Eden Local Plan Infrastructure Delivery Plan

June 2017

This document assesses the current level of infrastructure provision in Eden and identifies improvements that will be required to support the delivery of the Eden Local Plan.



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Accessibility Information

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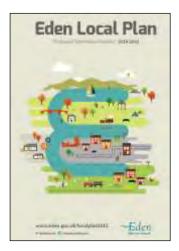
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Introduction

Background and Purpose of the Infrastructure Delivery Plan

 This Infrastructure Delivery Plan (IDP) has been prepared to support the delivery and implementation of the Eden Local Plan. The Eden Local Plan is the new development plan for Eden which sets out how the area will develop in the period 2014-2032. It sets an overall development strategy, allocates sites for development and protection, and provides a suite of policies that will be used to make decisions on planning applications. The Local Plan is currently at Main Modifications stage, which is the final consultation before the Plan is adopted.



- 2. The Government's National Planning Policy Framework (NPPF), published in March 2012 requires development plans to be prepared in a positive manner. It requires them to proactively plan for and drive sustainable economic development by assessing the need for, and helping to deliver the homes, business and industrial units, infrastructure and thriving local places that communities need.
- 3. The NPPF requires Local Plans to be 'deliverable', meaning that the development that they plan for can actually be delivered on the ground and be supported by proper facilities, services and infrastructure.
- 4. The purpose of this Infrastructure Delivery Plan is therefore as follows:
 - To assess existing infrastructure provision in Eden and highlight current deficiencies;
 - To consider what new infrastructure needs will arise as a result of the development being planned for in the Eden Local Plan;
 - To determine how these arising needs will be met to support new development, including identifying who is responsible for providing them, how they will be funded, and when they will be delivered.

5. Infrastructure is a broad term encompassing a range of structures, facilities and services required to support the functioning of places and communities. It is commonly categorised into three broad areas – physical, social and green infrastructure and the areas of infrastructure covered by this Infrastructure Delivery Plan are outlined below.

Infrastructure Category	
Physical	Transport – Road Network Transport – Public Transport
	Transport – Walking and Cycling
	Water supply and Wastewater Treatment
	Flood Risk
	Energy Distribution
	Waste
	Telecommunications
Social	Education
	Health
	Social Care
	Community Facilities
Green	Open Space and Ecological Networks

Figure 1: Infrastructure Types

Growth in Eden and the need for new/improved infrastructure

- 6. Eden is growing, and this trend is set to continue. From 2001-2011 the population of Eden rose by 2,785 people, a 5.6% increase. The number of households is expected to grow more rapidly than population as household sizes become smaller. Between 2014-2032 national projections forecast an 8.5% increase in the number of households in Eden¹.
- 7. Migration is the biggest factor driving Eden's growth in fact in terms of population projections, 'natural change' (births and deaths) alone would see Eden's population decline, as the district's ageing population is characterised by more deaths than births. The majority of population change in Eden will arise from people moving to Eden from other areas in the UK. In preparing the Local Plan an objective assessment of the future need for housing has been undertaken based on a range of evidence sources, and the Local Plan sets an annual house building target of 242 homes per year to be built in order to meet housing need. The Local Plan is therefore planning for 4,356 homes over its lifespan 2014-2032. More detail can be

¹ 2012 based Office for National Statistics projections.

found on how the Council has determined its housing need in its Strategic Housing Market Assessment – 'Taking Stock' and its October 2016 Position Statement on the Objectively Assessed Housing Need.

- 8. In order to help deliver the Council's Corporate Priority for economic growth and to reflect the national emphasis on sustainable economic growth, the Local Plan also allocates 28hectares of employment land and supports long term growth at Newton Rigg College and Eden Business Park Phase 2 at Penrith.
- 9. In line with sustainable development principles, the Eden Local Plan directs the majority of new development towards Penrith and the main market towns of Alston, Appleby and Kirkby Stephen, as these locations are where the existing provision of existing facilities, services and infrastructure is the most comprehensive and accessible, and development in these locations can help reduce the need to travel. The distribution of housing development being planned for in the Local Plan is illustrated in Figure 2, and shows where growth in Eden will be focussed over the next 15 years. In recognition of the need to help sustain rural communities and their existing services the Plan also directs some modest scale development towards rural settlements, with 20% of the overall requirement directed to thirteen Key Hubs². The Plan also allows for some limited small scale development in the smaller villages and hamlets to meet local demand but does not allocate any development here.

	Target	Distribution	Site Allocations	Completions since 2014 and Commitments	Remaining Local Plan Requirement
Target	4356	100%			
Towns					
Penrith	2178	50%	Yes	1075	1103
Alston	131	3%	Yes	62	69
Appleby	392	9%	Yes	182	210
Kirkby Stephen	305	7%	Yes	55	250
Total Towns	3006	69%		1374	1632
Rural Areas					
Key Hubs	871	20%	Yes	368	242
Villages and Hamlets	479	11%	No	537	-57
Total Rural	1350	31%		905	185
Total	4356	100%		2279	1817

Figure 2: Eden Local Plan Distribution of Housing Development

10. The Local Plan plans positively for the future growth of Eden by allocating sufficient land to meet housing need and to support economic growth in order to strengthen the area's economy. In planning positively for the area the Council needs to assess

² Armathwaite, Brough & Church Brough, Culgaith, Greystoke, High and Low Hesket, Kirkby Thore, Langwathby, Lazonby, Nenthead, Plumpton, Shap, Stainton, and Tebay.

infrastructure needs alongside development needs, as development cannot happen without the appropriate type and quality of infrastructure being in place to support it. The NPPF requires local authorities to assess infrastructure needs in preparing their Local Plans and specifically requires them to work with other authorities and providers to assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy, telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management.

- 11. Whilst the level of growth planned for in Eden may be relatively modest when compared with more urban and highly populated areas, it will still result in the need for new infrastructure and improvements to existing infrastructure in order to facilitate and support the new development. In some ways the rural nature of the area presents a more challenging environment for infrastructure provision due to its sparsely populated and dispersed nature.
- 12. In order for the Local Plan to be delivered on the ground a wide range of new or improved infrastructure will be required, for example, new house building and resultant households will increase the demand for school places, open space, and community facilities, and the new car journeys it generates will result in the need for improvements to the road network. The Eden Local Plan aims to support rural communities by directing smaller scale development to the key hubs and allowing limited development in the smaller villages, and an important consideration will be identifying how these communities can be supported by appropriate infrastructure. For example it may be that improved telecommunications or more innovative ways of delivering transport solutions or social infrastructure such as libraries and community facilities could help rural communities sustain themselves.
- 13. In addition to new physical development on the ground, changes in Eden's population characteristics that are being planned for through the Local Plan could also result in the need for changes to the district's current levels and type of infrastructure provision. For instance Eden's ageing population could result in the need for changes to social infrastructure provision for example expanded health care provision or changes in the way social care is provided.
- 14. It is the role of this Infrastructure Delivery Plan to identify all the infrastructure needs that may arise as a result of the Local Plan, and that will need to be met in order for it to be successfully implemented and delivered on the ground.

Who is responsible for infrastructure provision?

15. As outlined in the introductory section of the Infrastructure Delivery Plan, the term infrastructure covers a broad range of facilities and services that are needed to help communities function. The responsibility for funding, providing and maintaining infrastructure lies with a wide range of organisations and bodies including public bodies, private sector companies and charitable and voluntary bodies. The table below provides an overview of who is responsible for providing and maintaining different types of infrastructure in Eden:

Infrastructure Category	Infrastructure Type	Organisation/Body responsible for provision and maintenance.
Physical	Transport – Road Network	 The vast majority of the roads network in Eden is maintained by Cumbria County Council. Highways England is responsible for operating, maintaining and improving the strategic road network in England on behalf of DofT, which in Eden includes the M6 and A66. Some roads in Eden have not been adopted by the County Council therefore responsibility for them lies with the landowner.
	Transport – Public Transport	 Buses in Eden are provided by a range of commercial bus operators. Network Rail runs and maintains Britain's rail tracks, signalling bridges, tunnels and level crossings and is therefore responsible for the network that passes through Eden. A range of private operators provide rail services in Eden including Virgin Trains and First Transpennine on the West Coast Mainline and Northern rail on the Carlisle-Settle Line.
	Transport – Walking and Cycling Network	 Cycling and walking are encouraged by Cumbria County Council through the provision of appropriate facilities within the highway. Cumbria County Council as the statutory highway authority is required to assert, protect, map, record, manage and maintain the public rights of way network across Cumbria, in partnership with other agents. A range of public bodies and voluntary and charitable organisations work in partnership to improve and promote walking and cycling infrastructure. For example 'Sustrans' is a key charity that helps provide, improve and promote cycling and walking networks.

Infrastructure Category	Infrastructure Type	Organisation/Body responsible for provision and maintenance.
	Water supply and Wastewater Treatment	 United Utilities provides water and sewage services to North West England and provides, improves and maintains the infrastructure network which includes water pipes, sewers, water treatment works and wastewater treatment works. United Utilities area of responsibility covers the vast majority of Eden. A small part of Eden, including Alston falls within the area covered by Northumbrian Water.
	Flood Risk	 The provision of flood warning systems and defences are the responsibility of the Environment Agency. The Environment Agency monitors river levels and flows and undertakes repairs and maintenance of Eden's flood defences. Cumbria County Council is now a Lead Local Flood Authority and has new powers and duties for managing flooding from local sources including ordinary watercourses (any watercourse that is not a main river), surface water and groundwater across Cumbria.
	Energy Distribution	 Electricity North West owns, operates and maintains the North West's electricity network and supplies electricity to properties in Eden. It connects the region to the National Grid, the national high voltage transmission network.
	Waste	 Eden District Council is responsible for the collection of household and trade waste in Eden, as district councils are Waste Collection Authorities (WCAs). Once collected, the disposal of waste is the responsibility of Cumbria County Council in its role as the Waste Disposal Authority. Cumbria CC provides Household Waste Recycling Centres across Cumbria including two in Eden. These are currently run by Shanks/Cumbria Waste management on behalf of the County Council.

Т		provision and maintenance.
	Felecommunications	 Broadband Internet is provided by a range of private companies. Mobile phone infrastructure is provided by commercial operators.
	Education	 Cumbria County Council is the education authority covering Eden and has a statutory duty to ensure that enough primary and secondary school places are available to meet needs.
	Health	 NHS Cumbria Clinical Commissioning Group is responsible for identifying the health needs of people in Cumbria and ensuring those needs are met. It receives an annual NHS budget for Cumbria from the Department for Health and uses it to plan and deliver NHS services including acute hospitals, community hospitals, community based health services and mental health services. It does not manage these services but works with the providers to oversee how they are run. NHS England is responsible for commissioning primary care in Cumbria (GPs, Opticians, Dentists and Pharmacies). From April 2013 it took on many of the functions of the former primary care trusts (PCTs) with regard the commissioning of primary care health services. Cumbria County Council is also now responsible for local public health and some public health services following the changes in April 2013.
S	Social Care	Cumbria County Council is responsible
		for the provision of social care for adults and children in Cumbria.
	Community Facilities	 Cumbria County Council is responsible for the provision of libraries in Eden.

GreenOpen Space and Ecological Networks• Eden District Council is responsible for the general operational management and day-to-day maintenance of the various parks and open spaces throughout the district. • Eden District Council is responsible for maintaining 39 play areas, and there are other additional play areas that are managed and maintained by Parish Councils or Community Groups. • Penrith Town Council owns 4 allotment sites and these are managed by Penrith Allotment Association on behalf of the Council.• A number of the district's open space assets e.g. country estates are owned and maintained by private landowners. • Sites of wildlife or geological interest are managed and maintained by various bodies and organisations for example private landowners, public bodies such as Natural England or voluntary organisations such as Cumbria Wildlife Trust, which manages a number of the nature reserves in Eden.	Infrastructure Category	Infrastructure Type	Organisation/Body responsible for provision and maintenance.
	Green	Ecological	 the general operational management and day-to-day maintenance of the various parks and open spaces throughout the district. Eden District Council is responsible for maintaining 39 play areas, and there are other additional play areas that are managed and maintained by Parish Councils or Community Groups. Penrith Town Council owns 4 allotment sites and these are managed by Penrith Allotment Association on behalf of the Council. A number of the district's open space assets e.g. country estates are owned and maintained by private landowners. Sites of wildlife or geological interest are managed and maintained by various bodies and organisations for example private landowners, public bodies such as Natural England or voluntary organisations such as Cumbria Wildlife Trust, which manages a number of the nature reserves in

Figure 3: Infrastructure Providers in Eden

How is infrastructure funded?

Overview

- 16. The provision, maintenance and improvement of infrastructure is funded from a wide variety of sources including Government funding to delivery bodies and public authorities, revenue generated by infrastructure providers (eg from customer charges), grants, voluntary donations and community generated funds, and also contributions from developers where their development results in the need for new infrastructure or upgrades to existing infrastructure.
- 17. Infrastructure providers generally have corporate plans and capital spending programmes which set out their plans for funding, providing and maintaining their infrastructure. Providers tend to work on relatively short timescales (eg 3-5 years) as beyond this there is a greater level of uncertainty over budgets. This needs to be borne in mind when preparing Local Plans, as whilst their time horizon is usually 15-20 years, certainty over infrastructure provision, specifically funding, can generally only be gained for the first few years of the plan. Additionally most infrastructure

providers, particularly utilities companies can only fund infrastructure when developments are certain to go ahead and cannot speculatively fund projects for developments that are in the pipeline eg longer term allocations in Local Plans that are not guaranteed to take place within a set timescale.

18. The economic situation of recent years has resulted in significant reductions in local authority budgets and local authorities are faced with an increasingly difficult challenge in funding the provision and maintenance of infrastructure, facilities and services to support their communities. This often results in difficult decisions having to be made over the level of service provision that can be provided and can affect the frontline services that people place a lot of value on for example rural bus services, social care, libraries and waste collection.

The role of the planning system and developers

- 19. New development is essential for communities as it provides much needed houses and employment opportunities, however it does place an additional burden on existing infrastructure, for example the need for extra school places, or improvements to the road network to accommodate extra traffic. The planning system has a role to play in ensuring that new development is delivered in conjunction with the infrastructure that is needed to support it.
- 20. As new development places pressure on existing infrastructure and sometimes results in the need for new or improved facilities and services, developers can be required to contribute to the costs of such provision. This may involve the developer being required to provide or improve the infrastructure for example improving a road junction or providing open space on a development, or it may involve the developer providing a sum of the money to the local authority to provide the infrastructure, for example a financial contribution towards the cost of providing extra school places. These contributions towards infrastructure are known as 'developer contributions' or 'planning obligations' and are currently agreed between developers and local authorities as part of the planning application process, and are then set out in a legal agreement known as a 'Section 106 Agreement'. Developers may enter into a Section 38 Agreement (Highways Act 1980) if a highway they provide is to become a formally adopted highway, or a Section 278 Agreement (Highways Act 1980) if they are to make alterations to a public highway as part of a planning application.
- 21. Planning obligations are an important tool as they can make development that would be otherwise unacceptable acceptable. The Government's Planning Practice Guidance³ states that they should only be used where it is not possible to address unacceptable impacts through a planning condition. Legislation⁴ sets parameters for

³ http://planningguidance.planningportal.gov.uk/

⁴ Regulation 122 of the Community Infrastructure Levy Regulations 2010 http://www.legislation.gov.uk/uksi/2010/948/contents/made

the scenarios in which planning obligations can be used, and limits them to instances where they are:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- Fairly and reasonably related in scale and kind to the development.
- In 2010 the Government brought into force a new mechanism that local planning 22. authorities can use for charging developers called the 'Community Infrastructure Levy' (CIL). Instead of contributions being negotiated on a case by case basis CIL involves local authorities setting charges according to the floorspace size of a development, which can be varied according to the type of development (eg housing, supermarket developments). In order to introduce CIL charging, authorities need to adopt a 'charging schedule' based on a careful assessment of infrastructure needs in their area including likely costs, and balance this against the economic viability of development in their area and its ability to withstand such a charge - ie developers must still be able to make a profit on their developments after paying CIL. Eden District Council has undertaken some exploratory work into the feasibility of introducing CIL and decided not to progress at this time. However, the situation will be reviewed periodically. Currently therefore, financial contributions from developers for infrastructure provision are obtained through Section 106 agreements. In April 2015 the Government brought into place restrictions on the pooling of monies from Section 106 contributions and Councils can only pool money from a maximum of five Section 106 agreements for any infrastructure type or project. This will undoubtedly impact upon the way the Council can fund new infrastructure from developer contributions.
- 23. The Eden Local Plan provides a policy framework which is intended to ensure that new development is supported by appropriate infrastructure. In particular Policy DEV4 states:

Policy DEV4 – Infrastructure and Implementation

The scale and pace of new development will be dependent upon sufficient capacity being available in the existing infrastructure networks to meet the demands of new development. Where this cannot be demonstrated, permission for new development will only be granted where additional capacity can be released through better management of existing infrastructure, or through the provision of new infrastructure, or in the case of transport infrastructure, where it can be demonstrated through the use of a Transport Statement or Transport Assessments that the residual cumulative impacts of the development will not be severe. Developer contributions may be sought to fund new infrastructure and a programme of delivery will be agreed before development can take place. Contributions must be necessary to make the development acceptable in planning terms and ensure that the viability of the development is maintained.

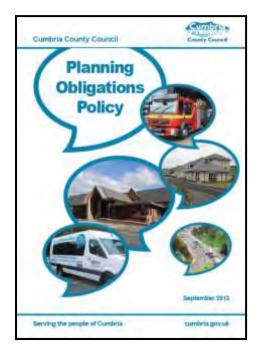
In some cases developer contributions will take the form of a financial contribution. In all cases they will be directly, fairly and reasonably related in scale and kind to the proposed development. Infrastructure requirements are set out in the Infrastructure Delivery Plan.

The ability of a developer to pay contributions, based on an assessment of the economic viability of the development will be considered at the application stage. Negotiations between developers and the Council (advised where appropriate by Cumbria CC) will determine on a case by case basis whether a developer can feasibly pay contributions to infrastructure without undermining the schemes viability.

The need for a Community Infrastructure Levy will be reviewed periodically by the Council.

- 24. In recognition of the scale of development that will be taking place in Penrith the Local Plan also sets a requirement for masterplans to be agreed with the Council for the strategic sites to the north and east of Penrith. 'Policy PEN2- Penrith Masterplans' requires developers to consider the cumulative impact of their development with other planned developments in the town and requires them to work with infrastructure providers to demonstrate how the developments will jointly provide and fund the physical and social infrastructure necessary to support the strategic development in the town.
- 25. The Local Plan therefore provides the overall planning policy framework to ensure new development is accompanied by required infrastructure. The IDP will play an important role in helping to implement the above policies by setting out in more detail what infrastructure needs are likely to arise as result of the development proposed in Eden until 2032 and should inform future more detailed discussions between developers, the Council and infrastructure providers.
- 26. Figure 3 above illustrates that Cumbria County Council is responsible for a number of types of infrastructure provision in Eden. The County Council is consulted on larger planning applications in Eden and requires contributions from developers in some scenarios so that it can fund improvements to existing infrastructure, or provide new infrastructure to support the development in question. In September 2013 the County Council adopted a 'Planning Obligations Policy' which is intended to support the planning process by providing Cumbria's local planning authorities and the development sector with a guide to the circumstances where the County Council may request appropriate contributions through its role as a planning consultee. The policy does this by setting out the County Council's approach to securing the

services and infrastructure necessary to mitigate the impacts of new development where it affects those areas of infrastructure which the County Council has responsibility for. The Planning Obligations Policy is due to be updated in December 2015 and the revised document will be reflected in future reviews of the IDP.



The Planning Obligations Policy sets out how the County may request contributions for the following types of infrastructure:

- Highways
- Transport and Travel Plans
- Surface water Management
- Education
- Social Care
- Safer Communities
- Fire Safety

Website address: <u>www.cumbria.gov.uk/planning-</u> environment/environmentandplanning.asp

Preparation of the Infrastructure Delivery Plan

- 27. The Infrastructure Delivery Plan has been prepared on an ongoing basis alongside the Local Plan.
- 28. A wide range of evidence base documents have informed the Eden Local Plan and where relevant these have also been used to inform the preparation of the Infrastructure Delivery Plan.
- 29. Preparation of the IDP has also involved reviewing the plans and programmes of various infrastructure providers in order to understand their planning process and future programmes. In line with the national 'duty to cooperate' the Council has worked with relevant authorities and infrastructure providers to establish the baseline infrastructure provision and the needs that will arise in order to support the delivery of the Local Plan. This has involved written communication as well as a number of meetings, in order for us to understand their current plans and to inform them of the scale of growth anticipated in Eden so they can factor this into their future plans and strategies.

Structure of the Infrastructure Delivery Plan

- 30. Following this introductory section, the main part of the Infrastructure Delivery Plan sets out the infrastructure needs that will arise from the Local Plan's strategy, and identifies who will be responsible for funding and delivering them, and what the timescale will be.
- 31. The IDP works through each main type of infrastructure in term, and for each type sets out:
 - An overview of current provision, highlighting any existing deficiencies in the level of provision eg amount, type or quality.
 - Identification of any relevant evidence base studies/reports/plans relating to the type of infrastructure, for example those used to inform the Local Plan, or plans/strategies prepared by infrastructure providers.
 - Likely future needs that will arise as a result of the strategy and scale and distribution of development proposed in the Eden Local Plan.
 - An overview of currently committed projects/improvements that are being planned for or new projects/improvements that will be required to deliver the Local Plan, including timescales, body/organisation responsible for delivery and costs and funding if known.

Physical Infrastructure Provision and Future Requirements

Transport – Road Network

What is the current level of provision in Eden and are there any deficiencies?

- 32. As a sparsely populated and dispersed rural area, car ownership levels in Eden are necessarily high, with 86% of households having 1 or more cars or vans compared with 72% across the North West as a whole⁵. Eden is also a popular tourist destination, and this combined with residents' and commuters' high reliance on private car, means the road network is heavily relied upon by residents, workers, businesses and tourist alike.
- 33. The road network in Eden can be categorised into a hierarchy of different road types. At the broadest scale the main strategic routes are the M6 motorway and A66. The M6 passes through Eden in a north-south direction and provides direct routes to Carlisle and Scotland to the north and key cities to the south. The A66 runs in a west-east direction and connects Eden with the Lake District and Cumbrian coast to the west and provides a link to the A1 (M) to the east. Penrith sits at the interchange between these two main routes and therefore has excellent strategic road links. As trunk roads these routes are the responsibility of the Highways England.
- 34. East of Penrith to Brough the A66 alternates between single and dual carriageway, and the speed limit is reduced to 40mph as it passes through Kirkby Thore. The A66 can at peak times become congested on this stretch and increase journey times. In 2007 the A66 was diverted from passing through Temple Sowerby and a three mile new stretch of dual carriageway was constructed to bypass the village, in order to cater for predicted future travel growth, remove through traffic and noise from the village, and to increase road safety. Highways England is undertaking ongoing studies of its transport routes along the A66.
- 35. The majority of other roads in Eden are managed by Cumbria County Council. Key routes include the A685, A686, A6, A592 and A5091.
- 36. The district by its nature is characterised by rural roads, most of which are historic routes and not designed or constructed for modern day traffic. Road casualty rates are a concern in Eden with the rate of people being killed and seriously injured on roads significantly worse than the national average⁶. Reducing road casualties, particularly in young men, has been named as a local health priority in the Eden District Health Profile 2015 produced by Public Health England.

⁵ 2011 Census 'Car or Van Availability' (QS416EW)

⁶ 89.9 per 100,000 population 2011-13 compared with 39.7 England average. Source : Eden Public Health Profile

- 37. As a sparsely populated rural area, congestion and highways capacity issues in Eden are relatively unproblematic at present compared with more dense urban areas. However there is notable local concern with regards current congestions issues in Penrith town centre at peak times.
- 38. Eden Council has worked with the County Council to further understand current issues so that the specific impacts of future development proposed in the Local Plan can be fully understood and resolved. To support the development of the Eden Local Plan, the County Council used the Penrith Transport Model (a strategic SATURN traffic model of the Penrith urban area) to understand what impact the proposed level of development would have on the highway network.
- 39. The Penrith Local Plan Modelling Report (2015) reveals that a small number of junctions in Penrith will be approaching capacity in the morning peak period if the development proposed in the Local Plan is realised, meaning that they have a 'Ratio of Flow to Capacity (RFC)' approaching 1. A junction with a RFC over one is considered as operating over capacity. These junctions are Duke Street/Stricklandgate (north end of the gyratory) and Victoria Road/Roper Street. The slowest average journey times are on the Carleton Road westbound route due to delays at the Victoria Road/Roper Street junction, and the A592 south bound route, due to delays at the M6 Junction 40.
- 40. The Penrith Local Plan Modelling Report was reviewed in January 2017 to take into account the changes proposed in the Main Modifications. There was no change in the number of junctions operating over-capacity and a slight decrease in the number approaching capacity. Due to the increase in the number of dwellings in the north of Penrith, journey times along the A6 increased slightly. The largest changes in the morning peak are to the north of Penrith, with increases in flow on Beacon Edge and Graham Street. This is due to more development sites at the north and traffic avoiding the congested Scotland Road/Duke Street junction at the northern end of the gyratory. In the evening peak, the increases in traffic are on Brunswick Street and Scotland Road. The Local Plan allocates almost 12 hectares of employment land at Gilwilly Industrial Estate (Phase 2A). The existing site access (Newton Road/Gilwilly Road) was a constraint to the expansion of Gilwilly Industrial Estate. However, a scheme of junction improvements has been completed to facilitate further growth. The improvements included new feeder lanes from the roundabout into Eden Business Park from the A592 Haweswater Rd and a new double roundabout on the B5288 Newton Rd to improve access into the Gilwilly Industrial Estate and helps link the two business estates. The Department for Transport funded £1.6m for the scheme, with Cumbria County Council providing a further £307,000, Eden District Council contributing £150,000 and the Cumbria LEP providing £235,000 through the Cumbria Infrastructure Fund.

What evidence do we have and what plans and strategies do infrastructure providers have in place?

Key Documents:

- 'Moving Cumbria Forward' Cumbria Transport Plan Strategy (2011-2026) Website address: <u>www.cumbria.gov.uk/planning-</u> environment/infrastructureplanning/strategicplans.asp
- 'Penrith Local Plan Transport Modelling Report' (Cumbria County Council, 2015)
 Available on Eden's Local Plan Evidence Base webpage.
- **'Penrith Transport Improvements' (Mott Macdonald, 2015)** Available on Eden's Local Plan Evidence Base webpage.
- 41. The Cumbria Local Transport Plan 'Moving Cumbria Forward' sets out Cumbria County Council's overall strategy for planning for the transport system and highway network across the County in the period 2011-2026. With regards the road network the key priorities include the maintenance of Cumbria's roads and making sure the strategic road links are able to support the Cumbrian economy.
- 42. Two new key pieces of evidence have been prepared to support the preparation of the Local Plan. The first of these is the Penrith Local Plan Modelling Study(April 2015 and updated in January 2017), which has assessed the capacity of key junctions and routes in Penrith to determine current and future capacity issues based on Local Plan development proposals and committed developments. The second is a Transport Improvements Study which has been prepared by consultants and identifies a range of highways and sustainable transport improvements that will mitigate the impact of new development in Penrith. The outputs of these studies are discussed in the following section. The County Council and Eden District Council recognise that the need for highways and transport improvements is fluid over time and dependent on a range of factors outside the scope of the Local Plan. Further studies will be undertaken to identify other potential highways and transport improvements that would support additional sustainable economic growth and quality of life.

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

43. Half of the future development proposed in the Local Plan will be directed towards Penrith. The updated Penrith modelling report (2017) identifies the following trip generation.

	Vehicle trips				
Development type	Morning peak		Evening peak		
	In	Out	In	Out	
Urban residential	216	748	676	412	
Employment	226	120	49	171	
Total	442	868	724	582	

2032 Revised Local Plan trip generation

44. This traffic will clearly impact upon key routes, putting more pressure on key junctions, and increasing journey times. The updated modelling outputs show that the 2032 scenario which takes into account Local Plan sites reveals that one junction will operate over capacity and an additional 4-5 junctions will be approaching capacity as a result of growth in the town. The average speed on the network across Penrith is forecast to reduce very slightly.

	Junctions over capacity		Junctions approaching capacity		Average speed across Penrith (kph)	
Scenario	Morning peak	Evening peak	Morning peak	Evening peak	Morning peak	Evening peak
2012 Base	0	0	2	1	34.8	34.7
2032 Base	0	0	3	4	33.2	33.0
2032 with Local Plan	1	1	6	6	32.7	32.6
2032 Revised Local Plan	1	1	5	4	32.6	35.6

Figure 4: Junction Capacity in Penrith

45. To mitigate the impacts of the Local Plan Growth, specific measures to support mode choice and help reduce the reliance on private transport, together with highway improvements will be required to relieve congestion and manage vehicle movements The Penrith Transport Improvements Study has identified a range of highways schemes and sustainable transport measures that will improve the capacity of Penrith's road network and improve the functioning of junctions where issues have been identified. The table below identifies the schemes. The schemes have been subject to further designs and a costing exercise. The costs identified are at 2016 prices. Detailed modelling has not been undertaken for Eden's other towns and villages. This does not infer that highways infrastructure and transport improvements will not be required to support new development, but these improvements will be site specific and relevant in scale to the proposed development. A study was undertaken in Penrith due to the scale of housing that the town is expected to accommodate, and the cumulate impact that such development will have on the town. In Eden's other settlements, the district Council will work with applicants and the County Council to determine likely requirements as proposals for development sites progress. Transport Assessments and/or Travel Plans will be required on development proposals that meet the criteria defined by the County Council. Where unacceptable highways impacts are identified developers will be

expected to mitigate these impacts to make the development acceptable, through investing in existing infrastructure or providing new infrastructure.

Required Infrastructure	Description	Delivery Body	Funding	Timescale/ Priority
Gilwilly Industrial Estate Highways Improvements	 A package of road network improvements to facilitate the growth of the Industrial Estate. 	• Cumbria County Council	 Funding Agreed (Department for Transport: £1.6m, CCC: £307,000, EDC: £150,000, Cumbria LEP: £235,000 through the Cumbria Infrastructure Fund) 	Complete
Traffic Calming Measures in New Streets, Carleton Hill and Beacon Edge	 On street traffic management e.g. speed cushions or 'dragons teeth' warning signs. 	• Cumbria County Council	 Developer Contributions Public funding/grants Estimated cost £150,000 	 High priority – required to mitigate impacts of northern and eastern urban extension sites
• M6 Junction 40	 Increased capacity for A592S to A66E movement. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £695,792 £900,000 	 High priority – of strategic importance for town
 Salkeld Road/A6 junction modification 	 Neatening of junction, Inglewood Road to be one-way southbound, introduction of pedestrian footway. 	• Cumbria County Council	 Developer Contributions Public funding/grants Estimated cost: £80,000 	 High priority – required to mitigate impact of northern urban extensions.
Stricklandgate/ Portland Place	 Reducing parking, moving bus cage and widening Portland Place to remove obstructions for vehicles turning from Stricklandgate. 	• Cumbria County Council	 Developer Contributions Public funding/grants Estimated cost: £24,000 	 High priority – needed to mitigate cumulative impacts of development across town.
 Brunswick Square/ Watson Terrace junction 	 Improved layout to aid pedestrians crossing. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £56,000 	 High priority – will improve pedestrian access into town centre

Required Infrastructure	Description	Delivery Body	Funding	Timescale/ Priority
Corney Place Reconfiguration	 Relocated parking, improved public realm, Corney Place one way. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £124,000 	 High priority – will improve pedestrian access into town centre.
Market Square Reconfiguration	 Condensing vehicle movements into a single priority junction, improved public realm. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: (£124,000) 	 High priority – will improve attractiveness of town centre and mitigate cumulative impacts of new development around town.
• Corn Market/ Great Dockray	 Realigned parking and new public realm and removal of one of the vehicle routes. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £500,000 	 High priority - will improve attractiveness of town centre and mitigate cumulative impacts of new development around town.
 Carleton Avenue/ Carleton Road 	 Additional capacity through new traffic signals and improved pedestrian crossing facilities. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £51,000 	 High priority – required to mitigate impact of urban extension sites.

Transport – Cycling and Walking

What is the current level of provision in Eden and are there any deficiencies?

- 46. Cycling and walking are legitimate uses of the highway network and as such are encouraged by Cumbria County Council and Eden District Council as suitable and healthy alternatives to car travel. Such uses should be supported by the provision and improvement of appropriate facilities in the highway network. Eden has a comprehensive network of public rights of way through its towns, villages and countryside. The Rights of Way Improvement Plan (ROWIP) prepared by Cumbria County Council is designed to provide funding to parishes and community groups to develop and enhance the rights of way network in their areas. The ROWIP has been incorporated into the County Council's and Countryside Access Strategy
- 47. Eden's quiet lanes provide lots of opportunities for walking and cycling and a number of long distance cycle routes pass through Eden, including the Coast to Coast (C2C part of National Route 7 and 71), Walney to Wear and Whitby (following National Route 70), the Pennine Cycleway (National Route 68).
- 48. The Government publishes annual statistics relating to local area walking and cycling, which are derived from the 'Active people survey', an annual household survey which is administered by Sport England. The survey results for Eden show that levels of recreational walking and cycling in Eden significantly exceed the North West average, whilst the levels of 'utility' walking and cycling (trips to get from one place to another for a purpose) are lower than the North West average (see Figure 5). These findings are supported by the Census which revealed that 1.26% of Eden's working population cycle to work compared with a North West average of 2.19%. These figures are perhaps not surprising given the rural nature of the area, with walking and cycling often not practical for 'utility' trips, whereas the easily accessible and high quality countryside provide ample opportunities for recreational walking and cycling.
- 49. Average commuting distances in Eden are amongst the highest in the county, at 20km per person, up from 18.1km in the 2001 census, compared with a regional average of 14km. It is not therefore unsurprising that cycling is a less common mode of travel to work than regionally. More surprising is that 16.5% of people walk to work in Eden compared with 10.9% across the North West.

	Walking				Cycling					
	Recreation		Utility		Recreation		Utility			
	At least 1 per month	At least 1 per week	At least 1 per month	At least 1 per week	5x per week	At least 1 per month	At least 1 per week	At least 1 per month	At least 1 per week	5x per week
Eden	65.9%	57.7%	52.2%	47.4%	19.6%	13.7%	8%	5.7%	5.4%	1.5%
North West	53.6%	42.9%	57.4%	50.5%	23%	9.3%	5%	4.7%	3.2%	1.3%

Figure 5: Walking and Cycling in Eden

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

- 50. New development will be expected to be able to be safely accessed by a range of transport modes. Policy DEV3 of the draft Local Plan states that development will only be permitted if it can provide safe and convenient access to pedestrians and cyclists. There will therefore be occasions where developers will be required to improve walking and cycling infrastructure to make their development acceptable in planning terms. These improvements will clearly vary on a case by case basis and will be negotiated at pre-application and planning application stages, with the input of the County Council as highways authority.
- 51. The Penrith Transport Improvements Study identified a range of sustainable transport improvements for Penrith to improve the safety and attractiveness of walking and cycling across the town. It has focussed on improving connectivity from existing and planned housing areas to the town centre and key employment areas. By encouraging modal shift from driving to walking and cycling in the town the highways capacity impacts of new development can be reduced, and wider environmental and health and wellbeing benefits can be achieved. The range of projects identified as being required re outlined in the table below. The schemes have been subject to further design and costing exercise. The costs identified are at 2016 prices. Other improvements may be identified from time to time as travel patterns change.

Required Infrastructure	Description	Delivery Body	Funding	Timescale/ Priority
 Cycle facilities along eastern side of A6 past hospital 	 Utilising low traffic routes and connection to existing cycle provision 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £9,000 	High priority
 Cycle routes on A6(north of town centre) 		 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £6,000 	 High priority – will ensure connectivity between northern sites and town centre.
 Underpass upgrade at Mallard Close and adjacent footpath along WCML 	 Upgrading of footpath and underpass including surfacing, signage and lighting. 	• Cumbria County Council	 Developer Contributions Public funding/grants Estimated cost: £31,000 	•

Required	Description	Delivery	Funding	Timescale/
Infrastructure		Body		Priority
Cowper Road cycle route to connect to new site and to Thacka Lane	 Completion of western section of orbital route with suitable surfacing, signage and lighting. 	• Cumbria County Council	 Developer Contributions Public funding/grants Estimated cost: £120,000 	 High priority – would provide a link between Gilwilly, existing housing and new developments in the north of the town.
 Pedestrian provisions at side road crossing points in Penrith town centre 	 Tightening/build outs at junctions including Pennyhill Park, Robinson Street and Lark Lame and Foster Street. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £53,000 	 High priority – required to improve pedestrian access to town centre.
 pedestrian facilities at A592 roundabouts with Cromwell Road and B5288 Norfolk Road 	 Introduction of pedestrian refuge islands and dropped kerbs. 	 Cumbria County Council 	 Developer Contributions Public funding/grants Estimated cost: £29,000 	 High priority – required to improve pedestrian access to town centre.
 Kirkby Stephen cycling infrastructure. 	 Sites in the west of Kirkby Stephen (KS15, KS18) should improve Croglam Lane as a lit cycle path linking to the town centre. 	• Cumbria County Council	Developer contributionsNot costed	• Will be required to improve cycling and walking connectivity with town centre.
 Site specific cycling and walking infrastructure 	 Cycling and walking infrastructure to ensure new development sites are properly integrated into settlements. 	 Developers Cumbria County Council 	Developer contributions	Alongside new development.

Transport – Public Transport

Introduction

- 52. The planning system is underpinned by the principles of sustainable development and local planning authorities, through their plan-making and implementation should enable and promote the use of public transport wherever possible. The sparsely populated and dispersed nature of Eden presents significant challenges to public transport provision and limits the viability of conventional public transport services, and resultantly people living and working in the area tend to be heavily dependent upon private vehicles to meet their travel needs. The 2011 census showed that less than 1% of the population travel to work by train and just over 2% travel by bus, minibus or coach. The proportions of people using public transport to get to work are significantly less than the average levels across the North West of England as a whole, however interestingly the proportion of people in Eden who work mainly from home or walk to work is much higher than the north west average (29% in Eden compared with 15% for the North West), possibly partly attributable to the significant proportion of people employed in agriculture in Eden.
- 53. Whilst public transport in Eden does not account for a large proportion of the total journeys travelled in Eden, it remains an important mode of travel for those people for whom travel by private car is not an option, for reasons such as age, health, income etc. Public transport in Eden comprises of rail services on the West Coast Mainline and Carlisle to Leeds railways and a number of buses serve the area focussing services on and around the main settlements.

Buses

What is the current level of provision in Eden and are there any deficiencies?

- 54. A range of bus services operate in Eden, connecting its settlements with each other and areas outside of Eden. The bus services are provided by a range of private companies including Stagecoach, Grand Prix Coaches, National Express, NBM, Robinsons, Telfords and Wright Bros Coaches, and the volunteer run Fellrunner.
- 55. As would be expected, the main towns in Eden are much better served by bus services than outlying villages and hamlets. A range of buses do serve many of the villages however in general these services only operate on certain days of the week and often comprise of a maximum of one bus per day. Whilst they do provide an important link for residents in outlying villages they do not present a transport option for regular journeys such as commuting. Large expanses of the district have no access to bus services and are resultantly reliant on private cars.
- 56. In recognition of the deficiencies in bus services due to Eden's rural nature, a number of community transport schemes are in operation across Cumbria including voluntary car schemes, community minibus group hire and a 'rural wheels' scheme,

all of which are schemes intended to provide an affordable transport option for those without access to their own car and with no access to scheduled bus services. These are coordinated by Cumbria County Council and some have benefited from funding from the Department for Transport, but largely rely on community volunteers and taxi companies to operate them.

57. It is within a challenging budgetary context that we need to consider how development that will be promoted through the Eden Local Plan can best be served by buses and other public/community transport. A realistic approach needs to be taken that recognises the challenges faced due to the area's geography, and funding issues, but we also need to remain committed to the principles of sustainable development and wherever possible try to ensure that development is not solely reliant on private car travel.

What evidence do we have and what plans and strategies do infrastructure providers have in place?

58. The Cumbria Local Transport Plan sets an overall framework for planning for transport across Cumbria. With regards bus services, the LTP recognises that whilst there are significant opportunities to increase travel by sustainable modes such as buses, train and bicycles in the County's main towns, there are major limitations on the viability of conventional bus services outside the main towns and other more innovative solutions for transport are often necessary. The LTP outlines a number of Transport Outcomes which it seeks to deliver, and relating to bus travel is the outcome that new developments will be located where more people can get there on foot, by cycle and by bus or train. It also includes the outcome that bus and train services will work together and be easy to use and affordable, and that people working in and visiting Cumbria will be able to make more of their journeys by train, bus, cycle and on foot.

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

59. One of the key mechanisms by which the Eden Local Plan will ensure that the development it promotes is adequately serviced by bus services is through its overarching locational strategy set out in Policy LS1. The distribution of development reflects the role and functions of settlements in Eden and directs the majority of development to the main town of Penrith and the market towns of Alston, Appleby and Kirkby Stephen. This development strategy concentrates development in the most sustainable locations that have the best access to facilities and services, including bus services. By focussing development in these towns where bus services exist, and by increasing the populations of these places and promoting sustainable travel (eg through requiring Travel Plans on larger developments) the Local Plan should help increase bus usage in the towns which could help sustain commercially operated services.

- 60. The Cumbria Local Transport Plan (page 30) recognises the difficulty in providing bus services in rural areas of Cumbria and states that in areas where frequent bus services are not viable, the voluntary and community sector will play an important role in providing alternatives. The County Council is working in partnership with operators and communities to deliver and promote local transport services for example the Rural Wheels scheme, voluntary car schemes and community minibuses.
- 61. Cumbria County Council's Planning Obligations Policy states that the County may seek developer contributions to secure, implement and monitor Travel Plans or contributions towards public transport. With regards bus services, the policy (page 19) requires developers of residential developments of 80 or more properties to contribute funding for bus services if there is not already a bus stop within 400m of the development (800m in rural areas) with the prescribed frequency of service (which is set out on page 20 of the Policy). The funding would be required for a new or enhanced service for a minimum of 5 years. The Policy also requires developers of employment developments that will employ more than 100 employees at the same time to make contributions to the provision of a bus service at the main start/finish time of the day from the nearest Key Service Centre, unless such a service already exists within 400m of the site.
- 62. The adoption of the County's Planning Obligations Policy therefore provides a policy framework for improving and delivering new bus services to support new development that will come forward through the Eden Local Plan. Contributions for bus services are however one of numerous areas of infrastructure for which developer contributions may be sought from the district or County Council. At the time of a planning application, the ability of a developer to pay contributions, based on an assessment of the development's economic viability will need to be considered carefully. Negotiations between developers, the district and County Council will determine on a case by case basis whether a developer can feasibly pay contributions to infrastructure without undermining their scheme's viability.
- 63. The Penrith Transport Improvements Study recognised that the scale of growth being planned for in Penrith will require, and should be able to sustain improved town bus services to provide better linkages between housing areas, employment areas and the town centre. Such improved services will require the resident population to increase to a point whereby bus services can be run commercially.

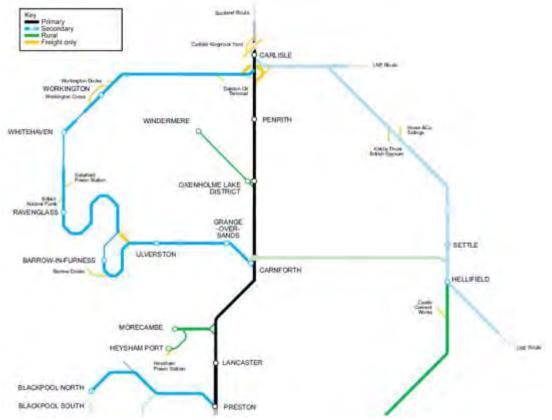
Required Infrastructure	Description	Delivery Body	Funding	Timescale/ Priority
• S15 Improved	 Introduction of 	 Cumbria 	Developer	 High priority
Bus Services	town centre	County	Contributions	but will require
circular routes		Council	 Commercial 	development to
with		(facilitating	operators	come forward
interchange		only)	 Estimated cost of 	to provide
	opportunities.		£500k per annum.	increased

Required Description Infrastructure		Delivery Body	Funding	Timescale/ Priority
		Commercial operators		consumer base to support commercial services.

Rail

What is the current level of provision in Eden and are there any deficiencies?

64. Eden is served by the west coast mainline and the Carlisle to Settle railway line. Penrith is situated on the west coast mainline and its station provides direct links to cities including Carlisle, Glasgow, Edinburgh, Manchester, Birmingham and London.



Source: Network Specification: London North Western (Network Rail, April 2014)

Figure 6: Existing Rail Network in Cumbria

65. Services on the west coast mainline are run by Virgin Trains and First Transpennine Express. A number of services on the west coast railway line do not stop at Penrith, reducing the number of services accessible from the town. Additionally a number of services that do stop at Penrith do not stop at Oxenholme and this limits the frequency of local train travel between Eden and South Lakeland.

- 66. The section of route of the west coast main line passing through North Lancashire and Cumbria is 101 miles long, is overhead electrified and predominantly a two track railway. It passes through some winding and steeply graded topography, such as Shap summit, and has a number of capacity constraints along the route. The speed differentials between passenger services and slower freight trains constrain capacity. The use of diesel traction, instead of electric traction, restricts the speed of freight services and there are also limited passing loops, with many of the existing ones being restrictive in length.
- 67. Penrith station has experienced significant growth in usage over the last 5 years, with a 21% increase from 2010 levels to over 498,400 journeys starting or finishing from the station in 2015-16⁷. Given the very small percentage of Eden residents who commute by train large proportion of this passenger number growth is likely to be attributable to leisure travel.
- 68. Northern Rail operates services on the Carlisle-Settle line and serves the stations of Armathwaite, Lazonby and Kirkoswald, Langwathby, Appleby and Kirkby Stephen within Eden. There are generally 6-7 trains a day serving these stations (some services skip Langwathby, Lazonby and Kirkoswald and Armathwaite). Usage at these stations has fluctuated slightly over recent years, and suffered significantly in 2015-16 when the line closed from February 2016 between Appleby and Carlisle due to flood damage. The line opened again in March 2017 so figures are not expected to recover until 2017-18.

Station	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Penrith	411,358	420,252	429,500	439,958	475,964	498,428
Armathwaite	9,684	9,554	9,194	8,130	7,786	5,950
Lazonby and Kirkoswald	17,456	18,632	17,198	16,144	15,802	12,510
Langwathby	24,994	26,642	24,752	24,350	22,832	17,870
Appleby	70,808	68,884	60,992	62,600	57,078	53,036
Kirkby Stephen	30,352	32,080	31,262	30,138	29,768	26,786

Source: Entries and Exits data provided by Office of Rail Regulation Figure 7: Passenger Usage at Railway Stations in Eden

69. As well as carrying passengers, the rail network also carries substantial and increasing amounts of freight, and the Settle Carlisle line includes a spur from British Gypsum in Kirkby Thore to transport gypsum for the building industry around the country. There are also significant loads of coal being transported along the line - the amount was increased in 2008 when some was rerouted from the West Coast Mainline to free up capacity. This growth in freight traffic means the long signalling headways (the minimum distances between trains on a section of track) between Settle and Carlisle are a constraint on capacity and performance.

⁷ Figures based on total passenger 'entries and exits', published annually by the Office of Rail Regulation. https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage

What plans and strategies do infrastructure providers currently have in place?

- 70. Network Rail prepares Route Utilisation Strategies (RUS), decade long plans for the management and improvement of its network. The RUS for Lancashire and Cumbria was published in August 2008⁸. In the future the RUSs will be gradually replaced a Long Term Planning Process (LTPP) which is designed to facilitate the strategic planning of the rail network in a flexible way to take account of the views of the rail industry, funders and customers. It undertakes market studies, cross boundary analysis and route studies. Draft market and route studies are published and subject to a 90 day consultation period which helps inform the final documents. Market and route studies then become established documents. Network Rail anticipated that work would start on the Route Study for the North of England in March 2017.
- 71. Network Rail has prepared Network and Route Specifications⁹ and Eden's and Cumbria's rail network falls under the 'London North Western' route which covers the network from London to the West Midlands, North West and Scotland. The Settle to Carlisle line is route H.40 and the stretch of West Coast Main Line from Preston to the Scottish Border is N.05. The Route Specification documents provide a description of each route, its capability, passenger train service levels, freight trains, level crossings and proposed infrastructure investment in Control Period 6 (2019-2043).

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

- 72. The development being planned for through the Local Plan will not result in specific identifiable infrastructure requirements relating to the rail network. However the overall improvements to the rail network being planned for by Network Rail will improve the rail services on offer and help encourage more sustainable travel by Eden's existing and new residents, workers and visitors. Capacity is not generally an issue on the railways within Cumbria given the relatively low levels of passenger demand when compared with more urban areas. The focus is therefore on improving the existing infrastructure to allow for faster and more efficient services.
- 73. Network Rail's Route Specification report identifies proposed infrastructure investment in Control Period 5 (2014-2019) and states that journey time improvements will be sought as part of track renewals on the Settle to Carlisle line. The current predominant line speed is 60mph and the target is for this to be improved to 75mph by 2019. On the West Coast Main Line investment in infrastructure will include the renewal of life expired assets and refurbishment, which

⁸ https://www.networkrail.co.uk/running-the-railway/railway-upgrade-plan/

⁹ https://www.networkrail.co.uk/running-the-railway/our-routes/north-west/

will result in junction and layout changes at Oxenholme and potential speed increases.

74. In the longer term towards the end of the Local Plan period, the proposals for the national high speed rail link HS2 could impact upon rail service provision in Eden. The proposals intend to provide an hourly high speed service from London to Preston and there is potential for the trains to extend this service and run on the existing network to serve Lancaster, Lake District stations and Carlisle depending on demand.

Level Crossings

75. There may be localised and specific instances where development promoted in the Local Plan may be required to fund railway infrastructure improvements. For instance Network Rail has raised concerns that the scale of development being planned for in Appleby could result in safety issues related to an increased use of the level crossing. The Council has a statutory duty to consult Network Rail where proposals for development are likely to result in a material increase in the volume or a material change in the character of traffic using a level crossing over a railway. Issues and infrastructure requirements relating to level crossings will be negotiated on a case by case basis.

Water Supply and Wastewater Treatment

What is the current level of provision in Eden and are there any deficiencies?

- 76. United Utilities is responsible for water supply in the North West and the region is split into four water resource zones within which water sources can be shared (see Figure 8). An integrated resource zone covers the majority of the North West and a large part of Eden District including, Appleby, Kirkby Stephen and the southern parts of Penrith and south western parts of the district. The Integrated Resource Zone is centred upon major aqueducts, which deliver water from the Lake District to Keswick, South Penrith, South Cumbria, Lancashire and Greater Manchester. There is a pumped supply from Watchgate Water Treatment Works (to the north of Kendal) which is pumped via Shap.
- 77. The north eastern parts of Eden are within the North Eden Water Resource Zone which serves a population of around 14,000. Most of the zone is supplied from a range of boreholes in the Sherwood Sandstone aquifer, whilst the Alston area is supplied from a bulk water supply from Northumbrian Water. There are no non-potable supplies in this zone. There is no transfer of water between the North Eden Zone and any other zone or any other water company, except for the import from Northumbrian Water. Northumbrian Water's Burnhope reservoir supplies raw water to its Wear Valley Water Treatment Works, which supplies drinking water to Northumbrian Water as well as the small export into United Utilities' supply area. The

agreement is for Northumbrian Water to provide a bulk supply of non-fluoridated, potable water up to a maximum of 1.3 Ml/d.



Figure 8: United Utilities Resource Zones

- 78. United Utilities is also responsible for taking waste water from development through its sewer network, treating it and safely returning treated water to the environment. Most properties in Eden are connected to main sewers however some rural properties are still reliant on septic tanks and private systems. For settlements connected to the public sewer system most are served by their own waste water treatment works plants. United Utilities continually invests in its waste water infrastructure to improve treatment capacity and environmental quality. A first time sewage scheme has recently been installed to serve Laithes and Catterlen, and Long Marton East WWTW has been upgraded to increase capacity.
- 79. In the Alston area, Northumbrian Water is responsible for waste water treatment, and Alston and Nenthead have local waste water treatment works.

What plans and strategies do infrastructure providers currently have in place?

- 'Final Water Resources Management Plan' March 2015 Website address: <u>www.unitedutilities.com/corporate/about-us/our-future-plans/water-resources</u>
- 'Northumbrian Water Business Plan 2015-2020' Website address: <u>www.nwl.co.uk/services/water/Draft-Water-Resources-Management-Plan-2024-consultation/</u>

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

80. The Council has liaised with United Utilities and Northumbrian Water throughout its Local Plan preparation to understand the capacity of water and wastewater infrastructure to accommodate the scale of development proposed in the Local Plan.

Water

- 81. With regards water supply infrastructure, United Utilities has advised that there are no major constraints in its infrastructure and all the Local Plan development will be able to be accommodated. Developers request a connection into the mains water supply network for which United Utilities issue a quote and charge.
- 82. As a general comment on overall water demand, UU's Water Resources Management Plan explains that total demand for water in the North West region has actually reduced in 18 out of the last 20 years. With current levels of water efficiency promotion, pipe leak detection and the provision of free of charge water meters, United Utilities predicts that demand will continue to reduce despite the expected population and housing growth.

Waste Water

- 83. With regards waste water infrastructure, developers have a right to connect to the nearest point on the waste network and United Utilities/Northumbrian Water must make capacity available to take foul water. A key priority for utilities providers is to ensure that surface water does not enter combined sewers as it reduces the overall capacity of the sewer and treatment plants, leading to more frequent instances of overflow spill and discharges into local watercourses with resultant environmental impacts. Whilst utilities providers are obliged to take foul water they do not need to accept surface water and it is important that new developments design in sustainable surface water drainage systems in order to ensure adequate wastewater capacity remains available and the best environmental outcome can be secured.
- 84. In Penrith a £20 million improvement programme is almost complete which has greatly improved capacity in the town. A key issue, highlighted by United Utilities will be to ensure new development sites in the town manage their surface water sustainably. There are concerns that the scale of growth being planned on the urban extensions particularly to the east of the town could increase the frequency of overflow spills into sensitive watercourses. These occasionally occur during periods of heavy rainfall but it is important that new development does not lead to an increase in frequency. Policy DEV2 of the draft Local Plan requires developments to incorporate Sustainable Drainage Systems and the Council will expect that these requirements are taken seriously and incorporated at the outset of scheme proposals. The district Council will liaise closely with applicants, United Utilities, and

the County Council as lead local flood authority at pre-application and planning application stages to ensure appropriate measures are put in place.

- 85. Across the other towns and villages United Utilities has advised that there are no significant wastewater infrastructure capacity issues that have been identified at this stage that would prohibit the development proposed in the Local Plan. The key message is again that surface water must not enter the combined sewerage system if capacity is to be maintained to accommodate future growth.
- 86. United Utilities does not provide specific capacity for wastewater treatment works at this stage of plan making but makes an overall judgement on the information available at this time. It is able to undertake more detailed assessments of capacity once start dates and connection points of sites are known, and pre-application and planning application discussions between the Council, applicants and United Utilities will be essential in ensuring capacity can be made available in a timely manner.
- 87. United Utilities will always be able to make foul water capacity available, but the key issue is timing. United Utilities investment and upgrade programmes work on 5 year 'AMP' periods. Investment is currently committed up to 2019 with a new AMP period commencing in 2020. It is therefore essential that United Utilities have sufficient notice of developments so that any required investment in their infrastructure can be planned into their investment cycles. The Council will continue to liaise with United Utilities and share its knowledge of future development locations and timescales as the Plan progresses.
- 88. Northumbrian Water has advised that whilst spare capacity at Alston and Nenthead waste water treatment works is limited, it is sufficient to accommodate the scale of development proposed in the Local Plan.

Flood Risk

What is the current level of provision in Eden and are there any deficiencies?

Overview

- 89. Flooding in Eden could arise from several sources including from rivers and watercourses, surface water and sewers, groundwater and reservoirs and artificial sources. The most significant flood risk in Eden is considered to arise from fluvial flooding along principle watercourses, in particular the Eden and the Eamont. Flood risk from these rivers is highest at Appleby (Eden) and Eamont Bridge (Eamont). In 2015 the River Eden experienced the highest flood levels recorded on any river in England, flooding hundreds of properties across Eden and damaging infrastructure.
- 90. Over the past five years flooding has occurred in areas that were not previously known as high flood risk, these include Ainstable (Powsey Syke) and Alston (Mill Race) where intense rainfall events have resulted in the surcharging of small becks resulting in property inundation.

- 91. There are numerous watercourses throughout the District which drain the upland areas of the Pennines and the Lake District. In recent years it has become notable that surface water run-off from the fells and highways is becoming more widespread with individual properties flooding where there was no previous history. Properties in locations such as Patterdale, Glenridding, Threlkeld and Southwaite have all been affected. In Eden District Council area there are 2077 properties at risk of fluvial flooding
- 92. In 2011, a £5.6m flood alleviation scheme was carried out in Penrith, providing a flood storage reservoir and fixing and replacing more than 675m of culverts to protect homes and businesses in Penrith. The flood storage reservoir has been constructed adjacent to Gilwilly Industrial estate and forms part of Thacka Beck Nature Reserve which is managed by Cumbria Wildlife Trust.
- 93. Responsibility for managing flood risk rests with the Environment Agency and Cumbria County Council as Lead Local Flood Authority (LLFA). The Environment Agency is responsible for taking a strategic overview of the management of all sources of flooding (eg through strategic plans, informing Government policy, providing a framework to support local delivery). The Environment Agency is responsible for increasing public awareness of flood risk, flood forecasting and flood warnings and has a general supervisory duty for flood risk management. The Environment Agency is also responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea. The County Council as LLFA has powers and duties for managing flooding from ordinary watercourses, surface water (overland runoff) and groundwater in the administrative area of Eden.
- 94. The County Council's duties as LLFA include investigating flood events and reporting its findings publicly. It must also develop, maintain and apply a strategy for local flood risk management and maintain a register of flood risk assets. As a result the County Council developed and published a Local Flood Risk Management Strategy in March 2015. In April 2015 it also became statutory consultee for major planning applications to the Local Planning Authority to ensure new developments incorporate a sustainable approach to surface water disposal. Lead Local Flood Authorities also jointly annually review a 6 year plan of flood relief schemes to the Environment Agency and Defra.

Penrith

- 95. The principle watercourse of Thacka Beck is classified as a main river, is approximately 5.3km in length and flows in a south easterly direction to its confluence with the River Eamont. The watercourses of Thacka Beck, Myers Beck and Dog Beck have a history of flooding in Penrith with flooding recorded in 1985, 1994 and 2002.
- 96. In the Cumbria floods of January 2005, 21 properties (16 residential and 5 commercial) were flooded from Thacka Beck affecting the rural floodplain upstream

and the urban channel which in the main is culverted apart from some small stretches through the town centre. The town centre was affected by flooding at four separate locations with the volume of water flowing through the culverts and surface water systems raising manhole covers and lifting tarmac.

- 97. Flood resilience works were carried out in December 2008 at Cumbria Police Headquarters at Carleton Hall to provide flow routes and flood prevention ramps and barriers. A grid situated on the culvert adjacent to the access road to the Police Headquarters, that was a source of previous blockages was re-sited upstream.
- 98. In August 2011 the Environment Agency officially opened the £5.6 million flood alleviation scheme which reduces the flood risk from Thacka Beck. More than 260 homes and 115 businesses in Penrith now benefit from improved flood protection. Work on the scheme involved fixing and replacing more than 675m of culverts underneath the streets of Penrith and the construction of a 76,000m³ flood storage reservoir the equivalent of 30 Olympic sized swimming pools which has been built upstream to hold back flood water to reduce the risk of flooding. Three telemetry stations have been built to monitor levels at the flood storage basin at the entrance to the town culvert at Watson Terrace and in the open section at White House Gardens. Since the works were completed the environment around the flood storage basin has been enhanced to provide a wetland wildlife haven which the local community can enjoy.

Alston

- 99. Predicted flood risk from main river sources in Alston includes the River South Tyne corridor, which flows to the west of the town and the River Nent, which passes through the town from the east.
- 100. However, the topography of Alston and its landscape setting results in large areas of existing urban development on or near steeply sloping land. This can lead to localised flooding problems as a result of direct surface water runoff during high intensity rainfall events.
- 101. Surface water runoff and ordinary watercourse surcharge present a significant flood risk in Alston and resulted in over 30 properties flooding in May 2013. A Flood Forum was subsequently convened to consult with the community in October 2013. A flood investigation report is currently being finalised and a funding bid being considered for improvement works.

Appleby

102. The historic town of Appleby is situated where the River Eden turns through two 180degree bends. A large portion of the development in the town has taken place on the natural floodplain enclosed by the river. Appleby suffers frequent flood damage with undefended properties on the Sands being particularly vulnerable.

- 103. On 5 and 6 December 2015 Appleby recorded the largest flood event affecting the town, when 176 properties were flooded. A number of properties along the Sands were flooded on three separate occasions throughout December.
- 104. On the 18 November 2009 Cumbria experienced exceptional flooding due to record rainfall totals and already saturated ground. In Appleby flooding to the majority of the properties on the Sands was prevented. 26 properties were prevented from flooding due to the installation of flood resistance measures in this area (eg flood guards). This work was a pilot project funded by DEFRA and involved partnership between the Environment Agency and Eden District Council.
- 105. West Bank and Chapel Street are protected by a Flood Alleviation Scheme which includes raised flood barriers, floodgates, floodwalls, earth embankments, stop logs and a pumping station and offers 1 in 100 year protection (1% probability of occurring in any one year (or, on average once in every 100 years). Some defences were overtopped during the December 2015 floods. The Sands and undefended areas offer a 1 in 10 year protection (5% probability of occurring in any one year). A bid for money for the replacement of the flood gate was made in March 2014 and is now sitting within the 6 year listing of flood relief schemes looking for Defra funding.

Eamont Bridge

- 106. The River Eamont catchment covers an area of approximately 230km² and its main tributaries are the River Lowther, Dacre Beck and Thacka Beck. Flooding in the Eamont Bridge area is mainly due to the River Eamont outflow from Ullswater but Dacre Beck, which joins the Eamont upstream of the Eamont Bridge Flood Warning Area, can often have a significant influence during flood events.
- 107. Approximately 100 properties were affected by the flooding in December 2015. Flood defences were overtopped or bypassed on the north side of the river from M6 to Skirsgill Lane, the south side of the river from M6 to Jubilee House grounds Mill Race Drive, Low Mill to Brougham Mill and the floodplain of the Lowther and the Eamont upstream of Brougham Bridge.
- 108. Flooding occurred on the 7 and 8 January 2005 with 35 properties affected. At the peak of the flood depths of up to 1m were recorded on Skirsgill Lane. The caravan park at Southwaite Green Mill, low-lying parts of the Cumbria Police Headquarters at Carleton Hall Park and properties at Frenchfield and Brougham were affected.
- 109. In November 2009 Cumbria experienced severe flooding following heavy rainfall. In Eamont Bridge 43 residential properties and 2 business properties flooded both upstream and downstream of the bridge. Another 14 bungalows were surrounded by flood water but suffered no internal flooding.
- 110. There are no formal flood defences other than private walls alongside the riverbank adjacent Skirsgill Lane and at Southwaite Green Mill Caravan Park adjacent the weir.

Kirkby Stephen

- 111. The River Eden flows directly to the east of Kirkby Stephen and places a number of properties adjacent to it at risk of fluvial flooding. Croglam Beck and an unnamed watercourse from Bengy Hill also flow through Kirkby Stephen. The majority of the town is however in Flood Zone 1 and therefore considered to be at a low risk of flooding from rivers.
- 112. In December 2015 37 properties were affected by flooding from various watercourses, including the River Eden and the unnamed watercourse in particular. Surface water, surcharging drainage systems and groundwater added to the problems. Five areas were particularly affected: Quarry Close, Birkbeck Gardens, Station Yard and South Road; High Street; North Road and Hartley Road; Mill Lane; and Hartley Low Mill.
- 113. The topography of Kirkby Stephen and the sloping nature of surrounding land results in increased risk of localised flooding problems as a result of direct surface water runoff during high intensity rainfall events. The Environment Agency Flood Maps show significant areas of surface water flood risk, particularly focussed along the main roads in the centre of the town including South Road, High Street, Victoria Square and Melbecks.

What plans and strategies do infrastructure providers currently have in place?

• 'Local Flood Risk Management Strategy' March 2015 (Cumbria County Council)

Website Address: <u>www.cumbria.gov.uk/planning-</u> environment/flooding/local flood risk management strategy.asp

• 'Eden Strategic Flood Risk Assessment' September 2015 (Eden District Council)

Available on Eden's Planning Policy Evidence Base Webpage

- 114. The draft Local Plan directs new development away from areas of flooding through its site allocations and development management policies. Consideration of flood risk has formed an important component of the Sustainability Appraisal of potential sites and policies, and was a factor used in assessing sites' suitability for allocation.
- 115. A Strategic Flood Risk Assessment (SFRA) has been prepared by the Council (September 2015) which forms an update to the previous assessment that was undertaken by consultants in 2009. The SFRA assesses the extent and severity of flood risk across Eden from all sources and uses the information to determine the risk of flooding on proposed site allocations. It has concluded that low flood risk areas can accommodate all the necessary proposed development in the Local Plan.

This means none of the proposed site allocation are within flood zones 2 or 3 and no stage 2 (more detailed) SFRA is required.

- 116. It is not considered at this stage that new infrastructure to manage fluvial flood risk will be required specifically to enable the delivery of the Local Plan. Significant capital investment has recently taken place at Penrith around Thacka Beck as explained above and there is therefore no need for additional works at present. However, there are numerous small watercourses that have not been hydraulically modelled which have the potential to cause localised flooding problems and further monitoring will be carried out. The County Council will continue to work in partnership with other bodies to deliver the identified schemes in Action Plan of the Local Flood Risk Management Strategy. These schemes will benefit people and properties in Eden and help resolve existing issues but are not specifically required to enable the delivery of the Local Plan.
- 117. Whilst the SFRA concludes that river flooding is not considered to pose a risk to Local Plan development sites, surface water flooding is still a risk and new infrastructure will be required to support the delivery of Local Plan sites. Surface water flooding affects a number of the proposed allocations and some areas of towns and villages in which development will be brought forward under the Local Plan. New Sustainable Urban Drainage Systems (SUDs) will therefore be an essential component of new development to ensure that it mitigates the risk of surface water flooding elsewhere. The Local Plan through Policy DEV2 will require SUDs in new development and DEFRA has produced a SUDS design standards document titled '*Sustainable Drainage Systems*: Non statutory technical standards for sustainable drainage systems'. A strong partnership approach and early engagement between applicants, developers, the County Council, District Council, Environment Agency and United Utilities will be important in ensuring effective SUDS are designed into development schemes at the earliest opportunity.

Required Infrastructure	Description	Delivery Body	Funding	Timescale/Priority
 SUDS in new developments 	 New development will be required to incorporate SUDS to manage surface water effectively. 	 Partnership working between District and County Councils, developers and United Utilities to agree appropriate SUDS schemes. 	 Developers will be required to integrate SUDS into their schemes as part of their development costs. 	Alongside new development.

Energy Distribution

What is the current level of provision in Eden and are there any deficiencies?

Electricity

118. Electricity North West Ltd is the local Distribution Network Operator (DNO), and as such owns and operates the regional electricity distribution network in the North West of England. It takes power from the National Grid's high-voltage national electricity transmission system, and distributes it at lower voltages to domestic, commercial and smaller industrial premises. ENWL is a private limited company and operates the network under a license from OFGEM.

Gas

- 119. Gas is available in the main towns of Penrith, Appleby, Kirkby Stephen and Alston and in a limited number of local service centres along the A6/M6. Many houses in the District are not connected to mains gas, and instead use heating oil, solid fuel, or to a lesser extent LPG (liquid petroleum gas). Statistics released by the Department for Energy and Climate Change (DECC) estimated that just under a third of the total households in Eden are not connected to the gas network.
- 120. The Gas Distribution Network (GDN) in the north of Cumbria is provided by Northern Gas Networks. It has the lowest customer density of all the gas distribution networks, reflecting the rural nature of much of the area. NGN has a statutory duty to supply new customers where it is economically viable to do so.
- 121. The National Transmission System owned by the National Grid is the high-pressure gas network distribution system, through which gas flows from the import terminals to major centres of population and some large industrial users. Local Distribution Zones contain pipes operating at lower pressure, which eventually supply the consumer.

- 122. The scale of development proposed in the Eden Local Plan is not of a scale that will present capacity issues in the gas and electricity transmission networks.
- 123. The Council has been awarded government funding to investigate the feasibility of district heating networks in the district, and new development projects may present opportunities for heating networks.

Waste

What is the current level of provision in Eden and are there any deficiencies?

- 124. Eden District Council is the Waste Collection Authority for the area and is therefore responsible for the collection of household waste in the area. The Council contracts the recycling collection service out to Cumbria Waste Recycling Ltd and the refuse collection service to Amey. Households in Eden are provided with blue bags for household refuse and this is collected on a weekly basis. A bag and box recycling collection scheme is also operated by Cumbria Waste Recycling on behalf of the Council on a fortnightly basis with most households (25,587) provided with a 55 litre plastic green box for glass and cans, and two weatherproof 40 litre canvas bags, one for hard plastics and one for paper and card. A kerbside garden waste collection scheme also operates on a fortnightly basis (monthly in winter) serving the majority (17,420) of households. There are also 50 'bring sites' within Eden District where communities can take their recycling locally for it to be collected.
- 125. Kerbside recyclables are firstly taken to the bulking station at Flusco and from here the co-mingled (glass, cans and plastics) recycling is currently taken to Norpol MRF (materials recycling facility) and the paper/card to Stirling Fibres based in Chester.
- 126. There are two household waste recycling centres in Eden, which are the responsibility of Cumbria County Council as a Waste Disposal Authority. They are operated by Shanks Waste Management on behalf of Cumbria County Council. These are at Flusco and Kirkby Stephen and are provided for householders to deposit household waste for recycling and disposal.
- 127. Local authorities are not responsible for collecting or recycling commercial waste and therefore this falls within the remit of private operators.
- 128. The table below shows the quantity of local authority collected waste in Eden over the period 2008-2013 and illustrates that on average 45% of household waste collected is reused, recycled or composted. These recycling figures do not take into account the recyclables that are taken by Eden residents to the County Council's Household Waste Recycling Centres and therefore the actual levels of Eden's household waste that is recycled is likely to be slightly higher.
- 129. In 2015-15 Eden District decreased the amount of waste produced per person by over 5% on the previous year. This is the eighth largest percentage decrease when compared to all other local authorities in England.

	2011-12	2012-13	2013-14	2014-15	2015-16
Household waste	22,604	20,242	23,663	22,437	21,984
collected (tonnes)					

	2011-12	2012-13	2013-14	2014-15	2015-16
% of household waste	45.8%	44.21%	40.77%	44.42%	43.25
sent for reuse, recycling					%
or composting					

Source: Defra – ENV18 – Local authority collected waste: annual results tables¹⁰ Figure 9: Waste Collection and Recycling in Eden

What evidence do we have and what plans and strategies do infrastructure providers have in place?

 'Joint Municipal Waste Management Strategy 2008 – 2020' (Cumbria Strategic Waste Partnership)

Available from: <u>www.recycleforcumbria.org/</u> and <u>cumbria.gov.uk/planning-</u> <u>environment/policy/minerals_waste/MWLP/home.asp</u>

This is a strategy for the management of municipal waste across Cumbria and reflects national waste objectives and is designed to contribute to achieving the national recycling and recovery targets contained in the Waste Strategy for England. It is delivered by 'Cumbria Strategic Waste Partnership (Resource Cumbria) which is a partnership of Cumbria's district councils and the county council.

Cumbria Minerals and Waste Planning Policy Documents (Cumbria County Council)

Website address: <u>cumbria.gov.uk/planning-</u> environment/policy/minerals_waste/MWLP/Adopted.asp

The County Council is the minerals and waste planning authority for Cumbria and is responsible for preparing planning policy relating to minerals and waste. It has adopted a Core Strategy and Generic Development Control Policies development plan documents, and following national planning reforms is now working to prepare a Minerals and Waste Local Plan which will replace these documents when adopted.

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

130. The Local Plan plans for an additional 242 homes per year to be built in Eden over the period 2014-32. In terms of waste collection Eden District Council will therefore need to ensure that a refuse and recycling collection service is provided to the new homes.

¹⁰ https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables

- 131. Under the terms of Eden District Council's current waste and recycling collection contracts, for every 50 additional properties that are included in the collection service, the cost to the Council increases by approximately £11,000. Therefore if 242 homes per year are built this would cost the Council an extra £53,240 per year to provide them with a waste and recycling collection service. The Council funds its waste collection service through Council tax receipts and it is anticipated the extra revenue from Council tax from the new properties would be sufficient to fund the increased costs of waste and recycling collection. The Council also receives some funding from Cumbria County Council in the form of recycling credits for diverting waste from landfill.
- 132. Cumbria County Council is the Minerals and Waste Planning Authority for all local authorities in Cumbria excluding the National Park, and it therefore has to identify and plan what waste management facilities and minerals developments Cumbria will need and indicate appropriate locations for them. The County Council is currently preparing the Minerals and Waste Local Plan which will cover the period up to 2028 and published a draft Local Plan for consultation in 2013. Once adopted the Local Plan will replace the Core Strategy and Generic Development Control Policies documents that were adopted by the Council in 2009 as part of the Local Development Framework.
- 133. The Minerals and Waste Local Plan is being prepared within the overarching national policy context of the Government's commitment to working toward a zero waste economy, which involves going further and faster in diverting waste away from landfill towards greater recycling, recovery and re-use. The Local Plan has therefore been prepared on the basis that volumes of household, commercial and industrial wastes are unlikely to increase significantly during the plan period, but that their management methods will continue to change to reflect the waste hierarchy and national zero waste targets.
- 134. Cumbria County Council's long-term municipal waste management contract is based around the two mechanical and biological treatment (MBT) plants at Carlisle and Barrow in Furness, which have throughput capacity for 150,000 tonnes of waste per year. It is anticipated that these plants will have a spare capacity of around 20,000 tonnes per year. The municipal waste management contract takes account of population growth throughout Cumbria.
- 135. As the waste disposal authority Cumbria County Council will need to ensure that appropriate provision of facilities is maintained in the form of the Household Waste Recycling Centres. The County Council will need to take account of the growth planned for in all of Cumbria's district councils' Local Plans, alongside national waste reduction and recycling targets, and ensure that its facilities across the County can adequately support increasing populations. For the Household Waste Recycling Centres, the only provision that is considered to be required in the draft Minerals and Waste Local Pan is for maintaining a network of HWRCs equivalent to the existing

one. Initiatives for increasing the number of Household Waste Recycling Centres have been constrained by austerity measures.

Waste Summary

Required	Description	Delivery Body	Cost & Funding	Timescale
Infrastructure				
• Waste and Recycling collection	• EDC will need to ensure waste and recycling is collected from the projected extra 242 new homes per year.	 Eden District Council through amending its existing contracts with Amey and Cumbria Waste Recycling Ltd. 	 242 homes per year would increase current costs by £53,240 per year. Cost would be met from Council tax revenue from new build properties. Also recycling 	Alongside new housing delivery.

Telecommunications

What is the current level of provision in Eden and are there any deficiencies?

- 136. The availability and speed of broadband and mobile phone services is subject to significant variation across the UK. A report prepared by OFCOM in 2013¹¹ highlighted that the variations are most evident between urban and rural areas. Given the commercial nature of broadband and mobile phone service provision, competition has delivered high levels of availability particularly in urban areas; however the market has not delivered comparable levels of service availability in rural areas. Costs of providing communications services are higher where population density is lower and/or topography is more challenging, and both of these factors apply to Cumbria and Eden.
- 137. Data compiled by Ofcom in 2016¹² revealed that the average broadband download speed in Cumbria was 22.5 Megabits per second (Mbit/s), with minimum and maximum speeds of 0.1 and 1000 Mbit/s respectively. This compares with a UK average download speed of 37 Mbit/s. Superfast broadband availability stood at 83%, compared with a UK average of 90%. These headline statistics clearly demonstrate that broadband provision in Cumbria is lagging behind the national average. However, this is a significant improvement on the situation presented in the previous Infrastructure Delivery Plan (2015).
- 138. Ofcom data paints a similar picture in terms of mobile phone coverage. 40% of premises in Cumbria have access to 2G phone coverage, compared with 67% nationally, 45% of premises have 3G coverage compared with 78% nationally and 31% of premises have 4G coverage compared with 86% nationally.

What evidence do we have and what plans and strategies do infrastructure providers have in place?

- 'Connecting Cumbria through superfast broadband Strategy 2011-2015' Website address: www.cumbria.gov.uk/council-democracy/key-plans-and-strategy
- 'Mobile Infrastructure Project' (Department for Culture, Media & Sport) Website address: www.gov.uk/government/news/mobile-coverage-in-rural-areasset-to-improve

¹¹ The availability of communications services in the UK (Ofcom, May 2013)

www.ofcom.org.uk/research-and-data/multi-sector-research/economic-geography

¹² http://infrastructure.ofcom.org.uk/

- 139. The importance of reliable broadband provision is recognised as essential to supporting economic growth and rural communities. A number of initiatives are already underway to improve broadband coverage and speed across Cumbria.
- 140. Cumbria has been awarded £17,130,000 of Broadband Delivery UK (BDUK)¹³ funding to enable the roll out of high speed fibre broadband across Cumbria. BDUK manages the Rural Broadband Programme and the ambition is for the programme to provide superfast broadband to at least 90% of premises in the UK and to provide universal access to standard broadband with a speed of at least 2Mbit/s. The roll out programme in Cumbria is being delivered by 'Connecting Cumbria', collaboration between Cumbria County Council and BT which is working to bring superfast broadband to 93% of homes and businesses in the County by the end of 2015. The project is being funded by the European regional Development Fund (ERDF), Broadband Delivery UK (BDUK), Cumbria County Council and BT. In July 2015 the project announced that between commercial programmes of deployment and project deployment, 75% of Cumbrian properties could order fibre broadband most of which would deliver speeds in excess of 50Mbps. The project provides mapping of where it has delivered services and expects to deliver services on its website at www.connectingcumbria.org.uk
- 141. The Government subsequently made further public funding available to raise the target for superfast broadband coverage to 95% of UK premises by the end of 2017. Connecting Cumbria have published the locations to receive superfast broadband as part of Phase 2 and Phase 3 of the Connecting Cumbria Programme.
- 142. In addition to the roll out fibre broadband programme being delivered by Connecting Cumbria, there are also a number of local alternative broadband companies providing services in Eden for example Lonsdale Net, and CyberMoor. A further Government fund was launched in March 2014 to provide grants to alternative technology providers to fund pilot projects which seek to bring superfast broadband to the hardest to reach areas not covered by the initial national superfast broadband for Alston Moor and the surrounding areas was been awarded £449,997 to develop a financing solution to lever social investment funding into its networks. The project has demonstrated that social investment was more challenging than anticipated, however the network was delivered on time and to budget. CyberMoor has produced documentation, known as Broadband in a Box, to guide fledgling broadband organisations in setting up their own projects.

¹³ A team within the Government Department for Culture, Media and Sport which is responsible for managing the Rural Broadband Programme.

143. With regards mobile phone network coverage The Department of Culture Media and Sport is currently undertaking the national Mobile Infrastructure Project which aims to improve mobile services in areas of market failure across the UK. The project includes £150 million to support the construction of infrastructure in areas where there is currently no coverage from any of the operators. This project is investigating a number of sites across Cumbria for the installation of publically funded masts to improve services in rural areas for both voice transfer and mobile broadband.

Required Infrastructure	Description	Delivery Body	Cost & Funding	Timescale
• Improved broadband coverage	 A number of initiatives are underway to improve broadband coverage across Eden, 	 Connecting Cumbria Broadband providers 	 Broadband Delivery UK (BDUK) funding (£17.1 million awarded). BT (£15 million funding) European Regional Development Fund (£13.7 million awarded) Government grant funding opportunities. 	The project is ongoing.
 Improved mobile phone coverage 	 The National Mobile Infrastructure Project will tackle 'not- spots' through installing new mast infrastructure. 	 Arqiva (Delivery body for Mobile Infrastructure Project) Mobile Network Operators 	 £150 million national project funded by government 	Ongoing, commenced in 2013.

Social Infrastructure Provision and Future Requirements

Education (Primary and Secondary Schools)

Introduction

144. Good quality and accessible education is an essential element in the creation of sustainable communities. This principle is reflected in the National Planning Policy Framework (NPPF) which states:

"Government attaches great importance to ensuring that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement and to development that will widen choice in education".

- 145. How the education requirements of housing proposals can be met must therefore be considered during the development and implementation of the Local Plan. Cumbria County Council adopted its Planning Obligation Policy (September 2013 currently under review) which sets out a methodology and approach to assessing the effects of new development upon County Council infrastructure including schools.
- 146. Cumbria County Council, as required by Section 14 of the Education Act 1996, must ensure it has secured the provision of sufficient primary and secondary school places for its area. The provision of these places can be in local authority maintained schools or, with their support, at academies.
- 147. In performing this role, the County Council must ensure it complies with the requirements of the 2006 Education and Inspections Act. This requires that Local Authorities promote choice and diversity in relation to the provision of school places. In practice this means parents are able to express a preference for which school they wish their child to attend. Providing there are places available in that school, the admission authority is required to allocate a place.
- 148. Linked to these responsibilities, the County Council is required to provide home to school transport where the catchment, or next nearest school, with a place available is more than two miles from a child's home where children are under eight, and a distance of three miles for children aged 8 and over or where there is no safe walking route to school.

What is the current level of provision in Eden and are there any areas with potential school place shortages?

149. Within Eden District there are 39 primary and 5 secondary schools. The district is divided into catchment areas as illustrated in figure 10.

150. These catchment areas are used in the event that a school is oversubscribed in order to prioritise applications for school places. They are also used as part of Cumbria County Council's Home to School Transport Policy.

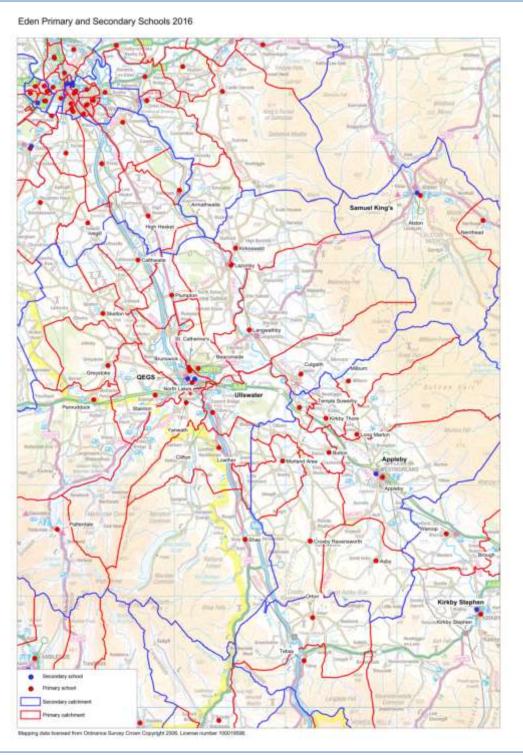


Figure 10: School Catchment Areas

151. The County Council produces projections of pupil numbers for all schools using census, live birth and application data (amongst other factors). These projections are

a snapshot in time and are subject to change as new information emerges and patterns of preference change.

			Projected numbers on roll				
School	*PAN Capacity	**NOR Sept 2016	Sep-17	Sep-18	Sep-19	Sep-20	
Alston Primary School	105	79	82	80	84	88	
Appleby Primary School	315	166	161	143	145	141	
Armathwaite School	70	10	66	62	57	58	
Asby Endowed School	42	25	25	24	23	23	
Beaconside Primary School	511	411	399	378	351	329	
Bolton School	56	52	56	59	54	58	
Brough School	105	67	79	79	79	77	
Brunswick School	135	149	143	141	135	135	
Calthwaite CE School	63	70	67	63	55	57	
Clifton School	84	63	65	58	55	48	
Crosby Ravensworth CE School	49	26	24	23	21	20	
Culgaith CE School	56	55	49	46	41	41	
Greystoke School	63	27	27	24	22	25	
High Hesket CE School	175	168	171	178	178	179	
Ivegill CE School	77	88	79	79	78	78	
Kirkby Stephen Primary School	210	181	194	193	194	198	
Kirkby Thore School	84	50	52	50	50	50	
Kirkoswald CE School	91	82	82	76	70	65	
Langwathby CE School	210	131	132	133	131	132	
Lazonby CE School Academy	105	82	85	88	89	92	
Long Marton Community Primary School	70	71	74	73	72	72	
Lowther Endowed School	105	88	91	89	81	86	
Milburn School	35	9	9	9	6	6	
Morland Area CE School	105	91	89	80	75	72	
Nenthead Primary School	28	19	15	14	15	15	
North Lakes School	228	208	210	219	205	193	
Orton CE School	70	71	74	69	73	70	
Patterdale CE School	42	29	30	29	25	24	
Penruddock Primary School	70	78	76	73	70	65	
Plumpton School	105	76	71	67	63	58	
Shap Endowed CE School	126	79	82	77	85	90	
Skelton School	105	85	87	90	87	84	
St Catherine's Catholic Primary School	140	128	131	135	139	140	
Stainton CE Primary School	189	155	139	132	117	108	

			Projected numbers on roll			
School	*PAN Capacity	**NOR Sept 2016	Sep-17	Sep-18	Sep-19	Sep-20
Tebay Academy	56	32	29	27	30	31
Temple Sowerby CE School	56	44	43	43	36	34
Threlkeld CE Primary School	70	62	60	54	51	49
Warcop CE Primary School	105	92	92	89	92	87
Yanwath School	210	158	168	177	186	187

* PAN Capacity - this is the number of children a school can admit based on their Published Admission Number **NOR – Number on roll

Figure 11: Existing Primary School Provision

			Projected	Projected numbers on roll									
	PAN Capacity*	NOR Sept 2016	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23	Sep-24	Sep-25	Sep-26	Sep-27
Ullswater Community College	1200	1129	1151	1183	1202	1188	1201	1200	1201	1196	1163	1125	1100
Queen Elizabeth Grammar School	600	635	637	638	639	639	640	640	640	640	640	640	640
Appleby Grammar School	575	376	372	359	364	356	365	356	350	339	324	309	307
Kirkby Stephen Grammar School	445	306	316	324	309	294	294	287	286	324	310	314	322
Samuel King's School	260	73	72	74	68	64	65	60	62	61	61	65	68

* PAN Capacity- this is the number of children a school can admit based on their Published Admission Number and excludes sixth forms for secondary schools.

Figure 12: Existing Secondary School Provision

- 152. 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 existing schools are full to capacity. This section considers, at a strategic level, some of the effects of housing growth in Eden and seeks to highlight the various mitigation measures that may be needed to ensure new development takes place in a sustainable manner.
- 153. When considering whether there is sufficient capacity in schools in the area of any new housing, the anticipated number of school aged children that the development will give rise to must be assessed. This assessment of the "pupil yield" of development has been undertaken using a "population-led" model.
- 154. The "population-led" model uses Census data to calculate the average number of school aged children living in each household in Cumbria. This average figure is then multiplied by the total number of houses in a new development to provide a pupil yield figure. When the County Council considers planning applications, a more refined, "dwelling-led" model is used. This utilises census information to derive a pupil yield based on the size of homes proposed in a scheme. These approaches

are established within the Cumbria County Council Planning Obligations Policy, which ensures the effects of development are considered in the most consistent and balanced manner across the County.

155. The Main Modifications to the Eden Local Plan proposes the allocation of 4,356 new homes (1,718 in Penrith) between 2014 and 2031 the majority of which do not yet benefit from planning permission. As set out below, the net estimated yield for this level of development using the population led model is 877 primary pupils and 626 secondary aged pupils:

3,600 Dwellings

Pupil yield (3,600 x 0.345) = 1,242

Of which the number of primary children would be (1,242 / 12 total year groups x 7 primary year groups) = 724

And the number of secondary children would be (1,242 / 12 total year groups x 5 secondary year groups = 518

- 156. When the yields of development are compared with the capacity of local schools, it is possible to highlight some of those locations where additional school places may be needed to ensure the sustainability of development.
- 157. It must be noted that all references to availability of school places to address the effects of development are high level and represent a snap-shot in time. Moreover this is a high level assessment which does not prejudice the in-depth consideration of individual planning applications at the point of their submission.
- 158. It should also be noted that the assessments that follow are underpinned by the baseline primary projections (ie before the effects of housing growth are factored in). These are based on September 2016 pupil census and projected pupil numbers for 2017-2020. All baseline secondary projections are based on September 2016 pupil census and projected pupil numbers for 2017-2027. Projections are updated annually. It should also be noted that during the plan period, there may be changes in school capacities out with the control of Cumbria County Council (eg at academies)

Penrith

- 159. To ensure the sustainability of development identified through the Local Plan there is expected to be a need for additional school places within Penrith. Using the population led model, the pupil yield from 1,718 houses is anticipated to be 346 primary pupils and 247 secondary pupils.
- 160. The sites are situated within the primary catchment areas of Beaconside C of E Primary School, and Brunswick School and North Lakes School, which share the same catchment area. All of the sites are situated within the secondary school

catchment area of Ullswater Community College (Queen Elizabeth Grammar School is also located in Penrith but it does not operate a catchment area as entrance is by examination only).

- 161. It is considered that there are not sufficient primary school places to accommodate the development proposed within the Local Plan. To address this issue, there will be a requirement for a new primary school to be delivered. This issue was highlighted during the consideration of planning applications (ref 2008/0291), (ref 2008/0295), (ref 2013/0654), (ref 2014/0405) and (ref 2013/0033), and contributions towards a new facility or more spaces at existing schools have been secured through Section 106 agreements attached the permissions.
- 162. With respect to secondary schools, as the building phases in Penrith move towards completion, the pupil yield could potentially increase pressure on secondary school places in the future. Work is ongoing to determine the appropriate solution should demand exceed the supply of places.

Main Service Centres

Alston

163. The proposed 73 dwelling allocations would result in an additional 15 primary aged pupils and 11 secondary aged pupils. It is considered that there will be sufficient spaces within the primary school; Alston Primary School, Alston, to cope with this rise and it is considered that there will be sufficient space within the secondary school; Samuel King's School, Alston to cope with this rise. Following a public consultation exercise the Alston Moor Federation of schools (Alston Moor Primary and Nenthead Primary) has been extended to include Samuel King's secondary school in Alston. The federation operates with a single governing body responsible for the day-to-day management of all three schools.

Appleby

164. The proposed 214 dwelling allocations would result in an additional 43 primary aged pupils and 31 secondary aged pupils. It is considered that there will be sufficient spaces within the primary school; Appleby Primary School, Appleby-In-Westmorland, to cope with this rise and it is considered that there will be sufficient space within the secondary school; Appleby Grammar School, Appleby-In-Westmorland to cope with this rise.

Kirkby Stephen

165. The proposed 250 dwelling allocations would result in an additional 50 primary aged pupils and 36 secondary aged pupils. It is considered that there will be insufficient spaces within Kirkby Stephen Primary School to accommodate the additional pupils, therefore further schools places will need to be delivered. There will be sufficient secondary school places in Kirkby Stephen Grammar School.

Key Hubs (821 new homes) & Villages & Hamlets (479 new homes)

166. Proportionate levels of housing development in the Key Hubs and Villages and Hamlets would benefit many rural communities as school aged populations in these areas have generally declined in recent times. The effects of individual developments will be considered on a case by case basis, whereby contributions to mitigate the effects of new development will be sought to expand existing capacity as required.

Delivery of School Places

- 167. During the detailed assessment of the effects of development, close working between Eden District Council, Cumbria County Council, schools and the development industry will be important.
- 168. Cumbria County Council will not be in a position to fund the additional school places that will be required to address the effects of new housing development. Therefore, where housing developments or the cumulative impact of a number of housing developments in an area give rise to the need for the delivery of new schools or the extension, refurbishment and/or remodelling of existing schools, the County Council will look to the developer to fund the full cost of providing the additional facilities required. For example the estimated basic cost for a 1 form entry primary school in 2015 is approximately £4 million (this assumes a flat site ready for development and does not include the cost of site purchase and will change over time due to factors like inflation).
- 169. Where it is not practical for such detailed cost information to be derived, the County Council will use Department for Education (DfE) construction cost multipliers (as amended) to determine the cost of providing additional school places and thus the level of contribution to be provided.
- 170. It is envisaged that Section106 agreements will play an important role in funding new education infrastructure, and the County Council's Planning Obligation Policy presents a robust and consistent means to establish the circumstances, timing and level of contribution that may be required. However Regulation 123 of the Community Infrastructure Levy Regulations 2010 (as amended) limits the number of S106 agreements that can be pooled for a piece of infrastructure to five, which will present challenges in funding large infrastructure projects. CIL provides an opportunity for funding infrastructure without such restrictions but at the time of publication of this IDP no final decision has been made on whether to pursue CIL in the district.
- 171. In addition to the provision of school places, in cases where there are no pedestrian facilities (i.e. a safe route to school) linking a development site to a school that can or can be made to accommodate the effects of a development, or if existing facilities are considered inadequate, the developer shall be required to provide new or

improved facilities usually via a Section 278 Agreement. If it is not feasible for improvements or adequate pedestrian facilities to be provided, the developer may be required to provide a contribution towards school transport costs; however this is not considered an especially sustainable solution, particularly so in the case of larger developments.

Required Infrastructure	Description	Delivery Body	Cost and Funding
• A new primary school in Penrith East	 A new primary school is required to serve the large scale urban extension housing developments in the east and north of Penrith. 	 This will be delivered by Cumbria County Council as the education authority. EDC is responsible for negotiating contributions from developers to fund the school. 	 To be funded through developer contributions through S106 agreements.

172.

Health

What is the current level of provision in Eden and are there any deficiencies?

- 173. Health care provision is split across a wide range of services provided by different bodies and organisations, but can be broadly split into primary and secondary care. Primary care can generally be described as the first point of contact for health care and includes GPs, dentists, pharmacists and optometrists, NHS walk in centres and the NHS 111 telephone service. NHS England is responsible for purchasing primary care services. Secondary care is commissioned by Clinical Commissioning Groups (CCGs), which are GP led bodies, and in Eden's case this is undertaken by the Cumbria CCG. Secondary care includes planned hospital care, rehabilitative care, urgent and emergency care, community health services and mental health and learning disability services.
- 174. In terms of primary care, Eden is served by 10 GP practices (across 12 premises) distributed across its main towns and larger villages. Patient to GP ratios currently lie within the range of 369 to 2237, with an average of 1304. The British Medical Association advises there should be approximately 1,500 patients per GP, whilst The Department of Health recommends that there should be one GP per 1400-2000 people. At present there are therefore no major issues with regards GP capacity, however future issues will be likely to arise due to retirement and recruitment challenges and these will be discussed in a later section.

	Partner / Salaried		
Practice Name	GPs	List size	Ratio
Alston Medical Practice	2	2,320	1160
Appleby Health Centre	4	4,853	1213
Birbeck Medical Group (Penrith)	10	15,818	1582
Court Thorn Surgery (Low Hesket)	3	3,000	1000
Glenridding Health Centre	2	737	369
Kirkoswald Surgery	2	2,311	1156
Lakes Medical Centre (Penrith)	6	9,092	1515
Shap Surgery (Branches in Orton and Tebay)	3	2,851	950
Temple Sowerby Medical Practice	2	4,474	2237
The Upper Eden Medical Practice (Branches in Kirkby Stephen, Brough and Tebay)	6	6,701	1117
Totals and Average	40	52,157	1304

Source: Information provided by NHS CCG, based on the position at October 2014. Figure 13: GP Provision in Eden

- 175. A wide range of health services are provided by the Cumbria Partnership NHS Foundation Trust. The trust provides health services for children and families (eg health visiting, school nurses, speech and language therapy etc), community health services (eg occupational therapy, district nursing, minor injuries units, community hospitals, rehabilitation etc), mental health care and specialist services (eg specialist dental care, learning disabilities, neurology, diabetes, palliative care etc). The Trust's services are delivered in the community at a range of premises including community hospitals and premises shared with other health or community services such as GP surgeries.
- 176. There are two community hospitals in Eden, providing non-emergency care. The Ruth Lancaster James community hospital in Alston is a 6 bed patient facility providing medical, nursing and rehabilitation and end of life care. A seven place day unit also operates on weekdays to provide an integrated service for older people. The hospital also has a 24 hour minor injuries units. Penrith Community Hospital is a 28 bed hospital and provides in-patient medical, nursing and rehabilitation and end of life care. It includes a clinical decision unit, minor injury unit, physiotherapy department, an extended scope practitioner twice weekly clinic and weekly hospice services in its day care facility.
- 177. For emergency and more complex and specialist care, Eden's population is served by the Cumberland Infirmary in Carlisle which is a general hospital which provides an accident and emergency and range of specialist services. The hospital is run by the North Cumbria University Hospitals NHS Trust and in a recent Care Quality Commission Inspection was rated as 'requires improvement', however the trust has made improvements since the previous inspection and was therefore taken out of special measures. Eden's residents are also sometimes treated at The Royal Victoria Infirmary Hospital in Newcastle depending on the severity and complexity of their care needs.

What evidence do we have and what plans and strategies do infrastructure providers have in place?

- 178. As explained above health care in Eden is commissioned and run by a range of different but interlinked bodies and organisations, each of which have their own plans and strategies. Some key documents are listed below.
 - 'Strategic Plan 2014-19' (Cumbria Partnership NHS Foundation Trust)

This is the 5 year plan of the Foundation Trust, which sets out the key objectives for the Trust.

• 'What makes Cumbria Healthy? Annual Public Health Report' (Cumbria County Council)

This document sets out key health issues in Cumbria and explains how Public health initiatives have a major role to play in securing health improvements.

• 'The Cumbria Local Health Economy Strategic Plan 2014-19' (Interim) (Cumbria Clinical Commissioning Group)

This document sets out the collective five year plan for the Cumbria Local Health Economy. It is both the draft plan for NHS Cumbria Clinical Commissioning Group (CCG), and the collective plan for all the partner NHS organisations working together.

• 'Cumbria Joint Strategic Needs Assessment 2012-15' (Cumbria Clinical Commissioning Group)

This document assesses the strategic health needs of Cumbria.

• 'Eden District Health Profile 2015' (Public Health England)

This profile gives a picture of people's health in Eden. It is designed to help local government and health services understand their community's needs, so that they can work together to improve people's health and reduce health inequalities. It highlights excess weight in adults and the number of people being killed and seriously injured on roads as two key areas where health in Eden is significantly worse than the England average.

- 'Reuniting Health with Planning Healthier Homes, Healthier Communities' (TCPA)
- 'Planning Healthier Places Report from the Reuniting Health with Planning Project' (TCPA, Public Health England)

Website address: www.tcpa.org.uk/resources

These documents were prepared by the Town and County Planning Association and examine how the planning system can help address health issues in light of the national health reforms in 2012-13. They aim to help improve the integration between planning and public health and include a range of case studies.

- 179. In order to understand the health infrastructure needs that will arise from the development being planned for through the Local Plan; we have researched key health statistics and service providers' strategies to understand the health issues facing Eden now and in the future.
- 180. The health of Eden's population is generally better than the England average however there are a number of health inequalities within Eden and some specific health issues that will present significant challenges. Some key health issues and challenges in Eden include relatively high levels of childhood obesity, high levels of fuel poverty and excess winter deaths, high levels of road traffic accidents, an ageing population, dementia and excess weight in adults.
- 181. We have met with the Cumbria Clinical Commissioning Group to discuss key health issues and the challenges that will be faced in ensuring appropriate health care provision and improving health in the coming years.
- 182. In terms of physical assets and premises, our discussions with the CCG have informed us that the scale of housing growth being planned for will not be of a scale that would require a new GP surgery as population increases will be able to be accommodated in existing practices. The CCG did however raise a major issue that will arise regardless of the planned housing growth through the Local Plan that will likely impact on GP provision. Nationally the NHS is currently suffering from a major GP recruitment problem and this is also the case in Cumbria. It is anticipated that approximately 30% of GPs in Cumbria will leave/retire over the next 5 years and not enough new GPs are coming through the system to replace them. This will clearly impact upon the patient to GP ratios illustrated in Figure 13 and may result in capacity issues in the future. Addressing this issue is far beyond the scope of influence of the Local Plan and will need to be addressed at a national level.
- 183. In planning for future healthcare provision the overarching message from the CCG was one of prevention and the crucial role of public health, and the importance of taking action now to avoid health issues arising in future. Infrastructure planning in relation to health in Eden is therefore much wider than purely considering the need for additional premises and physical health care assets. Planning has a much wider role to play in achieving public health objectives and through our discussion with the CCG and wider research we have identified a number of ways in which the Local Plan can address current and future health needs. These can be summarised as:

- Increasing the quality and quantity of open space and play facilities to encourage physical activity in children to address childhood obesity.
- Ensuring large scale new developments provide a community focus, a place to meet, build social networks and community support networks. This was highlighted as an important point by the CCG, particularly given the ageing population. Local support networks and cohesive communities play an important role in people's health and physical and mental wellbeing.
- Encouraging walking and cycling by ensuring new development is well connected to existing facilities and services and requiring improvements where necessary.
- 184. The Local Plan therefore has an important role in helping create 'healthy places' and in place making to ensure it helps create properly functioning and cohesive communities.

Required Infrastructure	Description	Delivery Body	Cost and Funding	Timescale
 Increased / improved open space and play provision to encourage physical activity in children. 	 Childhood obesity is an issue particularly in Penrith and the Open Space Audit has revealed a deficit in sports and play provision. New development will therefore be expected to provide new or expanded facilities. 	 Developers will be expected to provide new open space and play facilities as part of their developments, or where this is not appropriate/ feasible, a financial contribution to off-site provision. 	 To be funded through developer contributions through S106 agreements. 	 Ongoing basis throughout the Local Plan period.
• New community facilities/ hubs in large scale development.	• New urban extensions in Penrith will need to ensure they are designed in such a way to create a strong community focus.	 Developers will be required to design their schemes with a strong place making focus, and provide new community facilities where required. The local authority and partner organisations will need to determine the need for new facilities on the large urban extension sites and work together to ensure their delivery. 	 The costs of new facilities will be dependent upon the type of facility being planned. An average village hall type facility could cost £400-£500k. It is expected that developers of large urban extensions would be required to contribute to such facilities. Grant funding could also potentially be a funding source. 	 Ongoing basis throughout the Local Plan period.
• New/improved walking and cycling infrastructure.	 New development sites will need to ensure they provide new/improved links to encourage walking and cycling, and to ensure new sites are properly integrated with the existing town. 	 Developers will be required to provide cycling and walking infrastructure in their developments. The County Council may also be responsible for delivering some schemes identified in the Penrith Transport Improvements Study. 	 To be designed into new schemes and paid for by developers. Developers may also be required to contribute to improvements and new schemes identified through the Penrith Transport Improvements Study. Grant funding may be available for some schemes. 	 Ongoing basis throughout the Local Plan period.

Social Care

What is the current level of provision in Eden and are there any deficiencies?

- 185. Cumbria County Council via its Health and Care Directorate is responsible for adult social care within the district. The Care Act 2014 sets out and governs the way in which the County Council meets its adult care and support obligations.
- 186. The Act places new duties and responsibilities on local authorities about care and support for adults around:
 - Prevention, so that people receive services that prevent their care needs from becoming more serious, or delay the impact of their needs
 - Information and advice, so that people can get the information and advice they need to make good decisions about care and support
 - Shaping the market of care and support services so that people have a range of providers offering a choice of high quality, appropriate services.
- 187. Under the Care Act the Council is responsible for assessing an adult's needs for care and support and deciding whether a person is eligible for public care and support. Where the person has eligible needs, and wants the Council's help to meet them, then the Council will discuss the person's care and support plan with them. In all cases, the Council must give people advice and information about what support is available in the community to help them.
- 188. The underpinning principle of the Care Act is to promote people's wellbeing. Wellbeing is a broad concept, described as relating to a number of areas one of which includes suitability of living accommodation.

Residential Care

189. The County Council own and manage three residential homes for the elderly and commission residential care from a range of privately owned and managed residential and nursing homes within Eden District. The current provision of care homes is set out in the table below.

Name	Location	Provider	Places
PRIVATELY OPERATED			
Cold Springs Park Residential Home	Penrith	BUPA	60
Croft Avenue Residential Home	Penrith	BUPA	40
Winters Park Residential Home	Penrith	BUPA	41
Barrock Court Care Home Ltd	Low Hesket	Advina Healthcare Ltd	28
The Croft	Appleby		3
Jubilee House Therapy Centre	Eamont Bridge	Fire Fighters Charity	4
Appleby Grange	Appleby	Cinnabar Support & Living	27
		Ltd	
Stobars Hall	Kirkby Stephen	The Franklyn Group Ltd	38
Morningside	Penrith	Community Integrated Care	5
2 Newton Road	Penrith	Glenmore Trust	3

Name	Location	Provider	Places
Beacon Edge Care Home	Penrith	BUPA	33
Meadow View	Milburn		1
The Haven	Hackthorpe		3

Name	Location	Provider	Places		
PUBLICLY OPERATED	PUBLICLY OPERATED				
Christian Head	Kirkby Stephen	Cumbria Care	31		
Edenside	Penrith	Cumbria Care	17		
Grisedale Croft	Alston	Cumbria Care	13		
TOTAL residential places	347				

Figure 14: Existing Residential Care Home Provision

Extra Care Housing

- 190. Extra care housing can include a range of housing types but a common principle is that it provides independent living accommodation with a level of support equivalent to that of a care home.
- 191. Extra Care housing is defined by the Chartered Institute of Housing as homes that are part of purpose-built schemes, or have been remodelled, to provide a barrier-free environment which facilitates mobility and access for frail older people. In Cumbria, Extra Care Housing is a broad spectrum ranging from the creation of purpose-built schemes with flats built to full disability standard with a dedicated care team on site 24 hours a day, 365 days a year, to additional home care and community support provided to existing sheltered housing schemes, underpinned with a close working relationship with Housing Management Services.
- 192. Under the Care Act the County Council has a duty to ensure people who live in their areas receive services that prevent their care needs from becoming more serious, or delay the impact of their needs. The provision of extra care housing and the associated care service aims to address both suitability of living accommodation and care need issues.
- 193. The County Council is committed to supporting older and vulnerable people to live independent and healthy lives, by investing in extra care housing to enable people to live independently for as long as possible.
- 194. There are currently 4 extra care housing schemes in Eden which combined provide 125 flats:

Town	ECH Scheme	Provided by Landlord	Number of ECH units to date
Penrith	Lonsdale Court	Housing & Care 21	30
Penrith	Woodlands	Methodist Homes	57
Appleby	Rampkin House	Eden Housing	19
Kirkby Stephen	Mill Gardens	Eden Housing	19

Figure 15: Existing Extra Care Provision in Eden

What evidence do we have and what plans and strategies do infrastructure providers have in place?

- 'Commissioning Strategy for Older People and their Carers 2010-2019' (Cumbria County Council)
- 'Extra Care Housing and Supporting Living Strategy 2016-2025' (Cumbria County Council)

Website address: www.cumbria.gov.uk

- 195. The County Council's Commissioning Strategy for Older People and their Carers 2010-2019 states how it will seek to put in place services to support the increasing number of older people in the county and achieve the best possible outcomes for them. It describes how it wishes to reshape and modernise services for older people to provide choice and independence for as long as possible. An important part of achieving this is to provide increased opportunities for older people with care and support needs to be supported in extra care housing.
- 196. The County Council's Extra Care and Supported Living Strategy (2016-2025) makes projection of need for additional Extra Care housing in Eden District based upon demand analysis data provided by Social Care Strategies (October 2015). It is projected that 320Extra Care units will be needed in Eden District by 2025 to meet need.
- 197. The table below shows the projected overall requirement versus current supply for extra care housing in Key Service Centres within Eden district.

	Projected	ECH Supply	ECH Supply
Town	Demand 2025	2015	& planned
Alston		0	0
Appleby		19	19
Kirkby Stephen		19	19
Penrith		87	87
	320	125	125

Figure 16: Future Requirement for Extra Care provision

- 198. When existing supply is removed from this total, this results in the need for 195 additional units by 2025. The expectation is that Extra Care Schemes are best developed in locations that enable the elderly access to services but also to help retain access to other social networks.
- 199. The provision of an extra 4,356 new homes (242 x 18 years) in Eden over the plan period will create a further requirement for the provision of extra care housing over and above this conservative baseline requirement.
- 200. As an estimate of the additional requirement, evidence supporting CCC's Extra Care Strategy highlights a minimum requirement for 2,800extra care housing units for older people in Cumbria in 2025. When this figure is divided by the estimate of 222,488 households in Cumbria (based on 2011 CACI data) it quantifies a requirement for approximately 0.0066 extra care housing units per household:
 - a) Number of homes proposed (4,356 between 2014 and 2032)
 - b) 0.0066 ECH units required per home
 - a) x b) = ECH Requirement

4,356 x 0.0066 = 29 Extra Care Units over and above the baseline requirement specified in Extra Care Strategy

201. Extra care housing is provided across the broad range of public, private and voluntary sectors. Schemes can be funded and provided by local authorities, housing associations, private developers, voluntary community groups or as a partnership comprising any of the above.

Costs and Funding for Extra Care Housing

- 202. A typical new Extra Care housing scheme with around 40 units costs around £5.5million to build although the cost of building an Extra Care scheme will vary from scheme to scheme, depending on where the funding is coming from and issues such as the availability of land and the level of facilities provided. The majority of extra care schemes built in recent years have depended on combinations of a number of funding sources.
- 203. There are several ways in which the local authorities in Cumbria can support the development of extra care housing. Finding a suitable site and location is a key stage in any new housing development and many of the extra care housing schemes built in Cumbria in recent years have got off the ground due to District Authorities selling or leasing their land to Housing Associations at a discounted rate. Plots of land for possible development will continue to be identified and considered for the development of extra care housing. Countywide, Cumbria County Council has allocated £6 million to its Capital Budget to support the development of new schemes.

- 204. Bidding for public subsidy to support the delivery of extra care housing schemes is often unsuccessful, and has led to very slow growth in the number of extra care housing properties available. New housing development will create increased requirement which in the context described will heighten the levels of shortfall in provision.
- 205. The current funding climate does present challenges for the delivery of Extra Care housing. The Government has established a Care and Support Specialised Housing Fund to which bids can be made for financial support to develop Extra Care Housing.
- 206. Developer contributions will be important in ensuring the delivery of sufficient levels of specialist housing to meet the requirements created by new development. Affordable extra care housing could be delivered as part of the affordable housing requirement of a scheme where a site is considered suitable. Authorities may also assist with reducing the costs of schemes by identifying suitable, authority owned land and making it available for sale or lease to a housing association or other extra care housing provider.
- 207. In line with this approach the County Council is not formally seeking the allocation of a site for Extra Care Housing. Rather consideration will be given to the options to secure the delivery of necessary Extra Care Housing on single sites. Where the site is suitably located, there will be an expectation that an element of the affordable housing requirement as part of the larger housing scheme would be taken in the form Extra Care Housing. The County Council and Eden District Council will therefore look to work closely to ensure the delivery of appropriate levels of Extra Care Housing by these means as part of the affordable housing mix.

Required Infrastructure	Description	Delivery Body	Cost & Funding	Timescale
 Additional extra care housing 	 Eden's growing and ageing population will result in an increased need for extra care housing. 	 Partnership working between the County Council, District Council and Housing Providers. 	 Public funding Developer contributions 	• 29 units required in plan period 2014-2032

Libraries

What is the current level of provision in Eden and are there any deficiencies?

208. The main library within the district is in Penrith and there are staffed libraries in the towns of Alston, Appleby and Kirkby Stephen; as well as unstaffed Library Links at Shap Library and Lazonby Co-Op. There are also some book drops in other community buildings including St James Church in Tebay and Bolton Memorial Hall in Bolton.

- 209. Mobile library van services also operate from Kendal and Carlisle libraries and serve a number of villages across Eden, generally on a monthly basis. A home delivery service is also available to people who are unable to visit the library because of mobility problems or ill health and who have no one to go to the library on their behalf.
- 210. The County Council is responsible for delivering the library service across the district. Unlike medical services, utilities or school places the service is not dependent on patronage based on where people live. Customers of libraries do not necessarily exclusively use a library close to their own homes and they may use a library near where they work or where they choose to shop.

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

- 211. The level of service across the district is kept under constant review, and there are currently no specific library deficits that exist within the district, but conversations will continue to establish a clear need for any additional provision.
- 212. There is considered to be no requirement for additional library facilities to meet requirements however this position will remain under review.

Community Facilities

What is the current level of provision in Eden and are there any deficiencies?

213. Community facilities such as village halls play an important social role in communities. They provide spaces for a range of functions including socialising, celebrating learning, exercising, fundraising and accessing services. They are often at the heart of village life in rural communities and are highly valued by local communities. Eden is well served by a variety of community halls across its towns and villages and these are illustrated on Figure 17 below. The quality of provision of facilities of course varies, with some village/parish halls in need of modernisation and refurbishment, whilst others are newly built/refurbished providing modern high quality facilities.

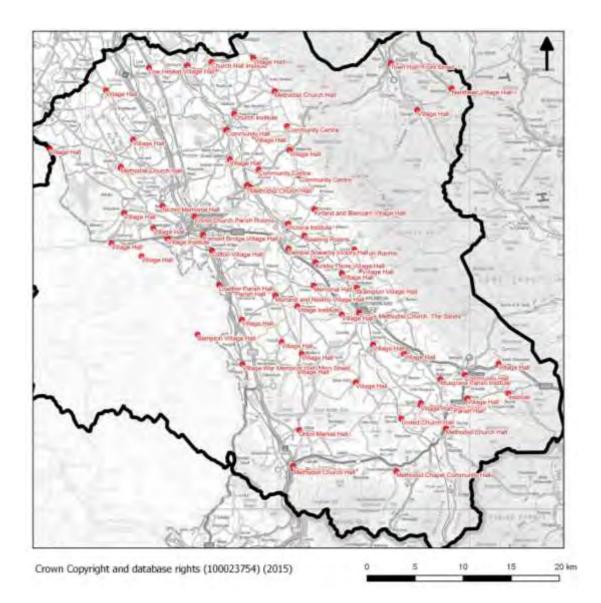


Figure 17: Community Facilities in Eden

Will improvements or new infrastructure be required to support the delivery of the Local Plan?

214. The Local Plan will deliver a number of significant urban extension sites around Penrith. The Local Plan through draft Policy PEN2 makes clear that it will require a comprehensive master planning approach to the delivery of these sites to ensure that they are well designed and provide the necessary physical and social infrastructure necessary to support the new development. Due to the scale of development being planned for on these sites they will generate the need for new facilities to enable them to become functioning and successful communities. Discussions have already taken place with developers of sites to the north and east of Penrith and it has been agreed in principle that provision will be made for new multi-functional community buildings on the sites at Carleton (E1), Carleton Village (E3), and to the north at Salkeld Road/Fairhill (N1/N1a). The importance of community buildings which can serve a number of functions has been stressed in discussions with the Clinical Commissioning Group, due to their important role in providing places for social relationships to be built, as well as more practical functions such as providing spaces for exercise and accessing services such as community health services. It is expected that the new multifunctional community buildings to the north and east of Penrith will be provided by the developers, as the needs will arise directly as a result of the new development. The Council will continue to work with developers as the masterplans for these sites are progressed to ensure that the new facilities will meet the needs of the future local communities.

215. In addition to the new community facilities that will be required in Penrith, improvements to existing community facilities across the towns and villages may be required to support new development. New housing development in the towns and villages will place additional pressure on existing facilities and may result in requirements for expanded/improved facilities. The Council will work with applicants and local communities to identify any required improvements at the time of a planning application. A recent example of where a new development has been required to mitigate its impact on existing village infrastructure was in Clifton (Planning Ref 14/0656) where the developer has agreed to provide a contribution to improvements at the village hall to enable it to support a larger population.

Required Infrastructure	Description	Delivery Body	Cost & Funding	Timescale
 Multifunctional community building in North Penrith (sites N1/N1a) 	 A new community building will be required to serve the development. 	• Developer	 Land and build costs to be met by developer. 	 To be delivered with housing development.
 Multifunctional community building in North East Penrith (site E1) 	 A new community building will be required to serve the development. 	• Developer	 Land and build costs to be met by developer. 	 To be delivered with housing development.
 Multifunctional community building in East Penrith (sites E3/E4) 	 A new community building will be required to serve the development. 	Developer	 Land and build costs to be met by developer. 	 To be delivered with housing development.
 Improvements/ expansion of existing facilities. 	 New development will increase usage of existing facilities and may require expanded/ improved facilities. 	 Developer Local community groups Eden District Council (to identify requirements) 	 Costs will vary according to scheme. Funding sources include developer contributions, local fundraising, grant funding (e.g. Eden Community Fund, Lottery Funding) 	 Alongside new housing development.

Green Infrastructure

Open Space

What is the current level of provision in Eden and are there any deficiencies?

- 216. The Council has undertaken an Open Space Audit to assess the quantity, quality and accessibility of open spaces across Eden to determine whether there is adequate provision of accessible, high quality spaces. The audit assessed a range of types of open space which serve different functions and identified over 5,400 hectares of publicly accessible open space which equates to 102 hectares per 1000 population. The table below provides a summary of the overall assessment. The audit breaks this information down on a ward basis to highlight differences in provision across the district.
- 217. The quantity of open space identified in the audit was compared against benchmark standards which were derived from national standards where available, or comparable local authority standards. A survey was undertaken of each space to assess its overall quality and was based on a scoring system over a range of factors such as accessibility, grounds maintenance, and quality of equipment.
- 218. In addition to the quality and quantity of open spaces, an important aspect of assessing the overall provision of open space infrastructure is the accessibility of spaces and how easily they can be used by local communities. The open space audit set accessibility standards where appropriate for different types of open space and includes maps showing accessibility in relation to outdoor sports facilities, allotments, amenity areas/informal recreation, community facilities/indoor sports, parks and play spaces. As would be expected the more formalised open space provision, for example parks, allotments and sports facilities are focussed in the larger settlements. Eden's rural nature does however mean that settlements generally have good access to countryside and informal recreation opportunities.

Typology	Total Hectares	Hectares per 1000 population	Quantity and Accessibility of Provision	Quality of Provision
Outdoor Sports	249.47	4.7 (1.73 excluding golf courses)	Majority of the district is within 20 minute drive time of a facility. Formal facilities are focussed in the towns.	Average audit score: 79%
Allotments	7.54	0.14	Provision is mostly focussed in Penrith where the need is considered higher due to higher proportion of properties without access to a garden. Lack of allotments in Alston and Appleby.	Average audit score: 76%

Typology	Total Hectares	Hectares per 1000 population	Quantity and Accessibility of Provision	Quality of Provision
Cemeteries and Churchyards	37.44	0.71	Generally focussed around historic churches within settlements.	Average audit score: 85% Penrith and Alston cemeteries have Green Flag status
Community Facilities	1.64	0.03	Main formal sports facilities are at Penrith and Appleby	Not assessed in study.
Indoor Sports Facilities	1.39	0.03	but many village halls have sports markings and provide space for exercise.	
Informal Recreation, Amenity Areas and Woodland	51.79	0.99	Settlements are generally well catered for with most residents in settlements being within a 10 minute walk of informal recreation facilities.	Average audit score: 77%
Local Nature Reserve	5.35	0.10	Cover over 2% of the district's area. Not considered	Quality was assessed within the 'informal
Nature Reserve	4302.3	81.85	appropriate to apply accessibility criteria.	recreation' typology.
Park	673.63	12.82	Formal parks are concentrated in the bigger settlements.	Average audit score: 83%
Play Areas	4.34	0.08	Play areas are focussed in the larger settlements with some gaps in rural provision. There is a slight shortfall in overall provision in the district.	Average audit score: 82%
Village Green	59.49	1.13	Generally focussed in central parts of villages providing easily accessible communal spaces and visual amenity for residents.	Where village greens performed a usable function, they were assessed within the 'informal recreation' typology.
Visual Amenity	6.69	0.13	Tend to be focussed within residential areas, not necessarily accessible but positively contribute to character and visual amenity.	Not assessed in the audit.
TOTAL	5401	102.7		

Figure 1	8: Su	mmary	of Oper	n Space	in Eden

- 219. In terms of the quantity of open space provision the only type for which the audit identified a significant deficiency was play space. The audit identified 4.3 hectares of play space provision which equates to 0.08 hectares per 1000 population. The Fields in Trust standard suggests a minimum provision of 0.25 hectares per 1000 population.
- 220. It has also identified a very slight deficiency in outdoor sports provision with current provision standing at 1.73ha per 1000 population compared with a Fields in Trust standard of 1.76ha per 1000 population.

221. The district's open spaces generally perform well against the quality assessment criteria used in the study.

What evidence do we have and what plans and strategies do infrastructure providers have in place?

• 'Eden Open Space Audit' (Eden District Council, 2015)

Available to download from the Planning Policy Evidence Base page of the Council's website.

- 222. As explained above the open space audit has identified some existing quantitative deficiencies in play provision and outdoor sports.
- 223. The scale of new development proposed in the Local Plan will itself generate the need for additional open space facilities. This is particularly the case with the large scale sites proposed for allocation in Penrith, Appleby and Kirkby Stephen. All of the Penrith wards have quantitative deficiencies in play area provision and half have a deficiency in informal recreation and outdoor sports provision.
- 224. New open space will be delivered through the implementation of Policy COM3 of the Local Plan once adopted. The policy requires on site provision of open space on large scale residential schemes unless it is considered impractical or unfeasible, in which case off site contributions for the provision or additional open space or upgrading of existing spaces in the local area would be appropriate. On smaller sites the policy states that financial contributions may be sought for the provision of off-site open space or upgrading of existing spaces.
- 225. The Council will actively liaise with developers at an early stage of planning applications to advise of the open space requirements that will arise from the proposed development. Contributions to new open space provision or improvements to existing facilities will be negotiated on a case by case basis to take account of differing needs across the district and to ensure that the viability of individual schemes can be appropriately taken into account.

Required Infrastructure	Description	Delivery Body	Cost & Funding	Timescale
 Additional or improved public open space. 	New development will result in the need for additional open space provision.	 Developers Eden District Council 	Developer contributions	 Alongside new development.