri-environment schemes • Creation Orders will incur greater legal costs than Creation Agreements • Rolling Path Agreements will incur similar legal costs as Creation Orders due to their complexity • Legal fees will be incurred over Years 4-19 as new routes are implemented • Appropriate assessments will be carried out for all designated coastal sites (including SSSIs) during the planning stage of the routes	• Legal fees range from £900 to £4,800 • Appropriate Assessments cost £300-£500 per site • Costs for Appropriate Assessments will be incurred in Year 1 when the coastal routes are being planned	• Consultation with National Trail officers and LHAs • Rural Development Service • *Countryside Agency (2005b)* • English Nature (pers. comm.)

Explanation of Costs Data

The negotiation of Creation Orders or (Rolling Path) Agreements will incur legal costs related to surveyors', land agents' and/or solicitors fees, as will land dedication. Table 2.5 presents an indication of the legal fees likely to be incurred, based on a range of data which are given in Annex 1, Tables A1.3 and A1.4.

Table 2.5: Legal Fees and Costs Associated with Creating New Access (£2006)

Option 1: Statutory Improvements			Option 3: Voluntary Improvements
Public Path Creation Order	**Public Path Creation Agreement**	**Rolling Path Agreement**	**Land dedication**
£4,800	£3,150	£4,800	£900

With regard to land dedication, Smiths Gore (2006) recommends that a variable contribution towards reasonable legal and surveyor's fees should be paid, and do not provide an average figure. However, Smiths Gore (2006) indicates that previous work had suggested a standard payment for legal fees of £750 plus VAT, based on an estimate of the time it would take a solicitor to deal with a dedication. This figure (£900, including VAT and adjusted for 2006 prices) is used here as an average cost of legal fees for a land dedication, although it is noted that the actual costs may vary in practice.

In addition, new access through land designated for nature conservation (SACs and SPAs) require Appropriate Assessments (AAs) under relevant legislation to ensure that public access does not adversely affect designated sites. Whilst the legislation only applies to European designated sites, English Nature[5] (pers. comm.) indicates that in practice (and as for open countryside access land) AAs would be undertaken for SSSIs as well as SACs and SPAs. English Nature estimates that there are 924 designated coastal sites and it would require 8-13 person years of effort to undertake and evaluate the Appropriate Assessments. This could cost £280,000 to £455,000, suggesting a cost of £300-£500 per site. However, it is expected that costs may be closer to the lower figure depending on the number of sites where preliminary work suggests that significant changes in access levels are unlikely.

2.3.3 Public Inquiries

Summary

Key Assumptions	Estimated Costs	Data Sources
• Public inquiries are held for 100% of Creation Orders	• A public inquiry may cost in the region of £5,000	• Consultation with National Trail and LHA officers

Explanation of Costs Data

RAC (2006) suggest that the costs to the LHA of a local public inquiry for an opposed order can easily run into thousands of pounds for legal support, officer time, publicity, administrative and accommodation costs. Even if the Lands Tribunal finally settles the amount of compensation, the LHA may incur significant extra costs in staff time and specialist advice. It is assumed here that all Public Path Orders are contested by nature (otherwise an agreement would be made) and will therefore lead to a public inquiry.

Three estimated figures for public inquiries have been provided during consultation:

- an initial figure of £30,000 for an ongoing public inquiry was indicated by one National Trail officer, where this did not include staff time;
- another National Trail officer indicated that an inquiry occurring 10 or more years ago cost only £2,000 (suggested to be "in today's costs"); and

[5] Part of Natural England from 2 October 2006

- a local highways authority officer suggested a cost of £3,000 per public inquiry.

An average of these figures would suggest that one in three Orders causes significant problems, which does not appear to be the case. Instead, a figure of £5,000 is used to reflect the generally low cost of public inquiries, whilst noting that some may cause significant difficulties and therefore costs.

2.3.4 Compensation/Payments to Landowners for Improving Access

Summary

Key Assumptions	Estimated Costs	Data Sources
• Public bodies do not receive any payment or compensation for the creation of PROW • Compensation for privately owned coastal land is paid at the same rate in all locations for the creation of PROW (including rolling path agreements) • In a few cases, caravan parks without existing PROW may require higher levels of compensation due to higher land values • All payments for land dedication are paid at the minimum rate per dedication, due to the small distances involved • Payments for agricultural land follow current HLS payment levels • HLS payments for access for people with reduced mobility may be paid for a proportion of the route depending on the gradient and stability of the route	• Compensation/payment for PROW creation is paid at £14.10 per linear metre • Higher payments of £50 per linear metre may be paid for routes across caravan parks • Payments of £45 per 100m (linear access) and £100 per 100m (access for people with reduced mobility) are paid under an agri-environment scheme. Each agreement also receives an annual payment of £350 • Payment per land dedication is £4,000	• Consultation with National Trail Officers and LHAs • *RAC (2006)* • *RDS (2005)*

Explanation of Costs Data

RAC (2006) suggest that the unique nature of every access creation means that it would be inappropriate to put forward a simple scale based upon pounds per metre and instead provides indications of the reasonable ranges for compensation. However, in order to conduct the analyses for the study areas for this project, it is necessary to make some assumptions and generalisations regarding levels of compensation, which may differ from what would occur in practice. It is assumed that compensation is only paid to private landowners, and not to public bodies and quasi public bodies (i.e. Crown Estate, local councils, National Trust etc.)

RAC (2006) indicate that there are few data available on the costs of PROW creation compensation. As such, the data presented in Annex 1, Table A1.5 should be seen as an indication of the levels of compensation that have been paid, and extrapolation from these data should be undertaken with extreme caution. In general, it can be seen that some land types attract higher compensation rates than others, with an approximate range of £0 to £45 per linear metre. For example, Smiths Gore (2006) notes that the Countryside Agency has made capital payments of between £0 and £85 per linear metre to create the Pennine Bridleway; with an average payment of £6.80 per m. However, this route is inland, and higher land prices may be associated with coastal land. Examples provided by one National Trail officer (and confirmed by a coastal local highways authority officer) indicate average compensation payments of £14.10 per m of cliff top/coastal land. Given that there is limited data on the land type and use which may be used for creating access, it would seem appropriate to use a standard value for all coastal land, i.e. £14.10 per m, which is consistent with the data provided in Table A1.5. However, it has been suggested that this figure may be too low when considering hotel complexes and caravan parks, where values may be as high as £37-£50 per linear metre. This is only likely to occur in a small number of cases as, based on the study areas, many caravan parks already have PROW on or near them.

RAC (2006) notes that the concept of severance and injurious affection has been defined within the Compulsory Purchase Act 1965, with the purpose of compensating for any damage or depreciation of an interest in affected land and there may be occasions where the amenity value of property will be diminished by the proximity of a PROW. However, these are difficult to quantify and while, in a small number of cases, a figure of 10-20% of the property value may be placed on injurious affection, in the majority of cases, the effects will be small or nil due to the generally non-intrusive nature of PROW (RAC, 2006). Therefore, no cost has been included for injurious affection in this assessment.

Payments for agri-environment scheme access are given in Annex 1, Table A1.6. The most applicable are those for permissive footpath access at £45/100m and for creating access for people with reduced mobility at £100/100m (see Section 2.4 below). Each agri-environment access agreement also receives an annual base payment of £350.

Section 16 of the CROW Act 2000 gives both public and private freeholders and long leaseholders the opportunity to voluntarily dedicate land, of any type, for public access. Smiths Gore (2006), commissioned by the Countryside Agency, has developed a payment scheme which allows for payment of legal costs and administrative costs of applications, and up-front payments, in order to secure and implement new rights of access. This applies to area dedication rather than linear route dedication (which is addressed under Section 25 of the Highways Act), although wider access corridors (5-10m wide) could be created. The lowest payment per ha is £980; for a 5 m wide access corridor, this would equate to £0.49 per linear metre. However, a minimum payment of £4,000 per dedication is recommended; in other words, a 5m access corridor would have to be longer than 8km to qualify for anything other than the minimum payment, which is unlikely in the study areas considered. Therefore, the cost of £4,000 per dedication is used in this assessment.

The compensation/payment values for creating a footpath are presented in Table 2.6.

Table 2.6: Compensation and other Payments to Landowners Associated with Associated with Creating New Access (£2006)					
Option 1: Statutory Improvements			**Option 3: Voluntary Improvements**		
Public Path Creation Order (one-off cost)	**Public Path Creation Agreement (one-off cost)**	**Rolling Path Agreement (one-off cost)**	**Agri-environment Scheme**		**Land dedication (one-off cost)**
			AES Annual Base Payment	**AES Annual Payment**	
£14.10 - £50.00 per linear metre			£350	£45/100m £100/100m*	£4,000
* Access for people with reduced mobility					

2.3.5 Overview of Study Areas Results for Introducing New Access

The above costs have been applied to the four study areas. Table 2.7 presents the key features of the study areas (the results of the desk-based analysis) which affect the costs presented for Option 1.

Table 2.7: Key Features of Study Areas Relevant To Option 1				
Key Features	**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Number of sections requiring PROW creation on private land	11	23	94	55
Number of sections requiring PROW creation on public land	9	12	19	11
Number of rolling path agreements on private land	2	13	4	15
Number of rolling path agreements on public land	1	1	0	3
Length of PROW required on private land	12.3 km	34.2 km	103.2 km	41.2 km
Length of PROW required on public land	7.7 km	34.5 km	71.0 km	30.7 km
Number of caravan parks affected by new PROW	0	4	7	3
Length of PROW through caravan parks (assume 500m per caravan park)	0	2.0 km	3.5 km	1.5 km
Number of designated sites	6	13	9	10

Table 2.8 presents the costs for Option 1, broken down by cost component as described above. In some cases, these are relatively straightforward calculations, e.g. the creation of 23 sections of PROW in Durham results in staff and administrative costs of £69,000 (23 @ £3,000 per creation agreement/order). However, there are particular areas of uncertainty which have resulted in a range of costs being provided. For example, the proportion of new PROW sections on private land that can be

created by Agreement vs. Order is uncertain[6]. It has been suggested that current permissive access does not necessarily indicate a willingness to enter into a Creation Agreement; in fact the converse is often true, and landowners may wish to protect the status quo. Therefore, a range of costs has been provided where the low estimate represents all sections of new PROW (public and private) being created by Creation Agreement (e.g. for Durham, legal costs for 11 sections of PROW agreement on private land (11 @ £3,150 = £34,650) plus 9 sections of PROW agreement on public land (9 @ £3,150 = £28,350) equals £63,000) and the upper estimate represents all public PROW sections created by agreement and all private PROW sections created by Order (e.g. for Durham, (11 @ £4,800 = £52,800) plus (9 @ £3,150 = £28,350) equals £81,150). It follows that if all private sections are created by Agreement, there will not be any public inquiries.

Other variables contributing to the range are the costs of Appropriate Assessments and whether higher levels of compensation are paid to caravan parks (these are added to the high total costs but not to the low total costs).

Table 2.8: Study Areas Costs for Introducing New Access under Option 1

Cost Component	County Durham and Hartlepool Coast	North Devon, Exmoor & West Somerset Coast	Southern Cumbrian Coast & Morecambe Bay	Suffolk Coast
Planning, consultation and approval	£40,000	£40,000	£40,000	£40,000
Staff and administrative costs	£69,000	£147,000	£351,000	£252,000
Legal costs for Creation Agreements and Creation Orders on private land	£34,650 - £52,800	£72,450 - £110,400	£296,100 - £451,200	£173,250 - £264,000
Legal costs for Creation Agreements on public land	£28,350	£37,800	£59,850	£34,650
Legal costs for Rolling Path Agreements	£14,400	£67,200	£19,200	£86,400
Legal costs – Costs of Appropriate Assessments	£1,800 - £3,000	£3,900 - £6,500	£2,700 - £4,500	£3,000 - £5,000
Costs of Public Inquiries (included in total high cost only)	£65,000	180,000	490,000	350,000
Compensation for all private land	£173,950	£482,200	£1,455,700	£580,400
Additional compensation for caravan parks (included in total high cost only)	-	£71,800	£125,650	£53,850
Option 1 Total Costs: Low	**£362,200**	**£850,600**	**£2,224,600**	**£1,169,700**
Option 1 Total Costs: High	**£444,900**	**£1,142,900**	**£2,997,100**	**£1,666,300**
Option 1 NPV: Low	**£287,300**	**£660,700**	**£1,724,800**	**£908,500**
Option 1 NPV: High	**£350,400**	**£895,000**	**£2,332,100**	**£1,300,600**

Note: Numbers may not add up due to rounding

[6] It is assumed that all new PROW on public (or quasi-public) land are created by Creation Agreement.

It should be noted that the figures in Table 2.8 have been rounded to the nearest £100 and the net present value (NPV) costs reflect the distribution of costs over 20 years as indicated in the previous sections (and summary tables). NPV costs range from approximately £287,000 to £350,000 in the Durham study area, to £1.7-£2.3 million in Cumbria.

Table 2.9 presents the key features of the study areas which affect the costs presented for Option 3. This identifies the proportion of the path to be made accessible for people with reduced mobility, which affects the level of payments under the agri-environment scheme. This percentage is based on the survey data collected by the Countryside Agency, which identifies whether existing PROW are accessible for everyone and, where paths are not considered to accessible for all, a reason is given as to why this is the case. It was agreed with the Project Steering Group that for the proportion of the route which is inaccessible due to gradient, it may not be considered reasonable to provide an accessible path; this would also be the case for unstable sections. However, the remainder of the route could potentially be made accessible, as indicated in Table 2.9. This is discussed further in Section 2.4.

Table 2.9: Key Features of Study Areas Relevant To Option 3

Key Features	County Durham and Hartlepool Coast	North Devon, Exmoor & West Somerset Coast	Southern Cumbrian Coast & Morecambe Bay	Suffolk Coast
Number of sections requiring footpath creation on agricultural land	1	26	46	43
Number of sections requiring footpath creation on other land	12	12	32	20
Length of footpath required on agricultural land	0.5 km	26.9 km	44.4 km	35.2 km
Length of footpath required on other land	11.9 km	21.9 km	37.8 km	0.8 km
Proportion that could be accessible	84%	62%	90%	88%

A similar situation occurs under Option 3 as for Option 1. The proportion of access which may be created by land dedication vs. agri-environment schemes is uncertain. Thus, a range of costs is provided in Table 2.10 where the low estimate represents all routes costed based on land dedication and the higher estimates represent all routes on agricultural land costed based on agri-environment schemes and the remainder by land dedication.

The timescale for implementation affects the yearly cost of agri-environment payments, as some sections will start receiving payments in Year 4, and others not until Year 19. This makes the calculation of the total costs less clear to the reader. In addition, the staff and administrative costs for agri-environment schemes include two set-up costs for some sections as agreements normally last 10 years, and those started in Years 4-9 will require renewal during the 20-year timescale.

Table 2.10: Study Areas Costs for Introducing New Access under Option 3 over 20 Years				
Cost Component	**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Planning, consultation and approval	£40,000	£40,000	£40,000	£40,000
Staff and administrative costs – Land Dedication	£36,000 - £39,000	£36,000 - £114,000	£96,000 - £234,000	£60,000 - £189,000
Staff and Administrative Costs – Agri-environment Scheme Set-up costs	£2,000	£47,000	£85,000	£76,000
Staff and Administrative Costs – Agri-environment Scheme Annual management costs (over 16 years)	£5,000	£102,300	£187,800	£160,400
Legal costs – Land Dedication	£10,800 - £11,700	£10,800 - £34,200	£28,800 - £70,200	£18,000 - £56,700
Legal costs – Costs of Appropriate Assessments	£1,800 - £3,000	£3,900 - £6,500	£2,700 - £4,500	£3,000 - £5,000
Payment to Landowners – Land Dedication	£48,000 - £52,000	£48,000 - £152,000	£128,000 - £312,000	£80,000 - £252,000
Payment to Landowners – Agri-environment Scheme	£9,100 - £12,700	£328,750 - £401,850	£566,150 - £687,200	£455,150 - £535,050
Option 3 Total Costs: Low	**£144,500**	**£344,100**	**£658,900**	**£540,700**
Option 3Total Costs: High	**£157,500**	**£692,500**	**£1,253,200**	**£974,400**
Option 3 NPV: Low	**£118,800**	**£273,300**	**£519,300**	**£427,600**
Option 3 NPV: High	**£126,700**	**£479,500**	**£865,500**	**£671,300**

It should be noted that the cost figures in Table 2.10 have been rounded to the nearest £100 and the net present value (NPV) costs reflect the distribution of costs over 20 years as indicated in the previous section (and summary tables). NPV costs range from approximately £119,000 to £127,000 in the Durham study area, where there is only one agricultural section, to £519,000-£866,000 in Cumbria where more than 50% of the route may be on agricultural land.

2.4 Accommodation Works for New Access

2.4.1 Overview

The costs of constructing new access relate to:

- clearance of vegetation;
- laying of an accessible surface (where necessary); and
- infrastructure costs (e.g. furniture, signposts and fencing).

It should be noted that the Disability Discrimination Act 1995 (DDA) brought in a range of requirements upon service providers to prevent discrimination against disabled people. Although those responsible for rights of way/access (i.e. local highway authorities and the Highways Agency) are not recognised as service providers at present, the Department of Transport suggests that they should aim to comply with Part III of the DDA until such time as a legal precedent has been set to confirm their status. Part III of the DDA is based on the principle that people with disabilities should not be discriminated against (through non-provision of services or a different level of service provision) by service providers when accessing everyday services that other people take for granted. Provision of access for disabled people is subject to a test of reasonableness; at the time of writing, no case law has arisen that helps to define reasonableness in this context. Instead, consideration has been given to the survey work undertaken by the Countryside Agency in each of the four study areas. Where access is limited by gradient, or where the path is unstable, it is assumed that it would not be reasonable to make this accessible; thus, all other paths could be made accessible. However, in practice, the decision as to whether providing access is reasonable or not would have to made at the local level.

2.4.2 Costs of Construction

Summary

Key Assumptions	Estimated Costs	Data Sources
• The costs of construction are similar for Options 1 and 3. • However, under Option 3 it is assumed that the costs of clearance is met by the annual agri-environment payment, thus no clearance costs are included for agricultural sections of Option 3 • The surveyed routes provide an adequate indication as to the requirement for furniture, signing and fencing • Fencing is only required on the seaward boundary	• General costs for path clearance, path surface, accessible furniture, signposts and fencing have been developed and are presented in Table 2.11	• South West Coast Path Funding Formula • Higher Level Stewardship Payment Booklet (*RDS, 2005*) • Access Management Grant Scheme • LHA consultation

Explanation of Costs Data

Table A1.7 in Annex 1 provides a range of costs for a variety of infrastructure items. For the purposes of assessing the costs of creating new access in the study areas, this list is too detailed and has been simplified in Table 2.11. It is assumed that the costs apply to access created by both statutory and voluntary measures but that the costs of clearance are excluded from the construction costs for agri-environment access. There is no separate prescription for this under HLS and, as such, it is assumed to fall within the annual base and area payments received (and already accounted for). Maintenance is discussed further in Section 4.

Table 2.11: Simplified Item Costs for Assessing Construction Costs

Item	Cost (£2006)
Clearance	£164.40 per km
Accessible path surface (1.2m wide)	£15/m^2
Furniture (e.g. accessible kissing gate)	£330 per item
Signpost	£130 per item
Footbridge	£150 per m for small footbridges (<=6m) £6,500 per m for large bridges (>6m)
Post and Wire Fence	£1.20 per m

Under Option 1, where the new right of way follows an existing access route, it is assumed that little clearance is necessary; therefore clearance of routes is only required where there is no existing access. Under Option 3, clearance is undertaken for all land dedication sites.

As indicated above, access created for these two Options should be constructed so as to be accessible for people using pushchairs, wheelchairs, etc, where it is reasonable to do so. To give a range of costs, construction is considered in terms of signing and accessible furniture only along the whole length of costed path and with the addition of an accessible surface where access is not limited by gradient (based on a percentage from survey data) and the path is stable. Where infrastructure is currently the limiting factor for access on existing rights of way, the cost of replacing the item of infrastructure is also included. It is expected that the approach to constructing accessible paths would be considered in more detail at the project level.

2.4.3 Overview of Study Areas Results for Accommodation Works

For each study area, an average number of furniture items and signposts have been calculated, based on the survey data provided by the Countryside Agency. This has provided an indication of the number of items required for each new stretch of access costed. Similarly, the current length of path with a fence on the seaward boundary has been calculated in order to estimate the additional length of fencing needed (primarily for safety). This implicitly assumes that the current routes have adequate infrastructure. Whilst it is noted that this may not be the case, the survey data record few occasions where the access experience is limited by infrastructure or signing. These requirements for infrastructure are summarised in Table 2.12.

Table 2.12: Requirement for Infrastructure by Study Area				
	County Durham and Hartlepool Coast	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Distance between furniture items	2.2 km	1.7 km	1.8 km	3.0 km
Number of furniture items to be replaced	2	1	2	0
Distance between signposts	2.7 km	3.8 km	2.9 km	1.4 km
Number of footbridges required	2	0	1	0
Length of footbridge required	11 m	0	10 m	0
Proportion with fence on seaward boundary	30%	14%	19%	19%
Proportion which could be accessible (i.e. not too steep or unstable) (Option 3 only)	84%	47%	90%	88%
Proportion which could be accessible excluding that already surfaced (Option 1 only)	42%	40%	80%	78%

Table 2.12 provides two different proportions of the route to be made accessible. The first, higher figure is the overall percentage of the route which could potentially be made accessible (i.e. accessibility is not limited by gradient or stability). This is applicable to Option 3. The lower percentage reflects the proportion of the new PROW to be costed which is already surfaced. This difference relates to the concept of what is being 'created'. Under Option 1, legally defined rights of way are being created, therefore the route may include areas of permissive access which are already surfaced, but which are not currently PROW. Under Option 3, permissive access is created where there is no existing access, or to 'formalise' informal access arrangements. Some of the access in this latter category may already be surfaced but the proportion is expected to be small. Applying the higher percentage in Table 2.12 to the Option 1 route would result in unnecessary costs and therefore the lower percentage is used.

Table 2.13 (overleaf) presents the total cost of accommodation works for Options 1 and 3. The key variable is the inclusion of costs for an accessible path surface; the low estimate does not include an accessible path surface whilst the high estimate does. There is little difference between the Option 1 and 3 costs; any variation observed is mostly due to an actual difference in length being constructed and, to a lesser extent, the omitted clearance costs for land under agri-environment agreements.

Table 2.13: Study Areas Costs for Construction of New Access under Options 1 and 3				
	County Durham and Hartlepool Coast	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Total Costs				
Option 1: Low	£7,900	£20,400	£120,700	£19,400
Option 1: High	£160,100	£690,900	£2,641,600	£1,028,300
Option 3: Low	£6,200	£20,900	£100,600	£15,600
Option 3: High	£193,000	£562,300	£1,432,800	£587,100
Net Present Value (discounted at 3.5%)				
Option 1: Low	£6,300	£15,900	£87,900	£15,100
Option 1: High	£125,200	£531,900	£2,044,400	£792,800
Option 3: Low	£4,800	£12,700	£67,600	£5,200
Option 3: High	£148,900	£433,800	£1,108,600	£456,600

3. MAPPING AND UNMAPPED APPROACHES TO IMPROVING COASTAL ACCESS

3.1 Overview

This Section covers the key costs for Option 2 – use of CROW Section 3 and Option 4 – unmapped approach.

The key cost components for these two Options are:

- introducing new access along the coast, covering:
  a. a national coastal mapping or descriptive exercise;
  b. legal costs including appeals or other forms of dispute resolution;

- introducing new access links to the coast, covering:
  c. staff costs;
  d. legal costs;
  e. public inquiry costs;
  f. compensation costs;

- accommodation works (Disability Discrimination Act 1995 compliant, where applicable) for new onward access along (and to) the coast, covering:
  g. construction costs (including clearance, path surface, furniture, signing, fencing);

- management and maintenance costs for new onward access along coast, covering:
  i. on a national basis, costs of operating a restrictions regime; and
  j. an Access Management Grant Scheme and annual maintenance costs;

- a wider benefits corridor, covering:
  k. improvements in environmental quality;
  l. improvements in visitor experience; and

- public information, covering:
  m. a coastal access code

This Section addresses components *a* to *g* in relation to Options 2 and 4, and which are considered on a national basis. Section 4 covers component *i* - *j* in relation to maintenance on a national (and study area) basis. Section 5 covers components *k* to *m* which are essentially the same across all options, however, components *k* and *l* could vary by location/study area.

For each cost component, the key assumptions and costs data are presented in summary tables at the beginning of each section, to provide a clear picture of the main issues. These data are then described in more detail below, and additional data can be found in the Report's Annexes as indicated.

All costs data collated for this study have been adjusted to 2006 prices, using the Retail Price Index (Office of National Statistics, 2006) to account for inflation. Estimated costs for the future, under each Option, are presented as total costs and also as net present values (discounted at 3.5%, Treasury rate) over a 20-year period.

3.2 Introducing New Access Along the Coast

3.2.1 Option 2 – Use of CROW Section 3

Summary

Key Assumptions	Estimated Costs	Data Sources
• Previous experience with mapping registered common land and open countryside provides a basis for estimating the costs of a coastal mapping exercise • However, there is uncertainty associated with applying such costs to coastal land – whilst this cannot be quantified there is a suggestion that costs could be twice as high • The costs of the previous mapping exercise associated with registered common land may be applicable to the foreshore • The costs of the previous mapping exercise associated with open countryside may be applicable to other coastal land (excluding the foreshore) • The total area of coastal land is approximately 431,800 ha (288,410 ha of foreshore; 143,390 ha of other coastal land) • The estimated mapping costs relate only to those incurred by the Countryside Agency and not by other stakeholders • Additional costs are incurred for Appropriate Assessments of 924 coastal designated sites	• Based on previous experience: % £1.15 per mapped ha of foreshore % £44.05 per mapped ha of coastal land • Due to uncertainty surrounding the actual method to be applied the costs could be as high as: % £2.30 per mapped ha of foreshore % £88.10 per mapped ha of coastal land • Mapping costs range from £6.6-£13.3 million • Associated publicity and communications costs range from £2.4-£3.6 million • Appropriate Assessments costs range from £280,000-£455,000 • Lower estimate: £9.3 million • Upper estimate: £17.4 million • Costs are incurred over five years (years 0-4) • NPV: £8.7-£16.2 million	• Countryside Agency (pers. comm.) • Discussions with the Consultants who undertook the mapping exercise • English Nature (pers. comm.)

Explanation of Costs Data

It is assumed that the Countryside Agency's previous experience with mapping registered common land and open countryside provides a basis for estimating the costs of mapping coastal land. However, it should be noted that this is based on only one approach to mapping coastal land and there are other approaches which could be followed and which could affect the total costs of this Option.

Discussions with the Consultants which undertook the previous mapping work suggest that the costs of mapping coastal access land may vary from previous experience depending on the following factors:

- the availability of datasets for coastal land;
- the requirement for site visits;
- the effort required to identify landowners;
- approach to consultation; and
- the number of consultation responses received.

Furthermore, the Consultants indicated that the mapping of registered common land was relatively straightforward and that the majority of the costs related to the mapping of open countryside land. Thus, the average cost per hectare may vary by land type. Discussions with the Countryside Agency suggest that mapping the foreshore may be similar to mapping registered common land; as the foreshore is already defined there are likely to be fewer difficulties with mapping it than for other coastal land. Therefore, two mapping costs have been derived, so that different costs can be applied to the foreshore area and coastal land.

The total costs of the previous mapping exercise (in 2006 prices) for the Countryside Agency was £25.4 million (see Annex 2, Table A2.1) (Countryside Agency, pers. comm.). This suggests an average cost of £1.15 per mapped ha of registered common land and £44.05 per mapped ha of open countryside.

The area of coastal habitat has been estimated at around 431,800 ha, based on existing datasets (e.g. English Nature's GIS datasets), as indicated in Table 3.1 below.

Table 3.1: Estimated Area of Coastal Land

Habitat	**Area (ha)**
Mudflats	2,050
Coastal & floodplain grazing marsh	89,620
Coastal sand dunes	8,800
Coastal vegetated shingle	2,460
Maritime cliff and slope	19,340
Saline lagoons	760
Saltmarshes	20,360
Foreshore*	288,410
Total	**431,800**

*Source: Working estimate provided by Countryside Agency (by email, 28 July 2006) and Defra, based on English Nature datasets. *Foreshore has been calculated between Mean High Water Mark and Extent of the Realm. Extent of the Realm captures all estuaries and, therefore, the foreshore figure may overestimate the area of coastal land.*

Based on the figures presented in Table 3.1, the estimated cost of mapping coastal land, based on previous experience, is £6.6 million. Although the average costs per mapped ha of registered common land and open countryside are taken as the best available estimates for assessing the costs of mapping coastal land, the above factors suggest that the cost per mapped ha of coastal land may be higher or lower than that for open countryside depending on the approach taken (which would have to be clarified at the time of undertaking the mapping exercise). The uncertainty surrounding the cost estimates cannot easily be quantified; however, based on the experience of those involved in the mapping of open countryside within the Countryside Agency, it is suggested that the costs could be twice as high. Therefore, an upper estimate of the cost of the mapping exercise is taken as £13.3 million.

An additional cost would be incurred by providing information to landowners (and the general public) in relation to the mapping exercise and communications strategy. Previous experience suggests that this cost may be in the region of £2.4 million (see Table A2.3). It should be noted that this figure includes the costs associated with appeals publicity, which cannot be removed based on the level of data provided. This element would be more correctly attributed to the cost of appeals (see below) but does not affect the overall implementation costs. Given the uncertainty associated with mapping coastal land it is possible that this cost may also be higher, perhaps 50% more (on the basis that the cost of providing information is unlikely to be proportionate to the additional complexity of mapping). Thus, an upper limit of £3.6 million is assumed.

Appropriate Assessments are also required, to ensure that public access does not adversely affect European designated sites (e.g. SPAs and SACs). Whilst the legislation only applies to European designated sites, English Nature (pers. comm.) indicates that in practice (and as for open countryside access land) AAs would be undertaken for SSSIs as well as SACs and SPAs. English Nature (pers. comm.) estimates that there are 924 designated sites, which would require 8-13 person years of effort to undertake and evaluate the Appropriate Assessments. This could cost £280,000 to £455,000; however, it is suggested that costs may be closer to the lower figure depending on the number of sites where preliminary work suggests that significant changes in access levels are unlikely.

3.2.2 Option 4 – Unmapped Approach

Summary

Key Assumptions	Estimated Costs	Data Sources
• An unmapped approach would provide a description of types of coastal land, communicated to the landowners and general public through a national campaign • The costs of these communication exercises can be assessed based on previous experience. • However, there is uncertainty associated with applying such costs to coastal land for an approach which has not yet been fully developed • Some markers may be provided 'on the ground' – this is assumed to be addressed through general maintenance of the areas • The estimated costs relate only to those incurred by the Countryside Agency and not by other stakeholders	• £2.4 -£4.8 million for publicity and communication aimed at landowners • £1.3 - £2.6 million for a national public campaign • £280,000-£455,000 for Appropriate Assessments of all designated sites • Lower estimate: £4.0 million • Upper estimate: £7.9 million • Costs are incurred over four years (years 0-3) • NPV: £3.8-£7.5 million	• Countryside Agency (pers. comm.) • Countryside Agency (2004): *Open Access Total Project Costs*, Board Paper AP04/20

Explanation of Costs Data

An unmapped approach to improving access to coastal land has not previously been undertaken, therefore estimating the likely costs of such an approach is highly uncertain. A communications strategy and publicity campaign would be required to ensure that landowners are informed about any new access rights. Whilst previous experience suggests that the mapping publicity cost for the Open Access project was approximately £2.4 million (see Annex 2, Table 2.3), the novelty of the unmapped approach may require greater resources; thus a range of £2.4-£4.8 million is assumed.

An additional national campaign would be required to communicate to the general public what is and what is not considered to be coastal land. This may be similar to that undertaken for the Countryside Code, which is discussed Section 5, and which had a cost of £1.3 million (£2006 prices). Again, given the novelty of the approach, greater resources may be required to develop descriptions of coastal land that are well understood and to communicate these effectively; thus a range of £1.3-£2.6 million is assumed.

In addition, and as for Option 2, Appropriate Assessments would be required for 924 designated sites, at a cost £280,000 to £455,000.

Therefore, the combined figures of £4.0-£7.9 million are taken to be an approximate estimate of the costs of an unmapped approach.

3.2.3 Appeals and Dispute Resolution Process (Options 2 and 4)

Summary

Key Assumptions	Estimated Costs	Data Sources
• Previous experience with appeals relating to the mapping of open countryside provides a basis for estimating the costs of appeals/ disputes relating to coastal land mapping • However, there is uncertainty associated with estimating the number of appeals/disputes associated with coastal land • Some form of dispute resolution would be required for Option 4. The lack of previous experience (both CA and landowners) with a descriptive approach may result in more disputes under Option 4 than for Option 2 • 143,390 ha of coastal land may be subject to appeal/dispute • The estimated costs relate to those incurred by the Countryside Agency and the Planning Inspectorate • These costs are highly uncertain, and should be viewed as indicative only.	**Option 2:** • £2,800 - £5,600 per appeal • Under Option 2 there may be 800 - 2,000 appeals • Estimate for Option 2: £2.2-£11.2 million • Costs are incurred over two years (years 2-3) • NPV Option 2: £2.1-£10.3 million **Option 4:** • £1,500 - £2,800 per dispute • Under Option 4 there may be 800 – 3,000 disputes • Estimate for Option 4: £1.2-£8.4 million • Costs are incurred over two years (years 1-2) • NPV Option 4: £1.1-£8.0 million	• Countryside Agency (2004): *Open Access Total Project Costs*, Board Paper AP04/20 • Correspondence with the Countryside Agency and Defra

Explanation of Costs Data

Landowners, tenants and those with sporting rights have the right to appeal to the Secretary of State against open access land shown on the provisional maps. For the previous mapping work, external contractors were used to provide support for the appeals process and the Agency incurred significant staff costs related to circulating appeal documents, hiring venues, reviewing statements of cases and presenting evidence at hearings and inquiries (Countryside Agency, 2004).

The Countryside Agency received 3,173 appeals relating to the mapping of registered common land and open countryside. The total estimated costs of the appeals process (in 2006 prices) was £4.6 million for the Countryside Agency and £4.2 million for the Planning Inspectorate (Countryside Agency, pers. comm.; Defra, pers. comm.). This equates to an average (rounded) cost of £2,800 per appeal. Whilst this cost may appear low, it has been indicated that many appeals were settled without the need for

legal hearings and inquiries. Whilst this experience may transfer to any appeals made in relation to coastal access land, there is also the possibility that additional complications may arise in relation coastal access which cannot be foreseen at this time; therefore, an upper bound cost of £5,600 is assumed.

In order to assess the costs associated with coastal access land appeals/disputes, it is necessary to estimate the likely number of cases. It should be noted that whilst just over 3,000 appeals were received by the Countryside Agency in relation to open countryside and registered common land, original forecasts had suggested there may be as many as 8,000 (Countryside Agency, pers. comm). Although attempts were made to model the number of appeals which might be expected in any given area, there was found to be little correlation between the number of appeals and any other factor, thus, the number of cases which may be expected is highly uncertain. In the absence of better information, previous experience is used as the basis for estimating the number of cases, although it is noted that this could vary considerably in practice.

If the mapping of registered common land (and, in this case, the foreshore) was relatively straightforward, then it can be assumed that the majority of appeals related to the mapping of open countryside (and, in this case, other coastal land). In relation to the open countryside, data suggest that there are 566,305 ha of open countryside access land - this equates to 0.006 appeals per ha of open countryside access land, or 1 appeal for every 178 ha of open countryside access land. However, had the higher figure of 8,000 appeals been realised, this would have resulted in 0.014 appeals per ha, or 1 appeal for every 71 ha of access land.

Under Option 2, previous experience suggests that around 800 appeals may be made (mostly in relation to coastal land), with an associated cost of £2.2-£4.5 million. However, as an upper estimate, it is possible that around 2,000 appeals could be made, with an associated cost of £5.6-£11.2 million (based on a similar proportion as for the forecasted 8,000 appeals).

Under Option 4 there would be no administrative process to appeal against, although there would have to be some form of dispute resolution to clarify the access arrangements. The Countryside Agency (pers. comm.) suggest that such costs are likely to be lower than those associated with appeals under Option 2; without further development of the approach, it is not possible to assess what these might be. It should also be noted that, as given in Section 2, the cost of staff time for consulting with landowners in relation to statutory access is an average of £3,000 per landowner. Therefore, the difference in costs may not be that great, but it is uncertain. To illustrate the potential costs, an indicative range of £1,500 - £2,800 per dispute has been assumed; however, there is little evidence on which to base these costs and they should be viewed with caution.

As landowners will be unfamiliar with the system of an unmapped approach it has been suggested that there may be more disputes under Option 4 than for the mapping approach. However, there is little basis on which to assess the number of disputes which may be made, and therefore a range of 800 (i.e. equal to Option 2) to 3,000 (i.e. 50% higher than Option 2 upper limit) is used to illustrate the possible range of costs

associated with disputes under Option 4. This range has an associated cost of £1.2 - £8.4 million and is highly uncertain.

3.3 Introducing New Access Links to the Coast

Key Assumptions	Estimated Costs	Data Sources
• Access links are required at least every 5 km • Access links will be an average of 1 km in length • The study areas require 11 access links over 11.8% of the coastline • The English coastline is 4,090 km long • Access links may be created by any of the mechanisms described in Section 2 and incur similar costs	• See Section 2 for individual component costs • Costs are incurred over years 2-19 • Costs range from £0.7 if all links are created by land dedication to £2.4 million in Creation Orders are required • NPV: £0.6 - £2.0 million	• As for Section 2

As described in Section 2, access links to the coast are assumed to be required where there is a stretch of access along the coast, which is greater than 5km, without links. The length of these access links will vary according to location and, for simplicity, it is assumed that such links will be an average of 1 km. Eleven such links are identified within the four study areas, which account for 11.8% of the English coastline (4,090km) (although the length of coastal path may vary from this as described in Section 2). As an approximation, it can be assumed that around 90 such access links are required on national basis under Options 2 and 4.

Based on the costs set out in Section 2, Table 3.2 (overleaf) indicates the costs that may be associated with establishing access links, based on a range of approaches. It should be noted that, as in Section 2, the creation of new access routes are spread over time, starting in year 2 and completed by year 19 (this complicates the calculation of agri-environment scheme costs). The associated costs range from £711,000 if all routes are created by land dedication to £2.4 million if Creation Orders are required in all cases.

Table 3.2: Estimated Costs of Creating 90 Access Links, on a National Basis, Across a Range of Approaches				
	Creation Agreement	**Creation Order**	**Land dedication**	**Agri-environment**
Staff and Administrative costs – per unit	*£3,000 per arrangement*	*£3,000 per arrangement*	*£3,000 per arrangement*	*£1,000 per arrangement £312 per year*
Staff and Administrative costs – Total	£270,000	£270,000	£270,000	£206,900 (spread over 18 years)
Legal Costs (including public inquiries) – per unit	*£3,150 per arrangement*	*£4,800 per arrangement + £5,000 (public inquiry)*	*£900 per arrangement*	*n/a*
Legal Costs (including public inquiries) – Total	£283,500	£882,000	£81,000	n/a
Compensation/ Payment to Landowner – per unit	*£14.10 per m*	*£14.10 per m*	*£4,000 per arrangement*	*£350 per arrangement per year £45-£100 per 100m per year*
Compensation/ Payment to Landowner – Total	£1,269,000	£1,269,000	£360,000	£1,009,000 - £1,712,000
Total Cost	**£1,822,500**	**£2,421,000**	**£711,000**	**£1,216,000 - £1,919,000**
NPV Cost	**£1,505,800**	**£2,000,300**	**£587,400**	**£829,900- £1,303,700**

3.4 Accommodation Works for New Access

Summary

Key Assumptions	Estimated Costs	Data Sources
• Previous experience with an AMGS for open access land provides a basis for estimating the costs of establishing access on coastal land • The costs associated with construction of paths in Section 2 are applicable to the construction of short access links on a national basis • 431,800 ha of coastal land may require some form of preparation for open access	• Cost of preparing coastal access land: £2.0 million • Cost of constructing 90 access links to the coast: £0.03 - £1.3 million • NPV Option 2: £1.8 – 2.8 million • NPV Option 4: £1.8 – 2.8 million	• Correspondence with the Countryside Agency

Explanation of Costs Data

In order to assist with the general management of access land, an Access Management Grant Scheme (AMGS) was launched in 2004/05 to support Access Authorities in preparing for the new rights of access. The current scheme for open access land is in its third year; it is not clear to the Consultants how many more years the scheme will run for. However, it is assumed that, within three years, the grant scheme can provide sufficient funds to enable the preparation of coastal land for new rights of access. The level of grants available has varied over the three years, this is reflected in Table 3.3, which is based on data provided by the Countryside Agency, presented in full in Annex 1, Table A1.4. These costs account for both the Countryside Agency staff time in managing the grants as well as the value of the actual grants.

Table 3.3: Estimated Costs of the Access Management Grant Scheme (all £2006)

Year of Operation	Cost per ha of open access land	Year of Option 2	Year of Option 4
1	£1.00	3	2
2	£2.10	4	3
3	£1.50	5	4

Source: Countryside Agency (pers. comm.)

These data provide an estimated total cost of construction/preparation across coastal access land of £2.0 million, with net present values of £1.7 million for Option 2, and £1.8 million for Option 4, based on the assumption that preparation would begin a year earlier under Option 4. These values are based on the total area of coastal land (including the foreshore) as the estimated costs of the AMGS are based on all open access land (including registered common land). For example, it may be expected that additional safety notices may be required on (or in relation to) the foreshore, therefore this cost is relevant across all areas of coastal land.

Based on the data in Tables 2.11 and 2.12, the cost of creating access links to the coast can be estimated. If the costs were based on a single access link length of 1 km, the associated costs would be very low as the data in Table 2.12 indicate that a length of 1 km is too short too require either a signpost or a furniture item. Instead, the costs are applied to the whole length of 90km of access links, as illustrated by Table 3.4 (overleaf).

Table 3.4: Accommodation Works for 90 New Access Links				
Item	**Cost (£2006)**	**Average across Study Areas**	**Requirement along 90km**	**Total Cost**
Clearance	£164.40 per km	n/a	90km	£14,800
Accessible path surface (1.2m wide)	£15/m^2	77% can be made accessible (i.e. not too steep or unstable)	69.3 km or 83,160 m^2	£1,247,400
Furniture (e.g. accessible kissing gate)	£330 per item	2.2 km (distance between furniture items)	41 items	£13,500
Signpost	£130 per item	2.7 km (distance between signposts)	33 items	£4,300
Low: Total cost excluding accessible path surface				**£32,600**
High: Total cost including accessible path surface				**£1,280,000**
Low: NPV				**£27,000**
High: NPV				**£1,057,600**

3.5 Overview of Implementation Costs for Introducing New Access under the Mapped and Unmapped Approaches

Table 3.5 presents the total costs of the key costs components for introducing new access under Options 2 and 4; these are in the region of £15.3-£35.3 million and £10.0 - £24.0 million respectively. Net present values, over 20 years, are also presented. Whilst the unmapped approach is assumed to be cheaper and quicker to complete than a mapping approach, a number of factors decrease the difference between the two approaches, namely:

- the inclusion of providing public information for Option 4 as an implementation cost, rather than a management cost as for Option 2 (see Section 5) – the implementation of Option 4 is dependent upon the provision of this information;
- the potential for more disputes under Option 4;
- higher costs of setting up a restrictions regime for Option 4 compared to Option 2; and
- the (assumed) quicker implementation costs of Option 4 results in higher net present values.

The lower cost estimates are based on the previous experience of the Open Access project. However, there is some uncertainty associated with applying the same approach to coastal land (i.e. availability if data sets, stakeholder reaction, etc.) and the greater the variation from the previous approach, the greater the uncertainty in costing the approaches becomes.

Table 3.5: Implementing Costs for Introducing New Access under Options 2 and 4 (National Costs)

Cost Component	Option 2		Option 4	
	Total Costs	**NPV Costs**	**Total Costs**	**NPV Costs**
Introducing New Access Along the Coast				
Mapping/Descriptive Exercise	9.3 - 17.4	8.7 - 16.2	4.0 - 7.9	3.8 - 7.5
Appeals/Dispute Process	2.2 - 11.2	2.1 - 10.3	1.2 - 8.4	1.1 - 8.0
Accommodation Works Along the Coast	2.0	1.7	2.0	1.8
Introducing New Access Links to the Coast				
Access Links	0.7 - 2.4	0.6 - 2.0	0.7 - 2.4	0.6 - 2.0
Accommodation Works to the Coast	0.03 - 1.3	0.03 - 1.1	0.03 - 1.3	0.03 - 1.1
Restrictions Regime (set-up costs) (see Section 4)	1.1	0.9	2.1	2.0
Total Implementation Costs	**15.3 - 35.3**	**14.1 - 32.2**	**10.0 - 24.0**	**9.3 - 22.2**

4. MANAGEMENT AND MAINTENANCE COSTS FOR COASTAL ACCESS

4.1 Overview

Management and maintenance costs relate to ongoing, annual costs, which are required to ensure the continued provision of an accessible coastline[7]. These include the operation of a restrictions regime under Options 2 and 4, and maintenance costs under all four options.

Annual maintenance costs relate to:

- vegetation cutting;
- replacement and/or repair of furniture; and
- inspections and closures.

Annual maintenance is required under all four options for improving coastal access, as this is fundamental to providing a safe and pleasant access experience. All maintenance costs are considered here, including those for existing paths, since there is the potential for the maintenance of existing PROW to be improved to National Trail standards. In addition, there is no statutory requirement to maintain the National Trails to the current standard, thus it is not certain that this maintenance would continue without a programme for improving coastal access. It should be noted however, that existing ROW would continue to be maintained, thus the costs under Option 1 include an element which would be incurred regardless of improved coastal access.

4.2 Restrictions Regime (Options 2 and 4)

Summary

Key Assumptions	Estimated Costs	Data Sources
• A National Contact Centre has been established for managing restrictions on open access land. It is assumed that the additional costs of a restrictions regime for coastal land will include a proportion of the costs of this Centre for additional overheads incurred. • The relevant proportion may be 10% for Option 2, but higher for Option 4, perhaps 20%, as the lack of maps may complicate the process	**Option 2:** • The set-up costs are £1.1 million (incurred in year 3) • Set-up NPV: £0.9 million • Annual running costs are £0.80 -£1.60 per ha of open access land • Annual running costs are incurred for 16 years (years 4 to 19): £5.5 - £11.1 million • Running costs NPV: £3.8 - £7.5 million • Total costs: £6.6 - £12.1	• Countryside Agency (2004): *Open Access Total Project Costs*, Board Paper AP04/20 • Correspondence with the Countryside Agency

[7] Under Option 3, annual management and maintenance costs for agri-environment schemes have been included under the implementation costs presented in Section 2, since the payments ensure the provision of access, as well as its management.

Key Assumptions	Estimated Costs	Data Sources
• The number of restrictions can be estimated based on previous experience, however this is uncertain. • The annual costs of a restrictions regime are the same for Options 2 and 4, however if a descriptive approach is completed more quickly than a mapping approach, the annual costs may begin earlier under Option 4 • The estimated costs relate only to those incurred by the Countryside Agency and not by other stakeholders	million **Option 4:** • The set-up costs are £2.1 million (incurred in year 2) • Set-up NPV: £2.0 million • Annual running costs are £0.80 - £1.60 per ha of open access land • Annual running costs are incurred for 17 years (years 3 to 19): £5.8 - £11.7 million • Running costs NPV: £4.1 - £8.2 million • Total costs: £8.0 - £13.8 million • NPV: £6.0 - £10.1 million	

Explanation of Costs Data

Landowners and others with a legal interest in access land have the right to impose local restrictions on the new rights of access for up to 28 days a year, and to apply for longer term restrictions. Restrictions applications are processed in a similar manner to the mapping process; with each application validated and considered individually and the applicant has a right of appeal against any decision made.

The Countryside Agency has awarded a contract to provide a GIS IT system and central contact centre in order to register, monitor and report on restrictions information and to facilitate the flow of information to land managers and the general public. The programme costs (at 2006 prices) of the central contact centre were £10.5 million, with staff costs of £1.9 million and running costs of £0.5 million (Countryside Agency, pers. com.; see Annex 2, Table A2.2). Data from Asken Ltd notes that five staff currently operate the restrictions regime, at a cost of £48,000 each per year. This provides an ongoing staff cost of £240,000; it is assumed that the running costs are additional overheads, thus the total running cost of the restrictions regime is estimated to be £740,000 per year or £0.8 per ha.

Given that the Open Access Contact Centre (OACC) has already been established, the set-up costs of a restrictions regime for coastal land should be significantly less. However, it is possible that some overheads and additional costs will be incurred (for example, the Open Access restrictions regime programme costs included restriction regulations, nature conservation and consultancy costs, legal and technical advice and restrictions appeals). A key determinant of the costs of the restriction regime is the degree of similarity between the rules for imposing restrictions under open access regulations and those for coastal access. For example, if different time periods are introduced for coastal access restrictions than for open access restrictions this would essentially introduce a completely new system. Whilst it is unlikely that the entire

costs of the open access restrictions programme would be incurred again, it would have implications for the current contract for managing the restrictions regime and thus the overall costs. However, the closer the coastal restriction rules are to the open access rules, the lower the costs would be. Asken Ltd notes that the OACC has the capacity to increase throughput without major cost increases; therefore the closer the two restriction regimes are, the lower the costs are likely to be.

If it is assumed that the restrictions regime for coastal land under Option 2 follows a similar regime that for open countryside, it could be assumed that the coastal access restrictions regime incurs costs similar to 10% of the original set-up costs; this would result in set-up costs of £1 million. This is included as an implementation cost, summarised in Section 3.5. The estimated annual running costs, based on the area of coastal land, are £345,440 per year.

It is possible that the unmapped approach could be completed more quickly than the mapping approach. In this case, the rights to access would start, say, a year earlier and thus the restrictions regime would also start a year earlier. Therefore, the total costs of a restrictions regime could be higher under Option 4 than under Option 2 if an extra year of costs were incurred. However, it should also be noted that a restrictions regime for an unmapped approach is likely to be more complicated as some way of communicating and recording restrictions will be needed. This additional complexity may increase the costs incurred, and it is assumed that 20% of the original set-up costs are required to introduce this new regime under Option 4. This would result in set-up costs of £2 million (included as an implementation cost, summarised in Section 3.5), with the same annual running costs of £345,440 per year.

However, a further uncertainty is the number of restrictions which may be received. Given the currently low cost of restrictions per ha, the number of restrictions (and thus cost per ha) would have to increase significantly to affect the overall costs of the Options. However, by way of example, and for consistency with the ranges presented earlier in the section, a doubling of the running costs is assumed to provide the upper estimate, giving a value of £690,880.

The total costs of a restrictions regime over 20 years could be around £6.6-12.1 million (Option 2) and £8.0-13.8 million (Option 4); however, the costs are divided by implementation and management costs. Annual management costs are likely to total £4 - £8 million (NPV) over the 20-year period.

4.3 Maintenance Costs for New Onward Access Along the Coast

4.3.1 Access Management Grant Scheme (AMGS) or Similar (Options 2 and 4)

Summary

Key Assumptions	Estimated Costs	Data Sources
• Previous experience with an AMGS for open access land provides a basis for estimating the costs of an AMGS for coastal land • The annual costs for the first three years when access rights are first granted (years 2-4) have been accounted for in Section 3.4 • The annual costs will be lower after the first three years and will relate to maintenance rather than construction/preparation • Whilst there is no suggestion that the current AMGS will run for longer than 3 years, some form of maintenance (and thus costs) will be required for access land, therefore these costs are used as a basis. In practice a different funding mechanism may be used • Between 143,390 ha and 431,800 ha of coastal land may require maintenance	• The costs of maintenance are slightly higher for Option 4 than for Option 2 given that it runs for an extra year within the 20 year period • Option 2: £2.0 - £6.0 million (over 14 years) • NPV Option 2: £1.3 - £4.0 million • Option 4 : £2.2 - £6.5 million (over 15 years) • NPV Option 4: £1.4 - £4.3 million	• Correspondence with the Countryside Agency

Explanation of Costs Data

The Access Management Grant Scheme (AMGS) is designed to provide short-term financial help and guidance to those who will undertake the practical management of the new rights of access; with a focus on areas of nature concern and areas likely to be popular with visitors. The current scheme for open access land is in its third year; it is not clear to the Consultants how many more years the scheme will run for. However, some form of maintenance of coastal access land would be required, therefore it is useful to consider extending the costs of the AMGS scheme, whilst recognising that these costs may be funded through other mechanisms and/or incurred by other stakeholders in the future. It is assumed that funding at £1.00 per ha (slightly lower than the average of the figures in Table 3.2, given indications that this funding is declining) will be applicable after the first three years (the annual costs for the first three years when access rights are first granted (years 2-4) have been accounted for as construction costs in Section 3.4). These costs account for both the Countryside Agency staff time in managing the grants as well as the value of the actual grants.

Thus, the total costs over the 20-year period range from £2.0-6.0 million under Option 2 to £2.2-6.5 million under Option 4.

4.3.2 Maintenance to National Trail Standards or Similar

Summary

Key Assumptions	Estimated Costs	Data Sources
• Maintenance costs under Option 1 and 3 are based on the annual average of three coastal National Trails • Maintenance costs under Option 3 agri-envt agreements are included within the annual payment made and are only presented for comparative purposes.	• Management and maintenance to National Trail standards at £580 per km (coastal NT average)	• Countryside Agency (pers. comm.)

Explanation of Costs

One of the aims of providing an onward coastal journey is that it should provide a route for people to enjoy. This implicitly requires a certain standard of provision, and it is assumed that a coastal route would be maintained to National Trail standards. The South West Coast Path funding formula provides comprehensive information on maintenance costs for a coastal path to National Trail Standards, which has an average value of around £570 per km per year (£920 per mile per year). However, trying to apply these detailed costs (see Annex 3, Table 3.2) to the costed coastal routes is uncertain, as detailed knowledge of the requirement for vegetation cutting, furniture repair, etc. is not available. Instead, an average value of £580 per km per year can be used for paths under Option 1 and Option 3, where this is the average management and maintenance cost for three coastal National Trails, as shown in Table 4.1. It is noted that the overall average figure for National Trails is skewed by a large figure for the Hadrian's Wall Path, thus the coastal average figure is considered to be more appropriate.

Table 4.1: Comparison of National Trail Management and Maintenance Expenditure (2005/6)

National Trail	£/mile	£/km
Ridgeway/Thames Path	1,441	895
North Downs Way	656	408
South Downs Way	1,060	659
Yorkshire Wolds Way	696	432
Pennine Way	2,027	1,260
Hadrian's Wall Path	5,000	3,107
Inland NT Average	*1813*	*1,127*
Peddar's Way	978	608
Cleveland Way	864	537
South West Coast Path	963	598
Coastal NT Average	*935*	*581*
Overall NT Average	**1,521**	**945**

Source: Countryside Agency (pers. comm.)

Study Area Results

The costs of management and maintenance to National Trail Standards have been applied to the whole study area routes under Option 1, and to the whole route and to the route minus agricultural land under Option 3. This relates to earlier assumptions that access under Option 3 may either be provided solely by land dedication or by a mixture of agri-environment scheme access on agricultural land and land dedication on other land types. Payments under agri-environment schemes (as accounted for in Section 2) include the costs of maintaining the access routes. Therefore, the costs of the agri-environment scheme payments are only provided below for comparison.

The costs of maintenance under an AMGS-type scheme have been applied to each study area for Options 2 and 4 based on an area of 200m by the length of access. The value of £1 per ha is applied to the area of coastal access land for comparison across the study areas, but in practice these costs duplicate the figures given for England as a whole (above) and are only included once within the total figures presented in Section 6.

It should be noted that maintenance costs increase each year under Options 1 and 3 as new sections are implemented. In Year 4, the costs cover existing PROW (and other permissive access for Option 3) plus any lengths of footpath created that year. Subsequent years will add further sections to be maintained, until such time that the full route is implemented (between years 14-19 under Option 1 and 13-19 under Option 3) Maintenance costs for coastal access land under Options 2 and 4 cover the whole of the area from Year 6 (Option 1) and Year 5 (Option 3). Table 4.2 presents the annual cost of maintaining the coastal routes in the study areas in Year 19, i.e. once the entire route has been implemented.

Table 4.3 presents the total costs over 20 years and net present value costs discounted at 3.5%. As would be expected, costs for maintaining routes to National Trail standards under Options 1 and 3 are similar, with a slight variation due to a greater proportion (i.e. existing PROW and permissive access) being maintained from Year 4 under Option 3 compared to only existing PROW under Option 1. However, the costs of maintaining the route under Option 3 is considerably higher when the annual agri-environment payments are taken into account. These payments should be viewed as a means of securing access, as well as maintaining it, and therefore cannot wholly be considered as maintenance payments. Maintenance costs under Options 2 and 4 for the study areas are considerably lower.

Table 4.2: Annual Costs of Maintenance in Year 19 for All Options				
Option *(and additional information)*	**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Option 1: Length of Access (km)	*41.5*	*68.7*	*283.1*	*139.9*
Option 1: Cost of Maintenance to National Trail Standard (@ £580 per km)	£24,100	£39,900	£164,200	£81,100
Option 2 & 4: Area of Coastal Land (ha)	*810*	*4,128*	*5,582*	*2,758*
Options 2 & 4: Cost of Maintenance (@ £1per ha)	£810	£4,128	£5,582	£2,758
Option 3: Length of Access, excluding agri-envt access (km)	*41.0*	*41.8*	*238.7*	*104.7*
Option 3: Cost of Maintenance to National Trail Standard (@ £580 per km)	£23,800 - £24,100	£24,200 - £39,900	£138,400 - £164,200	£60,700 - £81,100
Option 3: Cost of Agri-envt Payments	*£2,500 - £4,800*	*£130,200 - £220,000*	*£215,800 - £435,500*	*£173,200 - £343,400*
Option 3: Total Cost	*£24,100 - £28,600*	*£39,900 - £246,200*	*£164,200 - £573,900*	*£81,100 - £404,100*

Table 4.3: Costs of Maintenance Over 20 Years for All Options				
Option	**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Total Costs				
Option 1: Cost of Maintenance to National Trail Standard	£346,800	£1,798,400	£2,263,900	£1,139,600
Option 2: Cost of Maintenance under AMGS-type Scheme	£11,300	£57,800	£78,100	£38,600
Option 3: Cost of Maintenance to National Trail Standard	£353,200 - £358,800	£1,661,100 - £1,846,300	£2,127,800- £2,459,200	£970,000 - £1,224,100
Option 3: Cost of Agri-envt Payments	*£40,600 - £76,500*	*£1,642,500 - £2,800,200*	*£2,763,200 £5,576,000*	*£2,070,900 £4,104,800*
Option 3: Total Cost	*£358,800 - £429,700*	*£1,846,300 - £3,146,800*	*£2,459,200 - £7,703,900*	*£1,224,100 - £5,074,800*
Option 4: Cost of Maintenance under AMGS-type Scheme	£12,200	£61,900	£83,700	£41,400

Table 4.3: Costs of Maintenance Over 20 Years for All Options				
Option	**County Durham and Hartlepool Coast**	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Net Present Value Costs (discounted at 3.5%)				
Option 1: Cost of Maintenance to National Trail Standard	£231,800	£1,210,900	£1,505,800	£761,000
Options 2: Cost of Maintenance under AMGS-type Scheme	£7,400	£38,000	£51,300	£25,400
Option 3: Cost of Maintenance to National Trail Standard	£237,500 - £241,400	£1,127,100 - £1,247,300	£1,441,700 - £1,657,800	£661,100 - £826,800
Option 3: Cost of Agri-envt Payments	*£27,700 - £52,200*	*£1,064,900 - £1,815,500*	*£1,800,700 - £3,633,600*	*£1,345,900 - £2,667,800*
Option 3: Total Cost	*£241,400 - £289,700*	*£351,100 - £2,046,400*	*£1,657,800 - £5,075,300*	*£826,800 - £3,328,900*
Option 4: Cost of Maintenance under AMGS-type Scheme	£8,100	£41,400	£56,000	£27,700

5. CREATION OF A WIDER BENEFITS CORRIDOR AND PROVISION OF PUBLIC INFORMATION

5.1 Overview

This Section covers the remaining cost components which are common across all four options, namely:

- a wider benefits corridor, covering:
  - improvements in environmental quality; and
  - improvements in visitor experience; and

- public information, covering:
  - a coastal access code.

For each cost component, the key assumptions and costs data are presented in summary tables at the beginning of each section, to provide a clear picture of the main issues. These data are then described in more detail below, and additional data can be found in the Report's Annexes as indicated.

All costs data collated for this study have been adjusted to 2006 prices, using the Retail Price Index (Office of National Statistics, 2006) to account for inflation. Estimated costs for the future, under each Option, are presented as total costs and also as net present values (discounted at 3.5%, Treasury rate) over a 20-year period.

5.2 Wider Benefits Corridor

5.2.1 Overview

The aim of a wider benefits corridor (WBC) would be to improve landscape and habitat quality and also to improve the visitor experience. Improvements in environmental quality could be achieved through the Environmental Stewardship scheme, whilst improvements for visitor experiences could include interpretation of special features along the coast, potentially funded under an AMGS-type scheme. This could include interpretation boards, self-guided walks, benches etc.

However, the concept of a WBC is inspirational in its objectives and goes beyond public access to include cultural and environmental improvement. As such, the extent of work that could be undertaken is almost limitless and a WBC could consume as much resources as are made available. As such, developing and improving the WBC is likely to depend on the level of resources available at any given time and it would be more meaningfully defined at the local level.

For these reasons, and given that the WBC is common across all Options, a total cost for the WBC has not been provided. Instead, an indication of the options that may be used to improve the local environment, and associated costs, has been presented.

5.2.2 Improving Environmental Quality

One basis for improvements in environmental quality could be the Environmental Stewardship Scheme, managed by the Rural Development Service (RDS). Data have been provided by the RDS on agreements under the Countryside Stewardship Scheme and Environmentally Sensitive Areas[8], and Table 5.1 provides an example of options which are relevant to each study area, and the current percentage of land under these types of options. These range in cost from £35 to £700 per ha.

Table 5.1: Example Options under the Environmental Stewardship Scheme for Each Study Area and Current Percentage of Land under Management Options

Option	Cost (per ha)	County Durham and Hartlepool Coast	North Devon, Exmoor & West Somerset Coast	Southern Cumbrian Coast & Morecambe Bay	Suffolk Coast
Restoration of sand dunes	£140			4%	
Maintenance of reedbeds	£60	1%			
Creation of inter-tidal and saline habitat on arable land	£700		1%	1%	
Conservation headlands in cereal fields with no fertilisers or manure	£330	3%			
Maintenance of lowland heathland	£200		11%		1%
Manage in-bye grassland with low inputs	£35			26%	
6m Uncropped, cultivated margins on arable land	£400	4%			1%
Restoration of species-rich, semi-natural grassland	£200	14%	4%		13%
Permanent grassland with low inputs	£85		9%		10%
Maintenance of woodland	£100			2%	

5.2.3 Improving Visitor Experience

Improving visitor experiences includes providing better interpretation of key features. Key features may include land with nature conservation designations, scheduled

[8] More recent data covering the Environmental Stewardship Scheme were not used as it was considered that these would not yet provide an accurate picture of relevant prescriptions for each study area.

ancient monuments and heritage sites. Better interpretation of these key features could include:

- an interpretative panel/large information panel @ £1,350;
- a bench @£120; and
- full colour folded leaflets @ £175 per 1,000, for example for circular walks.

These costs are based on the Access Management Grant Scheme and the Higher Level Stewardship scheme; however, it is not clear how the improvement of visitor experiences would be funded and these costs are indicative only.

5.3 Provision of Public Information

5.3.1 Coastal Access Code

Summary

Key Assumptions	Estimated Costs	Data Sources
• The costs of providing a coastal access code will be similar to those for the Countryside Access Code. • The costs will be fixed costs, and will not vary according to the area of coastal land open for access. • Unlike the Countryside Code, all costs of producing the access code will be attributable to improving access to the coast.	• Cost of producing a coastal access code: £1.33 million • Spread over two years (years 3 and 4) for each option • **NPV £1.18 million**	• Countryside Agency (2004): *Open Access Total Project Costs*, Board Paper AP04/20 • Correspondence with the Countryside Agency

Explanation of Costs Data

If access to the coast is increased and improved, it will be necessary to provide public information to increase awareness of coastal safety, nature conservation and land management issues. The Countryside Agency has a statutory duty to prepare a code of conduct in relation to access rights and, as part of the Open Access programme, launched a new Countryside Code. The Countryside Agency (2004) states that the cost of producing the Countryside Code was £1.09 million (in 2006 prices), with estimated staff costs of £240,000, providing a total cost of £1.33 million.

This value is taken as an estimate for producing a coastal access code, which is attributable to all options. It is assumed that this cost is spread over two years and is attributed to years 3 and 4 for each option. This provides a net present value of £1.18 million for providing public information.

It should be noted that this cost is already included for Option 4 in Section 3, as it is assumed that the unmapped approach provides information to the public, alongside the coastal access code, which is critical to its implementation.

6. COMPARISON OF COSTS AND CONCLUSIONS

6.1 Overview

This study has estimated the total implementation and maintenance costs for each of the four options for improving coastal access, assessing different cost components at a national and/or study area level. The study has involved a desk-based assessment, utilising study area survey data provided by the Countryside Agency. The costs have taken into account previous experience with the Open Access project; however, a key uncertainty is how approaches to improve coastal access may be undertaken in practice. The results of the study are discussed below.

6.2 Comparison of Costs by Option

Table 6.1 sets out the total net present values costs (discounted at 3.5% over 20 years) for each Option. It should be borne in mind that the costs for Options 2 and 4 are national costs whilst Options 1 and 3 are study area costs plus the cost for a national public information campaign. The range of costs under Options 1 and 3 are discussed further in Section 6.3 on the study area costs.

Table 6.1: NPV Costs over 20 Years for Improving Coastal Access by Option (£ million)

Cost Component	Option 1 (Four study areas + national information)	Option 2 (National)	Option 3 (Four study areas + national information)	Option 4 (National)
Implementation Costs				
Introducing new access along the coast	3.6 - 4.9	10.8 - 26.5	1.3 - 2.1	4.9 - 15.4
Introducing new access links to the coast		0.6 - 2.0		0.6 - 2.0
Accommodation works along the coast	0.1 - 3.5	1.7	0.1 - 2.1	1.8
Accommodation works to the coast		0.03 - 1.3		0.03 - 1.3
Restrictions Regime (Set-up)	n/a	0.9	n/a	2.0
Total Implementation Costs	**3.7 - 8.4**	**14.1 - 32.2**	**1.4 - 4.3**	**9.3 - 22.2**
Management Costs				
Management and Maintenance Works	3.7	5.1 - 11.5	4.0 - 3.5*	5.5 - 12.5
Provision of Public Information	1.2	1.2	1.2	Inc.
Total Management Costs	**4.9**	**6.2 - 12.6**	**5.2 - 4.6***	**5.5 - 12.5**
Total NPV Costs of Option	**8.6 - 13.3**	**20.3 - 44.9**	**6.6 - 8.9**	**14.8 - 34.3**

* The 'low' cost approach results in higher management costs because a proportion of the management costs for the 'high' cost approach (agri-environment schemes) are included in the implementation costs.

It can be seen that a range of cost estimates are presented for each Option – this reflects the uncertainty associated with predicting the costs of the different approaches. For example, the lower cost estimates for Options 2 and 4 are associated with a similar approach and/or level of interaction with landowners as for the Open Access project. Higher estimates reflect uncertainty associated with following a different approach and unknown levels of interaction with landowners which cannot be accurately forecast. However, it is difficult to assess the level of uncertainty associated with these factors, thus the range of costs should be viewed as indicative only of the costs that might be experienced in practice.

The costs for Option 4 are highly uncertain, since an unmapped approach has not been undertaken before and the approach is not yet fully developed. This uncertainty is likely to carry through to landowners and users, with the former potentially registering a higher number of disputes, and requiring greater investment in communication and publicity resources. These additional requirements reduce the difference in implementation costs between Options 2 and 4. In addition, there is an assumption that an unmapped approach could be implemented in four years, compared to five years for the mapped approach. This additional year adds extra operating costs for a restrictions regime, extra maintenance costs and affects the distribution of costs over the 20-year timescale, resulting in higher management costs over 20-years under Option 4 than for Option 2. It should also be noted that the provision of public information is a critical part of the implementation of Option 4, thus it is included within the costs of introducing new access along the coast for this Option. For the other Options, the provision of public information is a management, rather than implementation, cost.

6.3 Comparison of Costs by Study Area

Table 6.2 presents the costs for Options 1 and 3 by study area. The lower ends of the ranges represent the costs of creating PROW by agreement (Option 1) or by land dedication (Option 3). These are the least cost approaches for creating new access, and uncertainty regarding the staff costs for land dedication agreements means the low end of the cost range under Option 3 could be lower. Conversely, Creation Orders and agri-environment scheme results in the highest costs for creating access. Whilst statutory improvements appear more expensive over the 20-year period, it should be noted that these costs would secure public access and, over a longer timescale, only the maintenance costs would remain. Agri-environment schemes would require a continuing implementation expenditure over the next 20 years and beyond (assuming that such schemes continued) in order to retain permissive access routes.

In relation to the study areas, there are many factors affecting the costs. Whilst the length of access is most significant, factors such as private versus public ownership can increase the cost, as can the number of agricultural holdings and caravan parks. More significantly, the difference between the low and the high costs estimates for the study areas reflects the extent of accessible path surface included within the construction costs (and associated agri-environment payments).

Table 6.2: NPV Costs over 20 Years of Improving Coastal Access by Study Area				
	County Durham and Hartlepool Coast	**North Devon, Exmoor & West Somerset Coast**	**Southern Cumbrian Coast & Morecambe Bay**	**Suffolk Coast**
Option 1 – Statutory Improvements	0.5 - 0.7	1.9 - 2.6	3.3 - 5.8	1.7 - 2.9
Option 3 – Voluntary Approaches	0.4 - 0.5	1.5 - 2.0	2.3 - 3.4	1.3 - 1.8

6.4 Conclusions

The key conclusion for this study is that a centralised approach to improving coastal access would appear to provide a lower cost option than developing new rights of way or permissive routes at a local level, given that the costs for Options 1 and 3 are only based on four study areas, compared to the national costs of Options 2 and 4. However, consideration should also be given to the quality and security of the improvements provided, and the provision for an onward journey along the English coast.

There are a number of uncertainties underlying the cost assumptions, which may need to be investigated further, depending on how the approach to improving coastal access is taken forward.

- The lower bound costs of the mapped and unmapped options are based largely on previous experience under the Open Access project. However, it is noted that there is the potential for approaches to vary considerably from those used in the Open Access project, therefore the costs presented in this Report, in relation to mapping, appeals and restrictions may vary according to how the methods are implemented in practice. Whilst the upper bound costs attempt to reflect this uncertainty, there is little evidence to suggest how these costs may vary in practice.

- Different approaches to mapping coastal land may be followed, and aspects such as data availability, the use of local officers and site visits etc. may affect the costs. If the option to map coastal land is pursued further, a pilot study may help to refine the costs further.

- The unmapped approach is not fully developed, and further refinements to the approach may affect the costs presented in this Report. A pilot study may also help to refine the costs for this Option. The assumed timescale to be followed under Option 4 also has an affect on the relative costs of Options 2 and 4.

- For Options 1 and 3, the key uncertainties are the actual length of path required, the pattern of land ownership and the willingness to pursue Agreements/voluntary approaches vs. Creation Orders, which can only be resolved at the local level.

- For Option 3, the staff costs for land dedication are uncertain; any change in this cost may affect the relative costs at the low end of the range.

- In relation to agri-environment schemes, the requirement for a continued commitment of resources beyond the 20-year timescale just to retain access, suggests that this approach should not be pursued at the expense of other options. However, at the local level there may be locations where agri-environment schemes provide the best, or only, option for creating access.

- The requirement to provide an accessible surface for new routes (at an assumed cost of £15/m^2) accounts for a considerable proportion of the difference between low and high estimates in Options 1 and 3. In fact, it can increase the costs of construction by a factor of 20 to 90. Whilst this is likely to be a necessary cost, further consideration should be given to options for providing accessible routes on the coast, i.e. suitability of different surfaces, relative costs, practicability, etc.

7. REFERENCES

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A1. COSTS DATA ASSOCIATED WITH STATUTORY AND VOLUNTARY APPROACHES TO IMPROVING COASTAL ACCESS

Table A1.1: Staff and Administrative Costs Associated with Creating New Public Rights of Way (£2006)		
Type of Mechanism	**Cost**	**Source**
Public Path Order	£3,840	Consultation with National Trail Officer
Public Path Order	£2,952	Consultation with National Trail Officer
Public Path Order	£5,000	Countryside Agency (2005b)
Public Path Agreement	£200	Consultation with National Trail Officer
Public Path Agreement	£1,130	Countryside Agency (2005b)
Orders and Agreements	£5,000	LHA Comments
Average	**£3,000**	

Table A1.2: Costs for Agri-environment Schemes (2006/7)			
	Countryside Stewardship Scheme	**Environmentally Sensitive Area Scheme**	**Average Cost @ £22 per hr**
New Applications	53.75 hrs per case	37 hrs per case	45.4 hrs = **£1,000**
Managing Existing Agreements	12.5 hrs per case	13.0 hrs per case	12.8 hrs = **£280**
Compliance Monitoring	5% of agreements @ 3.3 hrs per case	5% of agreements @ 3.3 hrs per case	5% of agreements @ **£70**
Care & Maintenance (site visit to monitor progress)	25% of agreements @ 8.5 hrs per case	5% of agreements @ 8.5 hrs per case	15% of agreements @ **£190**
Source: RDS (pers. comm.)			
Note: Both schemes closed in 2004, therefore the costs for new applications are not currently applicable, but provide a representative value. Although data for Environmental Stewardship were offered; due to the relative newness of the scheme these did not represent 'business as usual' costs and were therefore considered to be unrepresentative			

Table A1.3: Legal Fees and Costs Associated with Creating New Public Rights of Way (£2006)	
Public Path Creation Order	**Public Path Creation Agreement**
Cost per Order (rounded to nearest £50)	**Cost per Agreement (rounded to nearest £50)**
£2,150	£3,150
Source: Countryside Agency (2005b) and consultation responses	

Table A1.4: Estimated Legal Costs of Access Creation	
Form of Discussion	**Unit Cost (£2006)**
Landowner as willing participant	2,400
Landowner as reluctant participant	4,800
Legal challenge (test case)	120,000
European Convention on Human Rights challenge	300,000
Source: Entec (1999)	

Table A1.5: Approximate Compensation Rate by Land Type Across the UK			
Land Type	**Compensation Rate (£/linear metre)**		
	Minimum	**Average**	**Maximum**
Public/utility	0.00	0.00	0.00
Moor	1.00	1.10	1.30
Inbye	1.30	1.80	2.40
Upland arable	2.30	2.60	2.90
Dairy	2.90	3.60	4.40
Upland pasture	0.80	5.50	13.70
Woodland	-	10.30	-
Lowland grazing	-	12.40	-
*Cliff top/coastal land**	*10.00*	*14.10*	*19.20*
Riverside meadow	7.30	15.00	22.60
Residential	24.70	31.00	37.60
Amenity land* (e.g. golf course)	-	43.50	-
Source: based on RAC (2006), figures rounded to nearest £0.10. * Amenity land and cliff top/coastal land value derived from consultation with National Trail Officers			

Table A1.6: Payments for Permissive Access Agreements based on the Higher Level Stewardship Scheme	
Access Option	**Annual Payment**
Permissive open access	£41 / ha
Permissive footpath access	£45 / 100m
Access for people with reduced mobility	£100 / 100m
Upgrading CROW access for people with reduced mobility	£105 / 100m
Permissive bridleway / cycle path access	£90 / 100m
Upgrading CROW access for cyclists/horses	£90 / 100m
Educational access – payment per visit	£100 / visit (not annual)
Linear and open access base payment	£350 / agreement
Educational access – base payment	£500 / agreement
Source: Defra (2005)	

Table A1.7: Construction Costs for Access Provision				
Item or Field of Work	**Access Management Grant Scheme – Guide Cost (2004)**	**Higher Level Stewardship Costs (2005)**	**South West Coast Path Funding Formula (2005)**	
			Unit Cost	**Lifespan (years)**
Access Management Planning	£2-£5 / ha			
Fire Planning	£2-£5 / ha			
Infrastructure Items				
Timber kissing gate (extra deep)	£350	£290		
Timber kissing gate (standard)	£300	£245	£240	15
Timber bridlegate/hunt gate	£300	£220		
Wicket pedestrian gate	£80			
Timber field gate	£220			

Table A1.7: Construction Costs for Access Provision				
Item or Field of Work	**Access Management Grant Scheme – Guide Cost (2004)**	**Higher Level Stewardship Costs (2005)**	**South West Coast Path Funding Formula (2005)**	
			Unit Cost	**Lifespan (years)**
Dog gate		£35		
Other gate			£180	10
Gate (urban)			£640	20
Footbridge (5-6m span)	£80 /m	£315 each	£150 / m	25
Bridlebridge			£160 / m	25
Ditch crossing (1.2m span)	£200			
Boardwalk			£70 / m	15
Step - timber			£20	12
Step - stone			£60	30
Step - concrete			£100	50
Staircase (wooden, up to 12 steps)			£30	12
Stepping stone (natural stone)			£10	10
Stepping stone (concrete)			£100	50
Timber step stile	£90	£100	£180	20
Stone step stile	£120	£85	£540	50
Step over stile in stone wall		£115		
Stone gap stile (dog stile)	£100	£85	£90	20
Ladder stile	£115	£125		
Stile (urban)			£270	10
Bench		£115		
Hard standing for car park		£13/m^2		
Hard standing for disabled paths		£15/m^2		
Signage				
Non-directional sign (small, simple)			£50	15
Non-directional sign (large, complex)			£160	15
Non-directional sign (urban)			£270	10
Interpretative panel/large information panel	£1,320			
Access management sign (local A4 sign laminated and mounted)	£40			
Way Marking				

Table A1.7: Construction Costs for Access Provision				
Item or Field of Work	**Access Management Grant Scheme – Guide Cost (2004)**	**Higher Level Stewardship Costs (2005)**	**South West Coast Path Funding Formula (2005)**	
			Unit Cost	**Lifespan (years)**
Sign at main access point (rural)			£150	10
Sign on a road			£140	10
Sign at a junction (rural)			£160	10
Other directional sign (rural)			£60	15
Sign at main access point (urban)			£840	20
Other directional sign (urban)			£780	20
Metal pavement plaque			£30	30
Marker post with access symbol (non-directional)	£30			
Access symbol attached to an existing structure	£2			
Boundary marker post (1.3m)	£22			
Finger post	£40			
Stone marker	£50			
Fire Control				
Fire beaters – six in a simple stand	£75			
Boundaries				
Post and wire fencing	£1.20 / m	£1.20 / m		
Sheep fencing		£1.80 / m		
Deer fencing		£4 / m		
Permanent electric fencing		£1.20 / m		
Rabbit fencing		£1.50 / m		
Stone walling	£20 / m	£52 / m		
Stone walling gapping up	£19 / m	£6 / m*		
Earth bank restoration		£3 / m		
Stone faced hedge bank repair		£16 / m		
Stone faced hedge bank restoration		£34 / m		
Ditch dyke and rhyne restoration		£2.90 / m		
Barrier – wooden, post and rail			£30 / m	20
Barrier – urban, concrete or metal			£80 / m	30

Table A1.7: Construction Costs for Access Provision				
Item or Field of Work	**Access Management Grant Scheme – Guide Cost (2004)**	**Higher Level Stewardship Costs (2005)**	**South West Coast Path Funding Formula (2005)**	
			Unit Cost	**Lifespan (years)**
Barrier - stone			£40 / m	50
Barrier - earth			£11 / m	50
Bollard - wooden			£53	10
Bollard - metal or concrete			£320	15
Drainage and Other				
Drainage cutoff - wooden			£20	10
Drainage cutoff – stone, concrete			£60	25
Drainage pipe			£30	25
Drainage culvert – stone, concrete			£50	50
Drainage ditch – dug only			£17	10
Revetment - wooden			£30	10
Vegetation Cutting				
Quad mounted	£0.50 / m			
Manual	£0.20 /m			
Volunteer Expenses				
Volunteers undertaking practical works	£15 / day			

A2. COSTS DATA ASSOCIATED WITH MAPPING AND UNMAPPED APPROACHES TO IMPROVING COASTAL ACCESS

Table A2.1: Estimated Costs of Open Access Mapping Project		
Component Description	**Actual Cost (£)**	**Adjusted Cost (£2006)**
External Contractor – mapping of registered common land	£0.3 million	£0.3 million
External Contractor – mapping of open countryside	£15.8 million	£16.5 million
Other Project Costs (e.g. OS Licence fees, legal costs, aerial photography, etc.)	£4.2 million	£4.4 million
CA salaries and running costs	£4.0 million	£4.2 million
Total estimated value for the mapping project including CA staff costs	**£24.3 million**	**£25.4 million**
Cost per mapped ha of registered common land (2% of costs, 369,376 ha)	**£1.10 per ha**	**£1.15 per ha**
Cost per mapped ha of open access land (98% of costs, based on 566,305 ha)	**£42.19 per ha**	**£44.05 per ha**
Source: Countryside Agency (pers. comm.) Costs taken as 2004 prices and adjusted to 2006 prices.		

Table A2.3: Estimated Costs of Providing Information to Landowners		
Component Description	**Actual Cost (£)**	**Adjusted Cost (£2006)**
Mapping and appeals publicity	£1.4 million	£1.4 million
Communications strategy, launch preparation, publication of guidance material, commencement	£0.5 million	£0.5 million
CA salaries and running costs (est.)	£0.4 million	£0.4 million
Total Costs	**£2.3 million**	**£2.4 million**
Source: Countryside Agency (2004) Costs taken as 2004 prices and adjusted to 2006 prices.		

Table A2.3: Estimated Costs of the Restrictions Regime		
Component Description	**Actual Cost (£)**	**Adjusted Cost (£2006)**
Programme Costs	£10.1 million	£10.5 million
CA Staff Costs	£1.8 million	£1.9 million
Running Costs	£0.5 million	£0.5 million
Total Costs	**£12.4 million**	**£12.9 million**
Source: Countryside Agency (pers. comm.) Costs taken as 2004 prices and adjusted to 2006 prices.		

Table A2.4: Estimated Costs of the Access Management Grant Scheme (all £2006)			
Component Description	**Cost (04/05)**	**Cost (05/06)**	**Cost (06/07)**
Salary costs	£106,500	£170,100	£202,500
Running costs	£19,500	£47,500	£25,000
Training and Development	£10,400	£10,200	£10,000
Grants	£962,400	£2,018,000	£1,440,000
Total Cost	**£1.1 million**	**£2.2 million**	**£1.7 million**
Number of grants	59 grants	90 grants	<90 grants
Cost per ha of open access land	**£1.00 per ha**	**£2.10 per ha**	**£1.50 per ha**

A3. COSTS DATA ASSOCIATED WITH MAINTENANCE OF COASTAL ACCESS

Table A3.1: Estimated Costs of the Access Management Grant Scheme (all £2006)			
Component Description	**Cost (04/05)**	**Cost (05/06)**	**Cost (06/07)**
Salary costs	£106,500	£170,100	£202,500
Running costs	£19,500	£47,500	£25,000
Training and Development	£10,400	£10,200	£10,000
Grants	£962,400	£2,018,000	£1,440,000
Total Cost	**£1.1 million**	**£2.2 million**	**£1.7 million**
Number of grants	59 grants	90 grants	<90 grants
Cost of Grants per ha of open access land	**£1.00 per ha**	**£2.20 per ha**	**£1.50 per ha**

Table A3.2: Maintenance Costs of South West Coast Path to National Trail Standards		
Type of Route/ Maintenance Required	**Details of Work Required**	**Average Annual Cost per km (£2006)**
Off-road sections	a) twice annual inspections of the path @ 1hr/km/inspection b) managing maintenance schedules (including cutting and furniture replacement) and ensuring work is carried out to a high standard @ 1.4 hrs/km c) undertaking minor maintenance work @ 3.73 hrs/km d) managing temporary path closures @ 0.84 hrs/km e) liaising with landowners and tenants as necessary @ 1.5 hrs/km f) liaising with the public @ 3hrs/km g) legal work @0.5 hrs/km	Total of 12.97 hrs of staff time at £21.07/hr per km = **£273/km/yr**
Road sections	a) 2 annual inspections @ 0.5hr/km/inspection b) minor maintenance @ 0.75hrs/km c) public and general liaison @1.5 hrs/km	Total of 3.25 hrs of staff time at £21.07/hr per km = **£68/km/yr**
Surfaced routes supplement	Maintenance of sections of the off-road path where the surface is hardened or sealed (e.g. cycle and wheelchair accessible paths) has additional cost.	**£110/km/yr**
Unstable sections supplement	Extra costs involved in additional inspections, landowner negotiations and dealing with minor diversions.	**£121/km/yr**
Vegetation Cutting	1 cut per year	**£219/km**
	2 cuts per year	**£438/km**
	3 or more cuts per year	**£658/km**
	Occasional heavy cut	**£164/km**
	Occasional light cut	**£110/km**
Source: South West Coast Path (2005), costs adjusted to £2006		

A4. COSTS DATA ASSOCIATED WITH A WIDER BENEFITS CORRIDOR AND PROVIDING PUBLIC INFORMATION

Table A4.1: Estimated Costs of Providing Public Information on Open Access	
Component Description	**Cost (£2006)**
Countryside Code Preparation, launch & promotion	£1,089,000
CA salaries and running costs (est.)	£239,000
Total costs for information including CA staff costs	**£1.33 million**
Source: Countryside Agency (2004) *Costs taken as 2004 prices and adjusted to 2006 prices*	