



Lake District
National Park

Lake District Local Plan Review

Infrastructure Delivery Plan – Baseline Report

October 2017

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1 Introduction

Summary

1.1 The Lake District National Park Authority (LDNPA) is required to address infrastructure issues as part of the Local Plan Review. This requirement is set out in the National Planning Policy Framework (NPPF), specifically paragraph 162, which states in relation to infrastructure:

1.2 *Local planning authorities should work with other authorities and providers to:*

- *assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and*
- *take account of the need for strategic infrastructure including nationally significant infrastructure within their area.*

Plan should make clear - for at least the first 5 years - what infrastructure is required, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development. However, it is important to note that infrastructure requirements do not only stem from new development and it may be that infrastructure shortfalls already exist before new development is considered.

1.3 The purpose of this baseline report is to therefore assess the existing infrastructure and identify any deficits (whatever their cause) in physical, social and green infrastructure within the National Park. This covers the first stage of infrastructure planning and will provide the context to the more specific examination of infrastructure issues in relation to development planned over the next 15 years.

1.4 This report also provides a summary of planned infrastructure improvements and the associated costs based on information obtained from the main infrastructure providers. This will assist with the preparation of the draft

Infrastructure Delivery Plan (IDP) by helping to establish what infrastructure needs to be delivered, when and by which provider to support future development.

Types of Infrastructure

- 1.5 Infrastructure is not exhaustively defined in the Planning Act 2008. Instead it is defined to ‘include’ a number of items. This includes roads and other transport facilities, flood defences, schools and other educational facilities, medical facilities, sporting and recreational facilities, open spaces and affordable housing.
- 1.6 The Lake District National Park has some different infrastructure requirements and needs, such as rights of way and cycle routes. The Authority has therefore agreed that the Infrastructure Delivery Plan will cover the infrastructure detailed in Table 1.

Table 1: Scope of Infrastructure Facilities

Physical	Social	Green
Highways	Health	Sports and leisure provision
Public transport	Education	Open spaces (amenity)
Cycle routes	Emergency Services	Play areas
Public rights of way	Adult social care	Allotments and communal gardens
Electric vehicle charge points	Household Waste Recycling	Biodiversity/wildlife corridors
Flood prevention and management	Libraries	
Shoreline defences and management	Affordable housing	
Telecommunications	Extra care housing	
Broadband	Community facilities	

Gas Supply		
Electricity Supply		
Water Supply		
Waste Water		

Infrastructure Delivery Plan

- 1.7 The responsibility for maintaining and improving infrastructure lies with a broad range of bodies and providers (see Appendix 1); many of which have their own strategies, investment plans or targeted programmes that seek to ensure services are maintained or improved. However, the Local Plan cannot rely on infrastructure to materialise as and when development takes place. It requires a planned and coordinated approach to ensure infrastructure requirements are understood and due consideration given to anticipated development alongside any existing shortfalls.
- 1.8 The purpose of the Infrastructure Delivery Plan is not to create a freestanding, detailed document that would duplicate the function of existing and bespoke infrastructure investment plans, and which infrastructure providers would not be bound to deliver. Instead, it is a mechanism to ensure that infrastructure providers – individually and collectively - are planning for broadly the correct level of future development based on the policies contained in the Local Plan. This in turn informs the LDNPA’s approach to deriving developer contributions to help fund infrastructure requirements.
- 1.9 Developer contributions cannot, however, be used solely to resolve existing deficits in infrastructure although they may be used where new development would increase pressure on existing infrastructure. It is therefore important for the LDNPA to understand the adequacy and capacity of existing infrastructure provision to identify where these may restrict or prohibit future development, or where mitigation would be required.

2 Current Infrastructure Deficits and Planned Improvements

- 2.1 This section summarises the current provision and any known deficiencies for each of the types of physical, social and green infrastructure listed in Table 1. This work has been undertaken with the assistance of the infrastructure providers set out in Appendix 1 who were contacted to provide details of any specific existing deficits in their networks (which they can currently identify) and their plans for the delivery of infrastructure improvements. This information is reported in Tables 2 and 3 respectively.
- 2.2 Discussions with infrastructure providers are ongoing and the information in this section should be regarded as a 'working draft' which will be updated as more detailed information becomes available.

Table 2: Overview of existing infrastructure and known deficits

Existing Infrastructure		Known Deficits	Planned Improvements (Y/N)
Physical			
Highways	<p>Highways England are responsible for the strategic road network, including the A66 and A590 which pass through the National Park.</p> <p>Cumbria County Council (CCC), as the highways authority, is responsible for the repair and maintenance for most of the road network in the National Park. This includes:</p> <ul style="list-style-type: none"> • Arterial A-roads • Subsidiary B-roads • Minor roads – extensive network of ‘C’ and ‘U’ roads. <p>Formal public car and coach parks can be found at various locations throughout the National Park. These are managed by district councils, the LDNPA, National Trust, the Forestry Commission, United Utilities and other private sector suppliers.</p> <p>Petrol filling stations within the National Park are located at Keswick, Windermere, Ambleside, Troutbeck Bridge, Ings, Near Staveley, Coniston, Witherslack, Newby Bridge, Broughton and Holmrook. There are other filling stations located outside but in close proximity to the National Park.</p>	<p>No transport and infrastructure improvements relating to the strategic road network are currently planned by Highways England¹.</p> <p>No specific information about the road network or planned improvements has been provided by CCC. Information has therefore been obtained from the following studies:</p> <p>The West of M6 Strategic Connectivity Study² presents the results of the Options Assessment undertaken on schemes that have been prioritised for further development and assessment. While there is no commitment to deliver these schemes at present, the study is able to give an indication of where there are known highways issues (either relating to capacity/reliability, safety, connectivity or resilience) and which schemes may be taken forward in the future. Schemes located in the LDNP which have been prioritised for future consideration have been outlined below.</p> <ul style="list-style-type: none"> • A66 Lake Bassenthwaite – dual 70mph both ways • A66 Scales / Troutbeck climbing lanes • A590 dualling - Greenodd to Haverthwaite • A590 2+1 – Haverthwaite to Newby Bridge • A590 2+1 – Newby Bridge to Ayside • A590 dualling – Town End to Levens • Newby Bridge flooding alleviation 	<p>N</p> <p>Y</p>

¹ [Highways England, 2017 - Transport and Infrastructure Improvements in the North West](#)

² http://www.cumbrialep.co.uk/wp-content/uploads/2015/09/West-of-M6-Strategic-Connectivity-Study-Report_FINAL2.pdf

		<p>Cumbria LEP Infrastructure Plan³ identifies key investment projects and short term infrastructure priorities within the LDNP. This includes:</p> <ul style="list-style-type: none"> • A package of transport and highways improvements with town centres (Keswick, Ambleside, Windermere) to improve access and promote the use of sustainable modes. Detailed information is not available but the schemes are likely to include junction improvements and walking / cycling infrastructure to improve the use of sustainable modes of transport. • A wider package of projects designed to provide high quality transport infrastructure and sustainable transport services aimed at visitors. This could include packaging schemes such as the water/cycle improvements in the Keswick and Borrowdale corridor and the Windermere corridor. The projects will help to address a lack of sustainable connectivity at key gateways and hubs on the edge of the Lake District, a lack of connections between visitor attractions and public transport hubs, and missing links in high profile cycle routes. It is intended that the improvements would support the growth and diversification of the visitor economy whilst also potentially helping to reduce congestion. <p>Car parks in the National Park, especially those in key visitor locations, are prone to capacity issues at peak times.</p>	
Public transport	The provision of public transport is variable in the National Park, with some areas having frequent quality		

³ http://www.cumbrialep.co.uk/wp-content/uploads/2016/05/31341_Cumbria-LEP-Infrastructure-Plan_FINAL_v2-2.pdf

	<p>services seven days a week and other areas having no public transport. Although 78.4% of properties are within 500m of a public transport node (bus stop or train station) , this does not take into account the frequency of which some nodes are served⁴.</p> <p>Popular visitor destinations in the South East and Central Lakes have high levels of bus services, water transport and rail services. This is in contrast to the West Lakes which has poor public transport services.</p>		
	<p>Railway Services and private operators:</p> <p>‘West Coast Mainline’ – main arterial route between London and Glasgow, providing a fast north-south route through the Cumbria, with interchange for the Lake District at Oxenholme. Operator: Virgin Trains and First TransPennine</p> <p>‘Furness Line’ – links Lancaster and Barrow with stops including Grange and Ulverston for interchange to the Lake District. Operator: Arriva</p> <p>‘Lakes Line’ - links Oxenholme to Windermere, with stations at Burneside, Staveley and Windermere. Operator: First TransPennine</p> <p>‘Cumbrian Coast Line’ - links Carlisle and Barrow via the coast, connecting the Western Lake District. Operator: Arriva</p> <p>Network Rail is responsible for the operation and</p>	<p><i>National Rail’s Route Specification for London North Western</i> (2016)⁵ includes the rail network located within the National Park and provides a description of each route, its capability, passenger train service levels, freight trains, level crossings and proposed infrastructure investment in Control Period 5 (2014-19).</p> <p>This details the proposed overhead 25kV electrification of the Lakes Line (also known as Windermere branch line) to provide increased connectivity, faster journey times and a reduction in carbon emissions. However, the government confirmed on July 19 that it had cancelled the planned 25 kV 50 Hz electrification on the Lakes Line.</p> <p>A study examining options for increasing capacity and station accessibility along the Lakes Line has been commissioned and is expected to complete by summer 2017. This will feed into discussions about electrification of the line and enhancing services along the line, including the reintroduction of through services to Manchester International Airport.</p>	<p>Y</p>

⁴ NaPTAN data – 10,082 residential properties (see SA Scoping Report – Appendix B (Baseline Evidence)).

⁵ [National Rail’s Route Specification for London North Western \(2016\)](#)

	<p>maintenance of rail tracks, signalling bridges, tunnels and level crossings across Britain and is therefore responsible for the rail network that passes through the National Park.</p>	<p>Improvements to the Cumbrian Coast Line are set out as short term priorities in the Cumbria Infrastructure Plan and include measures such as line speed and infrastructure improvements, signalling changes, station upgrades and improved access. There is also possibility of reintroducing a Sunday service on the mid-section of the Cumbrian Coast Line, between Millom and Whitehaven.</p>	
	<p>Bus Services are operated on a commercial basis by a range of private operators, although the majority of the network is operated by Stagecoach. The main services in the Lake District include:</p> <ul style="list-style-type: none"> • '555' – Lancaster to Carlisle via Kendal, Windermere (including interchange with rail station), Ambleside and Keswick. • 'X4/5' – Penrith to Workington, interchanging with mainline rail at Penrith and providing a service to Keswick and Cockermouth. • 'X6' – Kendal to Barrow, providing a link along the southern boundary of the National Park. <p>There are a number of community transport schemes in operation within the National Park, particularly in sparsely populated rural areas where bus services are not commercially viable. These include:</p> <ul style="list-style-type: none"> • Community minibuses include the Muncaster Microbus (operating within Bootle, Eskdale, Wasdale, Holmrook, Seascale and Gosforth) and the Northern Fells (covering Caldbeck, Ireby, Uldale and Mungrisdale) which provide a scheduled bus service and demand responsive service respectively. 	<p>CCC has previously subsidised bus services no longer considered commercially viable but continue to meet social needs; however, budget cuts meant these subsidies were withdrawn in 2014-15 leading to the loss / reduction of some bus services. There is now no public subsidy of bus services in the Lake District and authorities have limited influence over routes, fares and timetables which are set by the operator.</p>	<p>N</p>

	<ul style="list-style-type: none"> • ‘Rural wheels’ provides a door-to-door transport service for people who do not have or are unable to access scheduled transport. Ran by taxi operators and subsidised by CCC. • ‘Village wheels’ provides a timetabled service for communities to their nearest town. Services are in operation from Buttermere to Cockermouth, Greystoke to Penrith, Grizebeck to Ulverston and Seascale – Gosforth – Egremont. • Voluntary car schemes whereby volunteers are paid to give people lifts in their own vehicles. <p>Further information on each of these schemes is set out in the Access and Travel Main Issues Paper (March 2017)⁶.</p>		
	<p>Water transport (passenger) services operate on:</p> <ul style="list-style-type: none"> • Windermere (operator: Windermere Lake Cruises) • Coniston (operator: Coniston Launch and Steam Yacht Gondola) • Ullswater (operator: Ullswater ‘Steamers’) • Derwentwater (operator: Keswick Launch). <p>These services are well used by residents for leisure purposes although they also serve utility purposes. The services on Windermere and Ullswater operate throughout the year while those on Derwentwater and Coniston provide a reduced service (weekend only) during the winter months.</p> <p>In addition to the above passenger services, there is</p>	<p>Many jetties and piers are unsuitable for use during times of high and low water levels which often results in the cancellation of services. As such, there is a need to replace fixed jetties with floating jetties (and in some cases extend jetties) to increase resilience. There are plans to improve public jetties on Derwentwater, Coniston Water, Windermere, and Ullswater</p> <p>There are insufficient numbers of foot and cycle paths between existing jetties making it difficult for passengers to make best use of the water transport services.</p>	<p>Y</p>

⁶ [Lake District Local Plan Review – Access and Travel Evidence and Main Issues Paper \(March 2017\)](#)

	also the Windermere ferry – a motorised cable ferry set up for motor vehicles - which operates between Ferry Nab (near Bowness) and Ferry House (western shore of Windermere). It has capacity for 18 cars and over 100 passengers and runs throughout the year providing an important link for local residents and visitors.		
Public rights of way	<p>The National Park contains 2,206km of public footpath and 933km of public bridleway. These rights of way offer opportunities for walking, cycling and riding.</p> <p>There is also 1,246 sq.km of open access land.</p> <p>The LDNPA's 'miles without stiles' initiative helps those with limited mobility to access the countryside by providing suitable paths. To date, there are approximately 140km of accessible public footpaths.</p>	<p>There are gaps in the existing network (resulting in people needing to walk along busy roads) and there are a number of settlements that do not have footways or footways of limited width which are not suitable for people with disabilities.</p> <p>There is a need to develop paths and footways in settlements, where appropriate, and create more 'miles without stiles' routes, especially close to centres of population or visitor hubs.</p> <p>There are proposals to improve access to the coastline, with new sections of coastal path to be created in strategic places to link existing coastal paths thus providing a continuous route along the coastline⁷. Part of the trail is dependent on new river crossings over the Rivers Irt and Esk⁸.</p>	Y
Cycle routes	<p>The number of people cycling in the Lake District has grown in popularity in recent years and a series of programmes have emerged to increase the opportunities for visitors to get around the Lake District using alternative, more sustainable transport modes.</p> <p>The GoLakes Travel cycle network has developed a series of five off-road trails in the Central and Southern</p>	<p>There are infrastructure gaps in the cycle network and demand for the development of new, and improvements to existing, cycle links across the National Park.</p> <p>The emerging Cumbria Access and Recreation Strategy 2017 seeks to develop an integrated network of access, recreation and transport facilities that will encourage people to cycle. This will also identify priority areas for the</p>	Y

⁷ [Coastal Access – Whitehaven to Silecroft, Natural England's Report to the Secretary of State \(December 2014\)](#)

⁸ Coastal Access – Proposals: [Chapter 3 'Seascale to Eskmeals'](#) and [Chapter 4 'Eskmeals to Silecroft'](#)

	<p>Lake District linking key destinations and attractions in Bowness and Ambleside to places west and north of Lake Windermere (e.g. Hawkshead, Wray Castle, Langdale, Grasmere, Coniston and Torver).</p> <p>Several informal and formal events also use the cycling network in the Lake District, such as the Sea to Sea (C2C) and Guide Sky rides.</p>	<p>provision of cycle infrastructure.</p> <p>Cycle links to work and schools are not always safe or suitable and there are instances where new housing developments have not been linked to existing cycle and walking routes.</p>	
Electric vehicle charge points	<p>There are a number of electric vehicle charging points in and around the Lake District. The majority are slower chargers (3 - 22kW) with rapid chargers (43 – 50+kW) currently available in Keswick and Ambleside only.</p>	<p>There is likely to be a shortage of electric vehicle charging points across the National Park, particularly with the forecast growth in ultra low emission vehicles (ULEVs).</p> <p>CCC has indicated there are currently no plans to increase the number of electric chargers in public places. There is limited knowledge about the future installation of electric chargers by individuals / businesses.</p>	N
Flood prevention & management	<p>The Environment Agency (EA) is responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.</p> <p>Most rural service centres are located around main rivers. On average approximately 13% of the area covered by rural service centres is classed as high flood risk and 19% medium flood risk (2009 SFRA update). The highest flood risk areas are found in the larger towns of Keswick, Ambleside and Coniston where there are large concentrations of urban development on flat land adjacent to lakes and major rivers.</p> <p>The Strategic Flood Risk Assessment, which has been undertaken for the National Park, indicates there are a</p>	<p>There is a considerable history of flooding in the Lake District, with significant events occurring in 2005, 2009 and 2015. We are currently awaiting an updated Strategic Flood Risk Assessment.</p> <p>The Cumbria (Strategic) Flood Partnership was created following the aftermath of Storm Desmond in 2015. The partnership has adopted the Cumbria Flood Action Plan¹⁰ which identifies over 100 actions, many of which relate to the construction, strengthen, repair and maintenance of new/existing infrastructure (such as flood defences, bridges, roads) to reduce the impact of flooding. More information on the planned improvement works is set out in Table 3 below.</p> <p>The Cumbria Flood Action Plan should be read in</p>	Y

¹⁰ [Cumbria Flood Action Plan \(June 2016\)](#)

	<p>number of raised defences across the Lake District which provide localised protection against fluvial flooding. Formal flood defences are found at Keswick, where there is approximately 2.5km of raised defences, and raised fluvial defences at Ambleside and Lindale.</p> <p>CCC is designated as the Lead Local Flood Authority (LLFA) for the National Park and has the ‘lead’ role in managing flood risk from surface water, groundwater and ordinary watercourses within the LDNP.</p> <p>CCC’s Local Flood Risk Management Strategy⁹ states Keswick, Windermere, Ambleside and Grasmere are particularly prone to flash floods due to rapid surface water runoff from the surrounding hills. In these locations, there is a lot of dense development next to small watercourses with very little green space to allow watercourses to surcharge. This constrains already swollen watercourses leading to surcharging and flooding of many close by properties.</p>	<p>conjunction with CCC’s Local Flood Risk Management Strategy¹¹ which identifies current deficits and specifies the measures to be undertaken by the LLFA to reduce flood risk locally:</p> <ul style="list-style-type: none"> • Keswick – development has constrained the drainage network, leading to flooding in many locations. Future development has the potential to increase these problems, however, through the careful design and innovative use of SuDS these risks can be minimised. S.106 arrangement should be sought for all new development in Keswick to facilitate improvements to existing networks e.g. replace culverted highway crossings with clear span bridges, improved screen design etc... • Windermere – historic flooding problems throughout Windermere due to inadequate surface water drainage systems. UU’s combined sewer system receives runoff from unofficial sources meaning system lacks capacity during heavy rainfall events. New development could compound these if surface water management is not adequately considered. Future development has potential to increase problems but risks can be minimised through the use of SuDS. Green space to be provided in development proposals to account for surface water flood flow pathways. • Grasmere – blockage of culverts resulting in more water entering the River Rothay above Grasmere. Flood alleviation scheme based on walls and channel re-profiling / restoration including high level flood relief channel. Subject to funding availability. 	
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⁹ [CCC Local Flood Risk Management Strategy – Annex D Action Plan, March 2015](#)

¹¹ [CCC Local Flood Risk Management Strategy – Annex D Action Plan, March 2015](#)

		<ul style="list-style-type: none"> • Troutbeck Bridge – predominately main river flooding (Bell Beck). • Staveley – properties at risk of flooding from River Gowan / River Kent and surface water. • Ravenglass – various locations across the village suffering from surface water flooding, sheet run-off, sewer, highway drainage related issues. CCC Highways have carried out various drainage improvements, including improvements to sections of drainage in the village including 2 overflow systems onto the foreshore. • Gosforth – A number of locations across Gosforth and Wellington areas. Issues around culverts, surface water runoff and highways related issues. CCC Highways have carried out improvements in the village to the highway drainage. <p>CCC specify the restoration of natural habitats in the upper catchments would help manage surface water flooding and could reduce the risk of flooding further downstream.</p>	
Shoreline defences & management	<p>The National Park includes 26 miles of coastline and estuaries stretching from Silecroft to Ravenglass. Much of the coastline is undefended, with very little human modification, but there are short stretches of defences and works associated with small developments or other activities:</p> <ul style="list-style-type: none"> • Hartrees Hill, Silecroft – intermittent private defences to individual properties. Constructed in 1970s, new gabions in 1992 and 2007. Residual life 10-20 years. 	<p>There are expected to be minimal changes to the coastline in the 20 year period (2011-31) under present management but it is anticipated that change to sea levels will result in a greater rate of erosion and an increased risk of flooding in the 20-50 and 50-100 years.</p> <p>The Shoreline Management Plan 2 (SMP2)¹² indicates the long term plan for the stretch of coastline within the National Park is to allow natural processes to continue along the majority of the frontage and to maintain existing defences where economically viable.</p>	N

¹² [North West England and North Wales Shoreline Management Plan 2, Appendix C Section C4 – Q Hodbarrow Point to St Bees Head](#) and [Appendix C Section C4 – R Ravenglass Estuary Complex](#)

	<ul style="list-style-type: none"> • Stubb Place, Bootle – Gabion baskets with pre-cast blocks constructed in 1980s. Gabions effectively life expired. Pre-cast blocks < 20 years. • Eskmeals – minor interventions / management carried out along the MoD frontage at Eskmeal dunes. • Brighthouse to Walls Bridge – masonry wall supporting earth embankment with localised armour protection refurbished post-1994. Residual life 10-20 years. • Roman Fort to Ravenglass – vertical masonry wall with counterforts in front, constructed in 1980. Effectively life expired. • Ravenglass – vertical concrete, brick and masonry walls to property boundaries constructed in 1980s. Residual life > 5 years. • Ravenglass Bank – earth embankment with armour block facing added in 1992. Residual life > 10 years. • Ravenglass Viaduct (south) – masonry embankment facing with upper facing of interlocking concrete blocks and vertical crest wall, refurbished in 1950s. Residual life > 5 years. • Ravenglass Viaduct (south) – masonry embankment facing with unfaced upper section and concrete access path along berm, originally constructed in 1890s. 	<p>Private landowners at Silecroft will be allowed to continue to maintain their defences subject to private funding arrangements.</p> <p>The local road at Stubb Place is at risk of being lost to erosion and the recommended managed realignment policy will allow short term measures to be undertaken to keep the road operational while a longer term solution is developed.</p> <p>The long term plan for Eskmeals Dunes is to allow the area to evolve naturally with limited intervention only if local problems occur.</p> <p>Most of the defences at Ravenglass are in poor condition and will require immediate maintenance and improvement works to ensure continued protection of Ravenglass and Saltcoats.</p> <p>The SMP2 states there is insufficient economic justification to maintain or construct new defences to protect agricultural land.</p>	
Telecommunications (inc. broadband)	BT Open Reach manage the fixed telephony infrastructure within the Park. The network is extensive and serves the vast majority of domestic and commercial premises.	Although it is predicted that the Connecting Cumbria Programme will make fibre broadband available to approximately 95% of properties in the Cumbria there remains a greater proportion of 'not spots' in the Lake	N

	<p>The availability and speed of broadband and mobile phone services is subject to significant variation across the UK, with vast differences occurring between urban and rural areas¹³. The Connecting Cumbria Programme is a partnership between CCC and BT which was set up in 2013 with the aim of increasing access to superfast broadband services.</p> <p>Availability of superfast broadband has increased from 48% in 2014 to 86% of Cumbrian properties being able to access these services since the launch of the Connecting Cumbria Programme. Further deployment work is planned under Connecting Cumbria, with the current phases of work due to be completed by the end of 2018.</p> <p>Similarly mobile phone coverage has historically been poor in Cumbria compared to the national average; however since 2016 there has been significant increase in 4G coverage across the Lake District. Further improvements are planned for completion by the end of 2017 although it is anticipated that the geographical challenges of the Lake District will mean there will still be rural areas where these services cannot be accessed.</p>	<p>District. Work will still be needed to encourage developers to make provision for services to any new properties, which cannot automatically be covered by the programme. Significant further funding will be required to make superfast services available to all properties in the Lake District and some isolated properties may need to be covered by satellite, fixed wireless or 4G broadband solutions.</p>	
Electricity	<p>Electricity North West (ENWL) is the local distribution network operator (DNO) for electricity transmission in the National Park. The network is comprehensive and consists predominately 11kV three-phase overhead wires with low voltage overhead connections in villages,</p>	<p>There are no known deficits and ENWL do not currently forecast significant load increases that would necessitate the installation of major new infrastructure.</p> <p>Most planned work will be the continuation of current</p>	Y

¹³ [The availability of communications services in the UK \(Ofcom, May 2013\)](#)

	<p>towns and small groups of properties. There are not significant quantities of 132kV infrastructure within the park boundary.</p>	<p>programmes to routinely maintain, upgrade or replace existing infrastructure. There are plans to replace the plant (switchgear and/or transformers) at a number of sites within the LDNP, the largest of which have been listed below:</p> <ul style="list-style-type: none"> • Keswick • Haverthwaite • Gilsrow • Embleton • Coniston • Carleton • Ambleside <p>ENWL will continue to maintain and replace existing circuit equipment (cables and overhead lines) and is undertaking a programme of undergrounding overhead lines for visual amenity in sensitive areas identified by the LDNP. This places an average of 5km of line underground per annum and it is forecast that this programme will continue over the period of the plan.</p> <p>National Grid would need to provide 4x400kV transmission circuits to facilitate the proposed 3.2 GW nuclear power station at Moorside, West Cumbria. National Grid currently has no assets in the west of Cumbria and ENWL are involved in works to facilitate the development¹⁴. Options include the provision of underground cables through the LDNP to reduce visual impact.</p>	
Gas	<p>National Grid owns and operates the high pressure gas transmission system in England. A number of pipelines pass through the National Park. New gas transmission infrastructure developments (pipelines and associated</p>	<p>No known deficits.</p> <p>The majority of settlements in the Lake District are not connected to the gas network due to their size and relatively</p>	N

¹⁴ <http://www.enwl.co.uk/docs/default-source/about-us/strategic-direction-statement-2013.pdf?sfvrsn=6>

	<p>installations) are periodically required to meet increases in demand and changes in patterns of supply. Developments to the network are as a result of specific connection requests e.g. power stations, and requests for additional capacity on the network from gas shippers.</p> <p>Northern Gas Networks and Cadent Gas Ltd operate the local gas distribution network in the Lake District. Generally network developments to provide supplies to the local gas distribution network are as a result of overall demand growth in a region rather than site specific developments.</p>	<p>isolated locations. However there are no plans to provide a mains network as this would not be viable for the operator.</p>	
Water Supply	<p>United Utilities supply mains water for the National Park.</p> <p>Mains water supply is available across much of the National Park however some individual properties or small groups of properties in the National Park are served by private spring water supplies.</p>	<p>United Utilities have not responded to the information request and it is assumed there are no known deficits at this stage in the process.</p> <p>UU's Water Resources Management Plan (WRMP) (March 2015)¹⁵ takes into account population and household growth over the period 2013 to 2040. Assessment shows based on forecast levels of demand, environmental improvements and climate change predictions there is sufficient water to meet the populations needs.</p> <p>Ennerdale Water will cease being used as a water resource in 2022 with the EA withdrawing the abstraction licence. United Utilities therefore propose to install a major new pipeline to supply West Cumbria with water from Thirlmere, thus connecting the area to the 'Integrated Resource Zone'. This project will involve the installation of 31.6km below</p>	Y

¹⁵ [UU Final Water Resources Management Plan \(March 2015\)](#)

		<p>ground water pipe (aqueduct) and associated infrastructure to transport the raw water from Thirlmere to the new water treatment works (see route).</p> <p>The route will mainly be constructed across agricultural land but there are several points on the pipeline route where tunnelling will need to take place under rivers and key road crossings. The project is due to be operational by March 2022.</p>	
Wastewater & Sewage	<p>Mains waste (foul sewage or grey water) and rain water disposal from individual properties is the responsibility of United Utilities for the majority of the National Park.</p> <p>There are a number of isolated properties, and in some instances whole settlements, which are reliant on non-mains drainage by virtue of being remote from the mains network. These facilities for foul drainage are typically septic tanks or package treatment works.</p> <p>NB: Rainwater run-off from the highways is the responsibility of the highways authority (Cumbria County Council).</p>	<p>United Utilities have gradually improved treatment facilities but there are known to be some capacity issues at certain locations (based on feedback from Town and Parish Councils) and ongoing programmes of investment continue to be delivered. This has not been confirmed by United Utilities but it is imperative for the LDNPA to understand these pressures in more detail, particularly for those settlements which are most likely to accommodate larger scale developments.</p> <p>Proposals for expenditure in the years 2015-20 are contained in UU Five Year Investment Plan – Asset Management Programme (AMP6). This includes building new and modernising existing water pipers to ensure reliability, reducing the number of overflows from sewers and improving water and wastewater treatment works to deal with growing population and climate change.</p>	Y
Social			
Health	<p>Primary Care: There are 14 General Practitioners' (GP) Practices in the National Park. These are all located in rural service centres:</p>	<p>No response has been received from:</p> <ul style="list-style-type: none"> • NHS Morecambe Bay CCG, which includes South Lakeland; or • NHS North Cumbria CCG, which is responsible for 	N

	<ul style="list-style-type: none"> • Castlehead Medical Centre, Keswick <ul style="list-style-type: none"> - Registered patients: 6629 • Bank Street Surgery, Keswick <ul style="list-style-type: none"> - Registered patients: 1614 • Glenridding Health Centre <ul style="list-style-type: none"> - Registered patients: 738 • Ambleside Health Centre – Grasmere branch <ul style="list-style-type: none"> - Registered patients: 6324 • Caldbeck Surgery <ul style="list-style-type: none"> - Registered patients: 4166 • Ambleside Health Centre <ul style="list-style-type: none"> - Registered patients: (as above) • Coniston Medical Practice <ul style="list-style-type: none"> - Registered patients: 978 • Hawkshead Medical Practice <ul style="list-style-type: none"> - Registered patients: n/a • Dr P Burns & Partners, Windermere <ul style="list-style-type: none"> - Registered patients: 6117 • Windermere Health Centre <ul style="list-style-type: none"> - Registered patients: 5809 • Dr P Burns & Partners, Staveley <ul style="list-style-type: none"> - Registered patients: as above • Seascale Health Centre -Bootle branch <ul style="list-style-type: none"> - Registered patients: 5618 • Duddon Valley Medical Practice, Broughton <ul style="list-style-type: none"> - Registered patients: 3345 • Haverthwaite Surgery <ul style="list-style-type: none"> - Registered patients: 2746 <p>The only rural service centre not served by a GP is Gosforth; however, Seascale Health Centre is less than 3 miles away (outside the boundary of the National Park).</p>	<p>the localities of Allerdale, Copeland and Eden, to understand existing deficits or planned improvements taking place in the National Park.</p> <p>All GP surgeries are accepting new patients according to the NHS Choices website (searched 14/06/17).</p> <p>The South Lakeland District Council (SLDC) Infrastructure Deficit Plan identifies a need for a GP led medical centre in Kendal, which may provide for those parishes in the National Park that currently do not have a GP practice but are in close proximity to Kendal.</p> <p>Anecdotal information from local community groups within the National Park suggests the sustained availability of pharmaceutical services in rural areas remains a concern.</p> <p>No information is currently available to understand whether the dental practices have capacity for new NHS patients.</p> <p>In terms of secondary care, the travelling time and distance to district hospitals in an emergency remains an issue for many rural communities in the National Park. This problem is likely to worsen given the effects of an ageing population, with the Cumbria Joint Strategic Needs Assessment stating the number of hospital admissions will increase with the rise in residents aged over 65 years.</p>	
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	<p>The Cumbria Pharmaceutical Needs Assessment 2014 concluded the overall provision of pharmaceutical services is considered by Cumbria Health and Wellbeing Board (HWB) to be adequate however each district has services that could be improved with better access and the particular services vary in each district.</p> <p>There are 6 dental practices within the National Park, located across Keswick, Ambleside and Windermere.</p> <p>Secondary Care: There are 13 hospitals in Cumbria, with one – the Mary Hewetson Cottage Hospital, located in Keswick within the National Park. There are four district hospitals located in the larger urban centres (Kendal, Whitehaven, Barrow-in-Furness and Carlisle), which offer major health care facilities and emergency care, and several community hospitals located in towns whose facilities include non-emergency services.</p>		
Education	<p>Early years: Childcare provision in the National Park consists of a number of different services. A network of private childminders, largely based at their home addresses accounts for some of the provision. Dedicated nursery/pre-school facilities are generally provided in conjunction with, or adjacent to, primary school sites. Play groups are also provided in other multi-use meeting places, typically village halls.</p> <p>Primary: 28 state funded primary schools across the National Park. 15 schools are located in rural service centres and the remaining 13 located in villages.</p> <p>Secondary: 3 state funded secondary schools in the National Park:</p> <ul style="list-style-type: none"> • John Ruskin School, Coniston; 	<p>It is acknowledged that new housing development can place additional pressure on school places, either through inward migration from outside the county, or by redistributing the existing population into areas where the schools are full to capacity.</p> <p>The latest projections from CCC provide an indication of current provision and any potential capacity issues. The projections do not take into account possible pupil yield from any housing development and represent a snapshot in time, with the figures likely to change as further information becomes available.</p> <p>The pupil intake (numbers of roll) for September 2016 indicates there is an overprovision of places in almost all primary schools. There are a total of 2940 primary school</p>	N

	<ul style="list-style-type: none"> • The Lakes School, Windermere; and • Keswick School. <p>Independent / Specialist:</p> <ul style="list-style-type: none"> • Windermere School – independent boarding and day school for boys and girls from age 3-18. • Oversands School, Witherslack – an independent specialist school catering for children aged 8-19 with special education needs. <p>Higher Education: University of Cumbria (UoC), Ambleside Campus.</p>	<p>places available at schools within the National Park but in September 2016 only 70.5% of these places were filled. There are however wide variations from school to school, with 4 primary schools operating at below 50% capacity (Ambleside, Captain Shaw’s, Coniston and St Bega’s) while 5 schools are approaching or above capacity (Grasmere, Penruddock, Hawkshead Esthwaite, Leven Valley and Lorton).</p> <p>In terms of changes to pupil numbers based on the latest projections from 2017 to 2020, the primary schools expected to see an increase in pupil numbers which could result in capacity issues (anticipated capacity levels shown in brackets) are:</p> <ul style="list-style-type: none"> • Grasmere (105%) • Hawkshead Esthwaite (100%) • Goodly Dale (90%) • Gosforth (81%) <p>In contrast, there are some primary schools within the National Park that are expected to see a reduction in pupil numbers (anticipated capacity levels in brackets) over the period 2017 to 2020:</p> <ul style="list-style-type: none"> • St. Bega’s (30%) • Langdale (36%) • Ambleside (40%) • Coniston (44%) • Braithwaite (57%) <p>Notwithstanding the above, CCC has indicated there could be a potential shortage of primary school places to accommodate the increase in school age children as a result of housing development in the Local Plan.</p>	
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		<p>Pupil forecasts suggest there would be sufficient capacity within existing secondary schools to accommodate pupil yield from future housing developments. It is noted however that during the plan period there could be changes to school capacities outside the control of CCC.</p> <ul style="list-style-type: none"> • John Ruskin School, Coniston NOR Sep 16 = 143 NOR Sep 20 = 170 (forecast) NOR Sep 25 = 150 (forecast) PAN capacity = 240 • The Lakes School, Windermere NOR Sep 16 = 415 NOR Sep 20 = 415 (forecast) NOR Sep 25 = 389 (forecast) PAN capacity = 645 • Keswick School NOR Sep 16 = 974 NOR Sep 20 = 1085 (forecast) NOR Sep 25 = 1054 (forecast) PAN capacity = 890 	
Emergency services	<p>Police: The only police station in the National Park is at Windermere. This is open on a part-time basis, 9am – 1pm Monday to Saturday.</p> <p>Fire: There are 8 fire stations: Bootle, Broughton-in-Furness, Coniston, Windermere, Ambleside, Patterdale, Staveley and Keswick. Each station is staffed by on-call firefighters with access to one fire engine. Stations at Windermere, Ambleside and Keswick also have access to wildfire Land Rovers.</p>	No known deficits.	N

	<p>Ambulance: The North West Ambulance Service has bases at Ambleside and Keswick, with additional bases located in settlements close to but outside the National Park boundary. The North West Air Ambulance provides a vital service to residents and visitors to the National Park.</p> <p>Mountain Rescue: The Lake District Search and Mountain Rescue Association (LDSAMRA) is the umbrella body for the twelve mountain rescue teams in Cumbria (Cockermouth, Coniston, Duddon & Furness, Kendal, Keswick, Kirkby Stephen, Langdale Ambleside, Patterdale, Penrith, Wasdale, Cumbria Ore Mines Rescue Unit (COMRU) and the Lake District Mountain Rescue Dogs). There are approximately 450 team members.</p> <p>Coast Guard: Millom Coastguard Rescue Team covers the West Cumbrian coastline. Haverigg Inshore Rescue Team is manned by volunteers and works closely with the local coastguard, covering the coastline located in the National Park.</p>		
Adult social care	Adult social care is predominately delivered through the County Council with support from the voluntary sector and private business.	CCC have not provided any detailed information and it is assumed there are no known deficits at this stage in the process.	N
Household waste recycling / waste disposal	<p>There are no operational landfill or waste recycling processing sites in the National Park.</p> <p>Recycling and household waste disposal sites are generally limited to small scale glass/paper etc... banks in towns and larger villages. There are 32 community recycling points in the National Park located across</p>	Access to recycling centres from some areas within the National Park is poor and there is an increased reliance on the districts' doorstep collections/services.	N

	<p>rural service centres, villages and cluster communities.</p> <p>A larger household waste recycling site is found at Rothay Holme, Ambleside.</p>		
Libraries	<p>There are 4 libraries within the National Park at Ambleside, Gosforth, Keswick and Windermere.</p> <p>CCC also provides library link services in Broughton-in-Furness and Coniston along with a book drop service in Ennerdale.</p>	No known deficits.	N
Affordable housing	<p>Pressure on the local housing market is acute with second home ownership and use for holiday letting causing an imbalance. The affordability of homes remains a big issue for many local people. The current affordability ratio is 10.3:1.</p>	<p>Strategic Housing Market Assessments (SHMAs) and/or Housing Need Surveys produced by District / Borough Councils identify an annual requirement of 143 new affordable dwellings. This requirement is continuously being addressed by the LDNPA within the adopted Local Plan.</p>	Y
Extra care housing	<p>CCC via its Health & Care Services Directorate is responsible for adult social care within Cumbria.</p> <p>There are currently 132 existing extra care housing units across 3 sites in the National Park:</p> <ul style="list-style-type: none"> • Greta Gardens, Keswick (69 units) • Rowan court, Ambleside (18 units) • Birthwaite, Windermere (45 units) 	<p>Shortfall in provision of extra care housing units for older adults. It is anticipated that the demand for extra care housing by older adults across Cumbria will increase to 2,800 units as a result of the changing demographic profile. This is a shortfall of 2,101 units across the County.</p> <p>Additional sites are likely to be required across the National Park. Location will be dependent on specific areas of demand and priority within the Park.</p>	Y
Community facilities	<p>There are approximately 48 community buildings (primarily village halls) located across the National Park, with at least one in every rural service centre and village. These host a variety of community activities, ranging from meetings, exercise classes, craft workshops and pre-school play groups.</p> <p>There are 85 places of worship in the National Park:</p>	<p>There is no significant demand for the development of new community buildings although there is demand for the refurbishment and sometimes expansion of existing facilities. A survey of infrastructure has taken place with parishes which has provided useful information as to the issues and requirements in certain parishes.</p>	N

	<ul style="list-style-type: none"> • 24 in the North Distinctive Area (DA) • 13 in the East DA • 14 in the West DA • 22 in the Central and South-East DA, and • 12 in the South DA. <p>These are typically Church of England or Methodist although other denominations are also represented.</p>		
Green			
Sports and leisure provision	<p>The provision of sports & leisure facilities in the Lake District is provided by a mix of private and district / borough council providers. The following facilities are located within the boundary of the National Park and are managed on behalf of the district / borough councils by a non for profit charitable organisation known as 'Better':</p> <ul style="list-style-type: none"> • Windermere Outdoor Adventure Centre (activities include canoeing/kayaking, sailing) • Glebe Park, Bowness-on-Windermere (activities include crazy golf, three tennis courts and an 18-hole mini golf / pitch and putt course) • Keswick Leisure Pool & Fitness Centre (providing leisure pool, gym and cycle hire) <p>A full audit of sports & leisure facilities (including playing pitches) was undertaken as a separate exercise in May 2009¹⁶. This contains detailed information on the provision of private sports clubs (e.g. football, cricket, rugby, tennis) across the National Park. Most sports facilities are concentrated in the rural service centres, with the majority of playing pitches are either privately owned or belong town/parish councils. SLDC</p>	<p>The Open Space, Sport and Recreation Study (May 2009) made the following recommendations:</p> <ul style="list-style-type: none"> • Support sports clubs in applying for external funding to make improvements to changing and ancillary facilities in order to further support club development and sustainability. This should be aimed at football as a priority (in particular Coniston Youth FC). • Maximise community access to all outdoor sports facilities in the National Park, in particular school sites. Identified demand for more pitches (primarily football and cricket) can be met through opening up access to school sites • Support Keswick RUFC to purchase additional land to accommodate pitches and training facilities • Encourage and support schools to invest in synthetic turf pitches to increase quality, as a priority at Windermere St Annes School • Support the provision of a new STP provision in Keswick to meet the needs of local schools and attract Keswick HC back to the area. 	N

¹⁶ [LDNP PPG17 Open Space, Sport and Recreation Study - Open Space Assessment Report, May 2009](#) (prepared by Knight Kavanagh & Page)

	<p>is the only local authority to own football pitches within the National Park, at Queens Park in Windermere and Rothay Park in Ambleside.</p> <p>A number of schools allow use of their sports facilities by the community; however, private clubs (e.g. football) tend to perceive these pitches to be undersized and of poor quality making them unsuitable for community use.</p>		
<p>Open spaces (amenity)</p>	<p>Amenity greenspaces in the Lake District most often function as informal recreation space containing play areas and/or outdoor sports facilities or as village greens, providing visual and social amenity to residents and visitors.</p> <p>The <i>Open Space, Sport and Recreation Study</i>¹⁷ reported that a number of rural service centres and villages did not have sufficient access to amenity greenspace provision. This included:</p> <ul style="list-style-type: none"> • Keswick • Gosforth • Bootle • Broughton-in-Furness • Hawkshead • Grasmere • Staveley. <p>Since the publication of this report, the LDNPA has allocated 136.6ha of amenity local green space and 116.1ha of recreation local green space through the <i>Allocations of Land (Local Plan Part Two)</i>.</p>	<p>No known deficits.</p>	

¹⁷ [LDNP PPG17 Open Space, Sport and Recreation Study - Open Space Assessment Report, May 2009](#) (prepared by Knight Kavanagh & Page)

	No local green space has been lost to alternative uses following the adoption of the Allocations of Land DPD and most of the rural service centres, villages and cluster communities have local green space designated for either recreation or amenity purposes.		
Play areas	<p>There are 63 sites classified as children’s play areas within the National Park, totalling just over 32 hectares.</p> <p>Play areas are classified as follows:</p> <ul style="list-style-type: none"> • Play space – equipped No: 45, Size (ha): 16.94 • Play space – not equipped No: 10, Size (ha): 8.35 • Youth area No: 1, Size (ha): 0.33 • Other No: 7, Size (ha): 6.68 <p>Larger settlement areas such as Windermere and Keswick are well served in terms of provision for children and young people compared to smaller rural communities.</p> <p>Parish Councils provide the majority of equipped play provision in the National Park. This range in providers results in a great variance of provision.</p>	<p>The Parish Infrastructure Survey Results for play areas suggest that existing provision is largely good/adequate. This is consistent with the findings of the Open Space, Sport and Recreation Study (May 2009).</p> <p>Additional play areas/ equipment may be proposed by local community groups which will further improve provision of play areas.</p>	N
Allotments and communal gardens	<p>Parks and gardens: There are a total of 56 parks and gardens in the National Park, covering an area of 73.35 hectares. The majority of parks and gardens are owned and managed by town councils and charitable trusts.</p>	<p>The Open Space, Sport and Recreation Study (May 2009) identified a minor gap in park and garden provision in the West Distinctive Area, specifically Bootle.</p> <p>The Open Space, Sport and Recreation Study (May 2009) also reported there had been little demand for</p>	N

	<p>This formal type of greenspace tends only to be provided in the main settlement areas of Keswick, Ambleside, Coniston and Windermere. Approximately 64% of park and garden provision is located in the Central & South East Distinctive Area (mainly in Ambleside and Windermere/Bowness).</p> <p>Allotments: There are 7 allotment sites in the National Park. These allotments are provided by town/parish councils or privately owned. This results in a lack of strategic management across the area.</p>	<p>additional allotment provision, although there were a few areas where demand for provision existed, such as Keswick, Ambleside, Haverthwaite and Above Derwent. However, the results of the latest Parish Infrastructure Survey (Nov 2016) indicates there is a demand for new provision in the following parishes:</p> <p>Barton Claife Hawkshead Haverthwaite Irtton and Santon Lakes Parish Whicham Windermere Upper Allithwaite</p> <p>Additional provision may come forward from local community groups or may be secured through development proposals.</p>	
Biodiversity/wildlife corridors	<p>Almost 20% of the Lake District is designated for its biodiversity value, with 42,984.3 hectares of land designated as Sites of Special Scientific Interest (SSSIs) as well as several national and local nature reserves and county wildlife sites.</p> <p>The whole of the National Park falls within the Cumbria Local Nature Partnership (CLNP). This acts as an umbrella to existing partnerships and initiatives and is seeking to identify opportunities for investment.</p> <p>Cumbria Wildlife Trust (CWT) is one of the organisations forming the CLNP and operate a range of habitat restoration projects, including peat and wetland restoration, which support ecosystem services.</p>	<p>The Lake District National Park Partnership seeks to deliver bigger, better and more joined up habitats. A number of different organisations are working on different projects to achieve this.</p>	Y

Table 3: Planned Infrastructure and Investment

Infrastructure type	Relevant Plan/s	Infrastructure to be delivered	Costing of scheme	Timing (or phasing) of scheme	Risk to Local Plan
Highways	West of M6 Strategic Connectivity Study	A66 Bassenthwaite Resilience – dual 70mph both ways to facilitate faster speeds with provision for overtaking.	£10-50M	Long term, >7 years	
Highways	West of M6 Strategic Connectivity Study	A66 Scales/Troutbeck Climbing Lanes – Provision of climbing lanes eastbound and westbound approaching Scales.	£10-50M	Medium term, 3 – 7 years	
Highways	West of M6 Strategic Connectivity Study	Greenodd to M6 J36 <ul style="list-style-type: none"> • A590 dualling - Greenodd to Haverthwaite to provide capacity enhancements • A590 2+1 Haverthwaite to Newby Bridge to provide capacity enhancements • A590 2+1 Newby Bridge to Ayside to provide capacity enhancements 	£100M+	Long term, > 7 years	
Highways	West of M6 Strategic Connectivity Study	Greenodd to M6 J36 <ul style="list-style-type: none"> • A590 dualling – Town End to Levens to provide capacity enhancements 	£10-50M	Medium term, 3-7 years	
Highways	West of M6 Strategic Connectivity Study	Newby Bridge Flooding Alleviation	not available	Short term, <3 years	
Public transport - Rail	National Rail	Windermere Branch Electrification – overhead 25kV electrification of the Windermere branch line. Funded by DfT	not available	Short term, < 3 years	
Public Rights of Way	Coastal Access – Whitehaven to Silecroft	Coastal Path Trail – Whitehaven to Silecroft.	£416K ¹⁸	Short term, <3 years	

¹⁸ This figure is for the whole route (Whitehaven to Silecroft) and includes sections outside the LDNP. It does not account for the provision of two new river crossings over the Rivers Irt and Esk.

	(Natural England)	<p>Most of the trail would utilise existing public rights of way or highway but there are sections where new routes are required:</p> <ul style="list-style-type: none"> • Walls Bridge to Eskmeals (including new bridge of the River Esk) • Stubb Place to Tarn Point • Tarn Point to Hyton Marsh • Gutterby to Townend Bank • Townend Bank to Walkhole Bank • Walkhole Bank to Silecroft Beach <p>Coast Path to be managed as part of the family of National Trails.</p>	£28,769K		
Cycle routes, bridleways, footpaths	Emerging access and recreation strategy	<p>Cycle route link from Ennerdale Bridge to Bleach Green £40,000</p> <p>Gosforth to Wasdale off road cycle link £50,000</p> <p>Blengdale Bridleways</p> <p>River Esk and Irt crossings £3m</p> <p>Extension to Hadrian's Wall Cycleway £2.5m</p> <p>Eskdale Trail £30,000</p> <p>Duddon Valley bridleway £3,100</p> <p>Bootle to Bootle Station £50,000</p> <p>Black Combe Circular £3,000</p> <p>Cogra Moss circular from Lamplugh £80-100,000</p> <p>Drigg Cycle Routes £10,000</p> <p>Glenridding Miles without Stiles £15,000</p> <p>A66 Cycle provision between Scales and Lisco Farm £unknown</p> <p>Ullswater Way £unknown</p>	Some indicative costs identified but funding not secured for many projects	Various: short to long term projects	

	<p>Eamont Bridge to Lowther Bridleway £unknown</p> <p>Penrith to Keswick Cycle route</p> <p>Patterdale to Hartsop bridleway £3,000</p> <p>Dalemain Circular route including MWS</p> <p>Eycott Hill access project</p> <p>Pooley bridge sustainable visitor facilities</p> <p>Coniston to Foxfield £4m</p> <p>Broughton bridleway cluster £10,000</p> <p>Greenodd to Roudsea Wood Miles without Stiles £40,000</p> <p>Roudsea Wood to Holker Hall/ Cark cycleway £100,000</p> <p>Cycle route from Newby Bridge to Windermere Ferry £500,000</p> <p>Grizedale links from Go Lakes network to Ferry and from Haverthwaite in the south</p> <p>Hawkshead to Near Sawrey off road cycle route</p> <p>Southern Basin £4m</p> <p>Bridleway cluster around Cark and Cartmel £10,000</p> <p>Arnside to Grange Viaduct cycle and walking route</p> <p>Ambleside bridleway upgrades</p> <p>Grasmere Trail shoreline section</p> <p>Grasmere to Dunmail Raise link £650,000</p> <p>World Heritage Way £unknown</p> <p>Lakeland Gateway Route</p> <p>High Newton to Cartmel off road route</p> <p>University of Cumbria to Miller Bridge cycle link £80,000</p>			
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		<p>Keswick Better bridleway connectivity I £10,000</p> <p>Keswick Better bridleway connectivity II £10,000</p> <p>Round Bassenthwaite Cycleway</p> <p>Round Derwentwater Cycleway</p> <p>Thirlmere Cycleway</p> <p>Thirlmere north to Keswick</p> <p>Keswick Railway Footpath</p> <p>Caldbeck to Hesket Newmarket off road cycleway</p> <p>Buckhome Lonning £50,000</p>			
Public jetties	Emerging access and recreation strategy	<p>Derwentwater jetties £850,000</p> <p>Windermere Jetties</p> <p>Coniston jetties</p> <p>Ullswater jetties</p>	Not available	Medium to long term	
Water Supply	United Utilities	West Cumbria Water Supplies ¹⁹ – installation of 31.6km of below ground water pipe (aqueduct) and associated infrastructure to transport water from Thirlmere to West Cumbria.	not available	Active, Summer 2017 to Mar 2022	
Wastewater	United Utilities	<p>Windermere²⁰ – installation of a new 6.5km wastewater pipeline from the Glebe Road pumping station to Windermere Wastewater Treatment Works (WwTW) (Torver Wood).</p> <p>The project will be delivered over a three year winter period, with the pipeline being installed in 300 metre sections.</p>	not available	Active, Jan 2017 to Apr 2019	

¹⁹ [United Utilities West Cumbria Water Supplies Project Timeline 2017-22](#)

²⁰ [United Utilities – Wastewater improvements at Windermere 2017-19](#)

Surface water / Flood alleviation	Environment Agency	Braithwaite Flood Alleviation Scheme	£800k	Development Stage, 2017-2019 construction	
Surface water / Flood alleviation	Cumbria County Council	Penrith Road, Keswick	£1,910k	Pipeline stage, 2017-2019 construction	
Surface water / Flood alleviation	Cumbria County Council	Gosforth, West Cumbria	£710k	Development Stage, 2017-2019 construction	
Surface water / Flood alleviation	Cumbria County Council	Ravenglass, Cumbria	£330k	Development Stage, 2017-2019 construction	
Surface water / Flood alleviation	Environment Agency	Pooley Bridge Flood Alleviation Scheme	£1,400k	Development Stage, 2017-2019 construction	
Surface water / Flood alleviation	Environment Agency	Grasmere, River Rothay	£200k	Pipeline stage, 2019-2021 construction	
Play Areas	SLDC	Broadgate Meadow, Grasmere – to be completed in two phases: 1) Install outdoor gym equipment. Community received £20k LIPs funding to cover cost. 2) Redevelop and redesign the playground.	£20k £60-70k	Active, 2017 Short term, < 3 years (2018-19)	
Play Areas	SLDC	Rothay Park, Ambleside: 1) Install ‘destination’ playground 2) Improve picnic area to further enhance the park	£150k £30k	Complete 2016/17 Active, 2017	
Play Areas	SLDC & Partners	Millerground Enhancement Scheme: 1) Relocation and redesign of children’s playground	£50k	Active	

Biodiversity / Wildlife	Cumbria Peat Partnership	Peatland restoration – already restored 25ha, funded through EA (£53k), Esmee Fairbairn Foundation (£150k) and agri-environment funding. Seeking to upscale project with additional revenue costs being sought of £500k and capital costs of £1.5M		Active, 5 year project	
Biodiversity / Wildlife	Cumbria LNP	Restoration/creation of species-rich grassland due to start April 2017 for two years. Additional funding is being sought for year three onwards and capital works funding.	£70k	Active, 2017-2019	
Biodiversity / Wildlife	Cumbria LNP	Build on Cumbria LNP B-lines mapping for pollinators by analysing where meadow restoration work has taken place. Focus on restoring and creating species-rich grassland and hedgerows. Funding requirement to develop project £2-3k	£2-3k	Pipeline stage	

3 Anticipated Development Levels and Growth Scenarios

3.1 The planned levels and locations of growth are still emerging at this stage in the Local Plan Review. However, the information set out in Tables 2 and 3 on existing infrastructure deficits and planned improvements provide a useful starting point for understanding the infrastructure capacity within the National Park.

3.2 The LDNPA will be allocating housing and employment sites through the process of developing the Local Plan, although, at this stage it is assumed that the levels of development will be in line with the existing settlement hierarchy:

- **Rural Service Centres** – There are 13 settlements which are considered to offer the greatest range of important local services and facilities, as well as housing, employment and transport opportunities to a wider hinterland. These settlements are considered the most sustainable locations for new development.
- **Villages** – There are 22 settlements which provide a smaller range of services and facilities and offer opportunities for a smaller level of development.
- **Cluster Communities** – Smaller settlements/hamlets which individually or as a group provide local service provision, employment opportunities and sustainable transport connections. These are considered suitable for a limited small-scale development to meet local needs.
- **Open Countryside** – This encompasses all areas outside of the three settlement types above, where development will be the exception rather than the norm.

3.3 It is anticipated that most development will be located in or adjacent to the rural service centres, since these are the most sustainable locations, while

villages are likely to accept some small scale infilling and limited extensions to meet local needs. Cluster communities and open countryside locations are unlikely to accept any element of new build housing but could see other (non-residential) forms of new build activity, such as tourism uses.

- 3.4 Taking into account the existing settlement hierarchy and proposed settlement hierarchy, the particular focus on infrastructure capacity should be on the Rural Service Centres and Villages in order to establish whether there are likely to be any strategic infrastructure issues that would inhibit the development needs and aspirations of the Lake District National Park. A series of scenarios (Table 4) have been developed to test whether infrastructure provision will be adequate. The proposed site allocations will need to inform the precise location of development proposals to help test the adequacy of infrastructure provision.

Table 4: Potential development scenarios

Development type	Scenario 1 (per annum)	Scenario 2 (per annum)	Scenario 3 (per annum)
Housing	60 units	80 units	145 units*
Employment floorspace	2000 m ²	3000 m ²	3500 m ²
Retail floorspace	750 m ²	1000 m ²	2000 m ²
Hotel development	1000 m ²	2500 m ²	5000 m ²
Hotel bed spaces	50 bed spaces	100 bed spaces	200 bed spaces

*Based on annual SHMA requirement for Lake District

Scenario 1

- 3.5 Scenario 1 for housing and employment are based on the existing requirements in the Core Strategy, and for retail it reflects the average annual area of floorspace granted permission over a five year period. Hotel development fluctuates considerably each year therefore the hotel

development and bed spaces in scenario 1 is a conservative estimate based on annual permission data.

Scenario 2

- 3.6 Scenario 2 represents a modest increase on the scenario 1 figures as this was essentially the baseline position. It accounts for increase in provision of housing, employment and retail, and for hotel development accounts for a proportion close to the average annual provision over the last five years.

Scenario 3

- 3.7 Scenario 3 represents a larger growth scenario based on the likely maximum provision. For housing it takes account of the annual SHMA requirement for the Lake District. For employment and retail it is based on greater intensity of growth from Scenario 1 levels. For hotel development it reflects larger than average annual floorspace and bed space provision than granted over the past five years.

Appendix 1: List of Key Infrastructure Providers

Type	Provider
Physical	
Highways	Highways England Cumbria County Council Car parks – LDNPA, National Trust, United Utilities, Forestry Commission, District Councils and other private sector
Public transport	Railway – First TransPennine, Arriva, Virgin Trains and National Rail Bus – Stagecoach and private operators Water transport – private operators
Cycle routes	LDNPA
Public rights of way	LDNPA
Electric vehicle charge points	District Councils and Private
Flood prevention and management	Environment Agency Cumbria County Council
Shoreline defences and management	Private
Telecommunications	BT Open Reach Mobile Operators Association Cumbria County Council (broadband rollout)
Gas Supply	National Grid
Electricity Supply	Electricity North West (ENWL) and National Grid
Water Supply	United Utilities
Waste Water	United Utilities
Social	
Health	NHS North Cumbria CCG NHS Morecambe Bay CCG
Education	Cumbria County Council Independent Schools
Emergency Services	North West Ambulance Service Cumbria Police and Fire & Rescue Lake District Search & Mountain Rescue Association (LDSMRA) Millom Coastguard Rescue Team
Social services	Cumbria County Council District Councils
Household Waste Recycling	Cumbria County Council District Councils
Libraries	Cumbria County Council
Affordable housing	Housing Associations / District Councils

Extra care housing	Cumbria County Council
Community facilities	Parish Councils, Churches and Private
Green	
Sports and leisure provision	District Councils Private
Open spaces (amenity)	Cumbria County Council District Councils LDNPA Parish Councils Private
Play areas	Parish Councils and Private
Allotments and communal gardens	Parish Councils and Private
Biodiversity/wildlife corridors	Natural England LDNPA Local Nature Partnership Cumbria Wildlife Trust Cumbria County Council District Councils