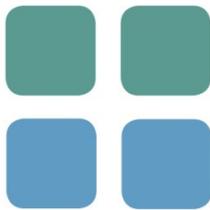
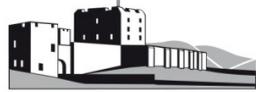


# The Carlisle District Local Plan 2015-2030

## Infrastructure Delivery Plan (September 2015)



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Images courtesy of Andrew Paterson, D&H Photographers and Jason Friend

## Contents

<b>1.</b>	<b>Introduction</b>	<b>1</b>
<b>2.</b>	<b>Physical Infrastructure</b>	<b>4</b>
	Flood Risk Management & Drainage Infrastructure	4
	Coastal Change	8
	Highways and Transport	10
	Electric Vehicle Charge Points	19
	Telecommunications	22
	Broadband Internet	24
	Utilities - Clean and Waste Water Infrastructure	27
	Utilities - Gas and Electricity	31
<b>3.</b>	<b>Social Infrastructure</b>	<b>33</b>
	Emergency Services	33
	Household Waste Recycling – Waste Disposal	35
	Education Provision	38
	Libraries	44
	Adult Social Care	45
	Health Provision	50
<b>4.</b>	<b>Green Infrastructure</b>	<b>52</b>
	Biodiversity	53
	Open Space - Sports Provision	57
<b>5.</b>	<b>The Next Steps – Plan Delivery</b>	<b>60</b>

# **1. Introduction**

## **New in this Update...**

**1.1** This version of the IDP (August 2015) has been updated in response to comments received during statutory consultation on the proposed submission draft of the Carlisle District Local Plan 2015-2030 and to reflect ongoing discussions with infrastructure providers. In summary, a number of minor changes have been made with respect to flood defence infrastructure; the current approach to capturing evidence on public open space; highways and transport infrastructure and libraries. More substantive updates have been made to the education provision and telecommunications chapters.

**1.2** Overall the broad conclusions of the IDP remain unchanged but in terms of next steps a more definitive need to actively explore the potential of CIL, and ultimately a timely decision on whether or not to adopt it in Carlisle, is acknowledged.

## **Infrastructure Delivery Planning**

**1.3** The National Planning Policy Framework (NPPF) states that local plans should be accompanied by a robust evidence base that demonstrates an adequate provision of physical, social and green infrastructure is present within a plan area in order to support the levels of development proposed within the local plan. Where gaps in infrastructure are identified, evidence should be available to show how, and by whom, required infrastructure will be provided, funded and delivered. This Infrastructure Delivery Plan (IDP) fulfils this role for the emerging Carlisle District Local Plan.

**1.4** This is still a working document but as it continues to evolve it will act to ensure that a robust strategy is in place for the delivery of identified infrastructure. The IDP will form a strong evidence base document in support of the Local Plan's site allocations, building upon work already carried out in partnership with neighbouring authorities and other infrastructure providers.

**1.5** The IDP describes specific types of infrastructure in Carlisle and provides context. It highlights future investment issues and the impact of the Local Plan. The report includes maps which illustrate both existing infrastructure and future investments in infrastructure, and states what infrastructure funding is (and is not) in place.

**1.6** The IDP will also provide the evidence needed to show that a Community Infrastructure Levy could be justified within the District in order to allow, subject to consideration of the viability of doing so, the City Council to seek financial contributions towards required infrastructure from developers.

**1.7** The report highlights some of the physical, social and green infrastructure areas that will need to be considered alongside the Local Plan where investment might be needed, or where there is already and likely to remain sufficient capacity.

**1.8** Physical infrastructure is essential to supporting development in the District. The report includes sections on transport, flood defence, broadband, energy provision and utilities. Social infrastructure is crucial to improving our communities. It includes sections on health, education facilities, libraries and emergency care housing. Green Infrastructure is also included in the IDP covering topics such as landscape, biodiversity and open space provision.

## **Carlisle in Context**

**1.9** The District of Carlisle covers an area of approximately 1,042 sq km and is situated in the north of Cumbria, bounded by the Scottish border to the north and Northumberland to the east. The City of Carlisle forms the principal urban area and lies within the south western part of the District. The remainder of the District is predominately rural in nature, with the exception of Longtown to the north and Brampton to the east, and a number of smaller villages which are scattered predominantly to the east of the city.

**1.10** The current population of the District is estimated at around 107,524 people, and has been growing steadily for the last 10 years. It is anticipated that over the next 15 year plan period the City Council will be required to plan for 8,475 new homes to meet the needs of a growing population. This translates into an annualised average of at least 565 net new homes.

## **Infrastructure**

**1.11** Traditionally infrastructure has often been regarded primarily as built infrastructure such as roads, utilities, schools and hospitals but this definition has been broadened through successive versions of national planning guidance and now, for the purposes of this document, includes a broad range of social, physical and green infrastructure types.

**1.12** For all types of infrastructure to be assessed the IDP seeks to establish the following:

- what currently exists on the ground;
- what is needed to support development proposed in the Local Plan;
- who will be responsible for providing any new infrastructure;
- when required infrastructure can reasonably be expected to be in place and any phasing that may be associated with it;
- the likely costs associated with any new infrastructure;
- sources of funding that will be used to meet these costs; and
- any potential gaps in funding and how these will be addressed.

## **Cross-Boundary Infrastructure**

**1.13** It is recognised that some forms of Infrastructure do not stop at the District border. Carlisle City Council has and will therefore continue to work with neighbouring authorities to ensure that strategic cross boundary infrastructure is considered in full. Within this context the City Council recognises the strategic role Carlisle plays within Cumbria as a whole, being the county's largest urban area and service centre.

**Please note:**

**The information contained within the Infrastructure Delivery Plan was correct at the time of writing. The IDP is, however, a living document that will be regularly updated as new information comes to light. Please check that you are reading the most up to date version of the IDP, as listed on the Council's webpage.**

## **2. Physical Infrastructure**

### **Flood Risk Management & Drainage Infrastructure**

**2.1** Flood defences are defined in the Carlisle Strategic Flood Risk Assessment (SFRA) as raised structures which prevent floodwater from flooding surrounding areas by altering the natural flood flow paths from a watercourse or by retaining flood water. They can be 'formal' structures, purposefully built to defend against flooding – such as the flood wall built near the Sands Centre in central Carlisle; or they can be informal structures which, whilst not built or maintained specifically to defend against flooding, still offer some form of protection to development such as boundary walls and railway/road embankments. There are also extensive areas of functional floodplain along the larger rivers in the District that play a critical role in reducing flood risk to urban areas.

#### **Current Provision**

**2.2** The Environment Agency (EA) and the Local Lead Flood Authority keep detailed records on the location and type of flood assets/defences within the District; they also record who has responsibility for each, be it the EA themselves, a local authority or a private business or individual.

**2.3** Most assets/defences are located within the urban area, which is to be expected given the devastation flooding caused within the city in 2005. Flood defences are mainly located along the banks of the main waterways flowing through the urban area. The areas benefitting most from the defences are located on the south banks of the River Eden and along both banks of the River Caldew and River Petteril where these flow through the city.

#### **What is needed?**

**2.4** Whilst the urban area now enjoys a very high standard of flood protection, as a result of investment in defences after the 2005 floods, there are areas of the District that are not formally protected by flood defences, some of which function as floodplain.

**2.5** There are scattered areas of development which are still at risk, though these tend to be in more sparsely populated areas. In previous consultations on the Local Plan the Environment Agency has also indicated in their response that they are continuing to investigate the catchments of Gosling Sike in Carlisle and Brampton Beck in Brampton to see what can be done to address localised flooding issues in these areas. In order to support the development objectives of the emerging Local Plan, it would be beneficial to support efforts to increase the flood prevention measures of these areas as and when opportunities arise.

**2.6** The Local Plan does not propose to allocate any land for development in Flood Zones 2 or 3 i.e. those at the greatest risk of flooding. There is no need to provide new flood protection schemes to deliver the growth in the city that is currently proposed through the Local Plan. Any additional sites that come forward during the plan period that are within Flood Zone 2 or 3 will need to comply with the requirements of the NPPF and the relevant policy in the Local Plan, where it will need to be demonstrated that such sites are not at an unacceptable risk of flooding and importantly that their development would not increase the risk of flooding elsewhere. Any measures put forward to protect sites and surrounding areas will include flood protection schemes of varying scales and nature. Developers submitting applications for sites in areas where new flood protection schemes are proposed may be required to provide financial contributions to those schemes where they will benefit from them.

**2.7** Issues around surface water flooding also exist within the District. These tend to be highly localised. Surface water flooding should largely be addressed by sustainable drainage – ensuring that development does not take place in areas prone to it, as well as ensuring that development doesn't exacerbate surface water flooding problems elsewhere. As of April 2015 Cumbria County Council as Local Lead Flood Authority become statutory consultees to the Local Planning Authority for drainage on all major developments.

### **Who will be responsible for providing new infrastructure?**

**2.8** Many different authorities share the management of flood risk in Cumbria, each with different responsibilities, powers and duties. Flood risk management authorities have a duty to cooperate with one another in undertaking flood risk management functions. Statutory bodies working together include the Environment Agency, Cumbria County Council, Carlisle City Council and United Utilities. However, partnership arrangements can also include any organisation or individual with an interest in flood risk management, including developers, Parish or Town Councils, community groups, land owners and others.

**2.9** Flood defences can typically be maintained by three different sources; the Environment Agency; a local authority; or by a private company/individual, depending on ownership or landowner in which it lies. Typically, informal flood defences, which often result from new development, are maintained privately as part of the general maintenance of the land and property. Formal flood defences built specifically for flood protection usually result from EA lead projects, sometimes in partnership with local authorities, and often remain the responsibility of these organisations. The focus of the IDP is how to secure the provision of new formal defences where they are needed. For this the Council will continue to work with the EA and other relevant partners to secure new provision where needed across the future.

## **When will required infrastructure likely be delivered?**

**2.10** After the 2005 floods, a major project to construct comprehensive flood defences within the city was undertaken. This project took around five years from initial planning stages through to delivery on the ground. It is unlikely that such a major scheme will be required within the city for a considerable amount of time. Therefore, future projects will likely be developed to meet specific local flooding issues. Should funding be secured and action agreed, it is likely that relatively small scale projects like this could be planned and delivered within three or four years.

**2.11** The EA and Cumbria County Council have developed a six year programme of Flood Alleviation Schemes. The programme starts in 2015 / 2016 and ends in 2021/2022. Four schemes in the Carlisle District have secured funding that will help in the delivery of these schemes within this time frame. The progression of these schemes may still require partnership funding contributions in order to deliver them. These schemes include:

- Gosling Sike - EA have identified upstream storage scheme (FCERM GiA bid made March 2014, development of business case 2016/2017);
- Brampton Beck - Flood alleviation scheme based on upstream storage & possible culvert improvements (FCERM GiA bid made in March 2014, development of business case 2016/2017).

## **What will be the likely cost of new infrastructure?**

**2.12** The detailed costs of the above schemes are still being derived as detailed proposals continue to be explored and worked up.

## **How would future provision be funded?**

**2.13** Government funding for flood defences, known as Flood and Coastal Erosion Risk Management Grant in Aid (FCERM GiA) is managed and allocated by the EA. Schemes are then worked on with local authorities and proposals for grant funding put forward, though naturally each year more schemes are put forward than funding is available for. However, there are opportunities for the EA to secure extra funding, in the form of a local levy, from local authorities, where gaps in FCERM GiA are identified. In other cases, a more bottom up approach to funding can be arranged. Communities can seek to raise funds for defences needed in their area; sometimes leading to partnership funding agreements with the EA. Schemes concerning coastal and main river flooding would be put forward and managed by EA, whilst schemes to address surface and ground water flooding would be the responsibility of the Lead local Flood Authority (LLFA). It is also acknowledged that the FCERM GiA no longer covers the cost of a proposed scheme and therefore future funding through partnership contributions would likely be required.

**2.14** Other funding options would be to secure financial contributions from developers through planning obligations where it can be proven that new provision is needed to directly enable development to proceed or where it would act to reduce the risk of flooding a development would otherwise be exposed to. Opportunities such as this would be explored through the planning application process. If strategic flooding issues were highlighted in the future, the Community Infrastructure Levy could be used if introduced and if the need for flooding related infrastructure was prioritised. A limitation with both of these methods however is that they are only likely to generate contributions to as opposed to raising sufficient funds to cover all of the costs likely to be encountered.

### **Gaps in funding**

**2.15** A major issue around gaining FCERM GiA funding is that the total benefits of a scheme must exceed the cost to the tax payer for a project in order to qualify. Schemes to protect smaller communities are still likely to be expensive, but the relatively limited number of properties and businesses that would benefit may struggle to provide justification for the costs of construction. Relying on community led initiatives may also not be a reliable approach to achieving significant flood defences as public campaigns and local levies could struggle to obtain the levels of funding required.

**2.16** The full extent of funding gaps for the schemes being progressed within Carlisle District remain unknown at this stage as the costs for delivery of the schemes, and potential sources of funding, continue to be explored.

### **Summary**

**2.17** There are no major, strategic concerns about flood risk and defence provision within the District which are likely to impede future growth. No intervention has been identified for example which is critical to the delivery of the Local Plan in its widest sense, and as such realisation of the proposals within are not dependent on significant investment for either new or upgraded flood defence related infrastructure. This position reflects that the Local Plan has sought to direct new development away from areas at risk of flooding and that most of the urban area within Carlisle already benefits from extensive flood defences.

**2.18** Notwithstanding the above there will be instances where localised flooding poses ongoing concerns. The EA will continue to work with communities to identify such areas and to explore options for mitigating or reducing the risks faced. It is recognised that opportunities which arise from development proposals should be explored and where possible utilised to help secure solutions. The development management process will be an important mechanism in this regard, and the Council will continue to work with the Environment Agency and the Lead Local Flood Authority to minimise the risk of flooding and endeavour to work with the developer to build sustainable drainage systems.

# Coastal Change

## Introduction

**2.19** The beautiful Solway Coast with its broad expanses of tidal waters, mudflats, salt marshes and sand dunes is a designated Area of Outstanding Natural Beauty. However, the coastline is undergoing constant change from waves, tides and winds but the amount of change varies depending on factors such as storms and sea level rise, geology and human intervention. Whilst these changes continue, social, economic and environmental pressures are increasing in coastal areas.

**2.20** The inner section of the Solway Firth estuary that falls within the Carlisle boundary and its confluence with the Rivers Eden, Esk and Sark at the Scottish Border is characterised by extensive sandbanks, mudflats and saltmarsh and is designated for its internationally important environmental features.

**2.21** The long term plan for this area is to allow the shoreline to continue to evolve naturally as much as possible, allowing expected future sea level rise to return low lying areas to saltmarsh as a natural defence. A managed realignment policy for much of the inner Solway will allow organisations, local land owners and responsible bodies to proactively adapt to future coastal changes and manage risks to local assets and to World Heritage Site Features as well as allowing opportunities for future habitat creation to be included within the Environment Agency's Regional Habitat Creation Programme.

## Current Provision

**2.22** There are no formal coastal flood defences currently in place nor planned along the District's coastline.

**2.23** The Shoreline Management Plan (SMP) that covers the Carlisle section of coastline is a high-level, non-statutory, policy document planning the future management of the coastline and coastal defences. It promotes management policies into the 22nd century that achieve long term objectives without committing future generations to unsustainable practices.

**2.24** The SMP sets the policy for managing the coast and has therefore influenced the content of the Local Plan. The SMP identifies how the estuary and coastal shorelines would be best managed over time to avoid negative effects (increased erosion and flooding affecting people, property and the coastal environment) and to maximise the beneficial effects (better beaches, better habitats, flood and coastal protection) of coastal management.

## **What is needed?**

**2.25** The long term plan for this area, as promoted by the SMP, is to allow a return to a more natural shoreline and for the sea to return low lying areas to saltmarsh where practicable, creating a more sustainable and naturally functioning coastline. From a local plan perspective however there is no significant growth promoted in the locality of the coast and as such no significant investment needed to aid the realisation of proposals within the Plan.

**2.26** New development aside the SMP found that there was insufficient justification to maintain shoreline defences, which will result in a number of isolated properties, minor access roads and paths becoming increasingly at risk of flooding in the longer term. A number of Scheduled Monuments and part of Hadrians Wall World Heritage Site will also be at increased risk of flooding. Some localised defences in current or retreated positions might be permissible to protect some agricultural land and property, but would be unlikely to attract national funding.

## **Who is responsible for providing new infrastructure?**

**2.27** In England Defra has national policy responsibility for flood and coastal erosion risk management. Local Authorities and the EA have powers that allow them to undertake works to flood and coastal defences, but do not give them a duty to do so. These bodies will only be able to commit to expenditure if they can obtain funding to do so. There is no right to protection against coastal flooding or erosion or any right to compensation from the damage that it causes.

## **How will new infrastructure be funded?**

**2.28** In England Defra has national policy responsibility for flood and coastal erosion risk management and provides funding through grant in aid to the EA which also administers grant for capital projects to Local Authorities.

## **Summary**

**2.29** There are no major, strategic concerns about coastal flood risk and defence provision within the District which are likely to impede future growth. No intervention has been identified for example which is critical to the delivery of the Local Plan in its widest sense, and as such realisation of the proposals within are not dependent on significant investment for new coastal defences or changes to existing coastal management principles. For the avoidance of doubt there are no projects currently planned by any relevant authority for coastal defences within the District.

# Highways and Transport

## Introduction

**2.30** Within the IDP, consideration has been given to existing and proposed highways and transport provision, and the effects of proposed growth and some of the interventions needed to support the continued sustainable development of the City over the plan period.

**2.31** In addition to this, there is longer term growth aspirations for South Carlisle. This is likely to require significant new highways and transport infrastructure and provision which will require detailed consideration during the development of proposals.

## Current Provision

### *Highways*

**2.32** Carlisle is a historic city of regional importance with large employers, a university, and a main railway station and airport. Carlisle is also a major shopping centre attracting people from a wide area, including Southern Scotland.

**2.33** These assets are important drivers to the local economy and Cumbria County Council as the highway authority has a history of delivering local and strategic interventions to maintain the vibrancy and vitality of the District. In recent years the most notable of these improvements will have been the completion of the Carlisle Northern Development Route (CNDR). The route improves links between the M6 and A595 (West Cumbria). Already this has reduced the impact of traffic in the City, increasing the available capacity of the highway network for further development.

**2.34** Notwithstanding this, highways and transport modelling has shown pockets of peak hour congestion on key routes into the city and without appropriate mitigation, congestion is likely to spread and grow more pronounced as new development comes forward.

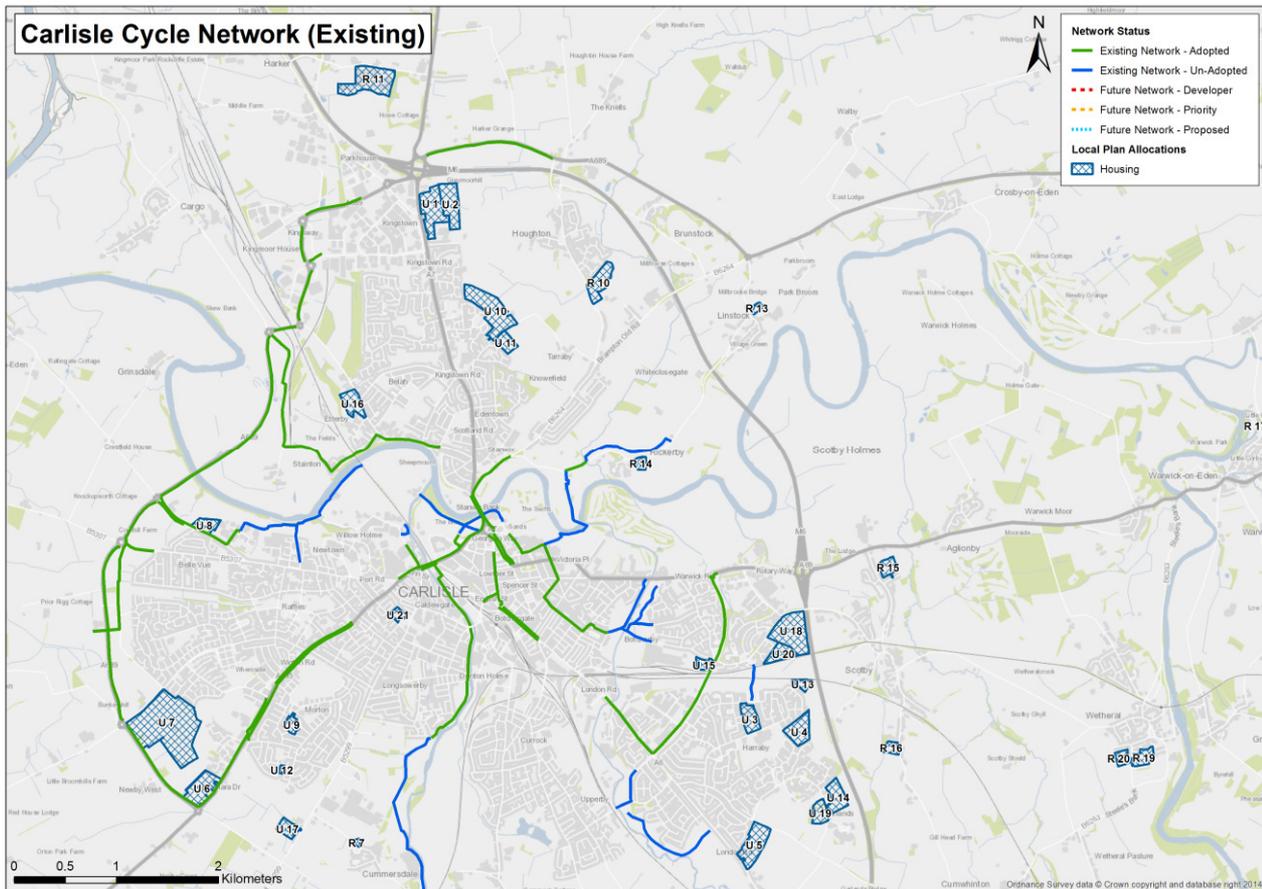
### *Walking and Cycling*

**2.35** To complement strategic highway improvements and meet the needs of all users, Cumbria County Council are delivering sustainable transport improvements to increase non-car modes of transport thus helping to increase the capacity of the highway network.

**2.36** Figure 1 shows the existing cycle network in Carlisle, which consists of a number of adopted and unadopted routes. The network shows relatively good coverage throughout the south of Carlisle with at least partial routes from the south west, south and south east of Carlisle towards the city centre. There is also significant cycle lane

provision around the west of the city which was delivered as part of the CNDR scheme. To further increase this, planned improvements include improved access across the Cumbrian Coast Line (Currock Bridge) and missing links in the Caldew Cycleway to ensure a continuous route from residential areas to key employment sites in the North.

**2.37** North of the River Eden, there is presently less cycle network coverage, although there are cycle lanes across the Eden Bridge, meaning that the River Eden is not in itself a barrier to cycle trips from the north.



**Figure 1 Existing City Cycle Network (not to scale)**

**2.38** Despite this, as part of the review of cycle facilities undertaken during the development of local plan evidence a number of gaps in provision have been identified. These include:

- gaps in completeness of cycle lanes connecting the southwest and south east of Carlisle to the city centre;
- the lack of a coherent cycle network to the north of the River Eden, or any links to the crossing point at Eden Bridge;
- pedestrian severance on major roads in and around the city centre;
- a lack of cycle network connections to Local Plan sites; and
- low visibility of signage for cycle routes.

## ***Bus Travel***

**2.39** Census 2011 travel to work data showed that only 7.2% of Carlisle residents travel to work via bus in comparison to the 16.4% national average. The low modal share is considered to be, in part, a consequence of walking being a strong alternative to catching the bus, once wait times and bus fares are taken into account. Nevertheless, there is an opportunity to improve the bus offering in Carlisle and to present the bus as a viable alternative to the private motor vehicle.

**2.40** With the Local Plan sites coming forward, frequency analysis demonstrates the importance of ensuring that these sites are served with a frequent service in order to maximise bus usage. It is therefore essential for developers to consider the accessibility of their developments and as part of the Transport Assessment/Travel Plan process, identify means to ensure visitors and residents can have suitable access by all non-private car means of transport. In keeping with the opportunities highlighted in the Transport Improvements Study, on some sites developers may need to work with bus operators to deliver improved services.

## ***Rail Travel***

**2.41** Cumbria is served by the West Coast Main Line (WCML), one of the country's main transport arteries linking London, the South-East and West Midlands with Scotland. Carlisle is an important rail hub for Cumbria and South-West Scotland. Routes from West Cumbria, Newcastle, Leeds via Settle and Kilmarnock/Dumfries feed into the WCML at Carlisle and good connectivity with long-distance services is of critical importance.

**2.42** Both the Cumbrian Coast and Tyne Valley lines are designated by the Department for Transport (DfT) as community rail lines (a Government Strategy supported by the rail industry).

**2.43** Rail plays a critical role in Cumbria – connecting people and places; as well as supporting the economic growth of the county.

**2.44** The Northern and TransPennine Express (TPE) franchises commencing in February 2016 will last for a minimum of 7 years and will affect the entire railway network within Cumbria.

**2.45** A joint Cumbria County Council/Local Enterprise Partnership (LEP) response was submitted to the Northern/TPE franchise consultation in August 2014. This outlined Cumbria's specific 'asks' closely aligned with the LEP Strategic Economic Plan (SEP) priorities for driving economic growth. Fit for purpose rail provision is essential to help achieve this growth.

**2.46** The Department for Transport responded to the franchise consultation in February 2015. Many of the requests from the County Council and LEP were taken on board. Of benefit to Carlisle, this includes:

Cumbria Coast Line:

- Sunday services along the full length of the line between Carlisle and Barrow;
- An increase in the number of services and re-timed services to support existing nuclear developments;
- Later evening services along the full length of the line.

Settle-Carlisle Line:

- A new service out of Leeds in the afternoon peak time through to Carlisle by December 2019.

Tyne Valley Line:

- Doubling the number of trains between Carlisle and Newcastle from the current 1 per hour to two per hour.

Anglo-Scottish Services:

- An additional evening service between Manchester-Glasgow.

### **What is needed?**

**2.47** The growth proposed in the Local Plan will inevitably affect the highways and transport network. In order to assess the transport impacts of the Local Plan, a transport modelling study was undertaken by Cumbria County Council working closely with the City Council. This study identified locations on the highway network where congestion is forecast to increase with the proposed Local Plan development.

**2.48** Following on from this work, Carlisle City Council and Cumbria County Council commissioned the Carlisle Transport Improvements Study. The purpose of this study was to identify possible transport improvements to support the Local Plan over the plan period and it is essential that the Local Plan developments provide transport infrastructure to mitigate their cumulative impact.

**2.49** The Carlisle Transport Improvements Study was completed in February 2015 and recommends a range of potential sustainable transport improvements which can be delivered in Carlisle. These improvements include new cycle routes, improved pedestrian facilities and improvements to public transport frequencies as well as associated infrastructure. Improvements to travel planning and engagement with existing trip attractors such as major employers is also proposed. These improvements will encourage mode shift from the car to other means of transport. Reducing reliance on the car could reduce vehicular demand by up to five per cent and provide wider benefits for the population of Carlisle.

**2.50** The study also recommends potential highway improvements at 11 junctions throughout Carlisle. The improvements have been demonstrated to reduce vehicle queuing and delay where proposed.

**2.51** The study also provides estimated costs for these potential improvements. The improvement costs are estimated based on rates for previously completed similar projects. They do not include direct costs for risks such as public utilities and land acquisition but do include a contingency allowance. The costs are set out in the following tables:

**Table 1 - Sustainable Transport Improvement Costs**

<b>Scheme</b>	<b>Cost</b>
Carlisle pedestrian and cycle signage improvements	£20,000 signage strategy (assume £150 per sign and 130 signs)
City centre urban design improvements	£50,000 study plus implementation of identified measures
Kingstown – Etterby Cycle Route (Scheme 1)	£90,000
Hammonds Pond Cycle Route (Scheme 2)	£157,000
Sheepmount Cycle Route (Scheme 3)	£204,000
Petteril Valley Link Cycle Route (Scheme 4)	£13,000
Caldew Cycleway (Scheme 5)	£5,000
Willowholme – Sheepmount Cycle Route (Scheme 8)	£67,000
Eden Bridge – Etterby Scaur Cycle Route (Scheme 9)	£142,000
Castle Way Crossing – Bridge Street Toucan Crossings (Scheme 10)	£140,000
Wigton Road to River Caldew Quiet Route	£25,000
Sites U1/2/10/11 Cycle Link (Scheme 11)	£624,000
Site U16 Cycle Link (Scheme 12)	£277,000
Eden Bridge – Etterby Street Cycle Route (Scheme 13)	£15,000
Willowholme Road Cycle Link (Scheme 14)	£181,000
Lowther Street – Georgian Way Cycle Link (Scheme 15)	£1,300

Scheme	Cost
Borland Avenue Cycle Lane (Scheme 16)	£110,000
Harraby Link Cycle Route (Scheme 17)	£280,000
Additional/diverted bus services for specific sites	Up to £1,920,000 (assume £240,000 per annum for a 20-minute frequency service, and up to 8 new/diverted services)
Bus stop infrastructure improvements	Up to £320,000 Assume £8,000 per stop, and up to 40 bus stops
Travel planning and business engagement programme	£200,000
<b>Total</b>	<b>£4,841,000</b>

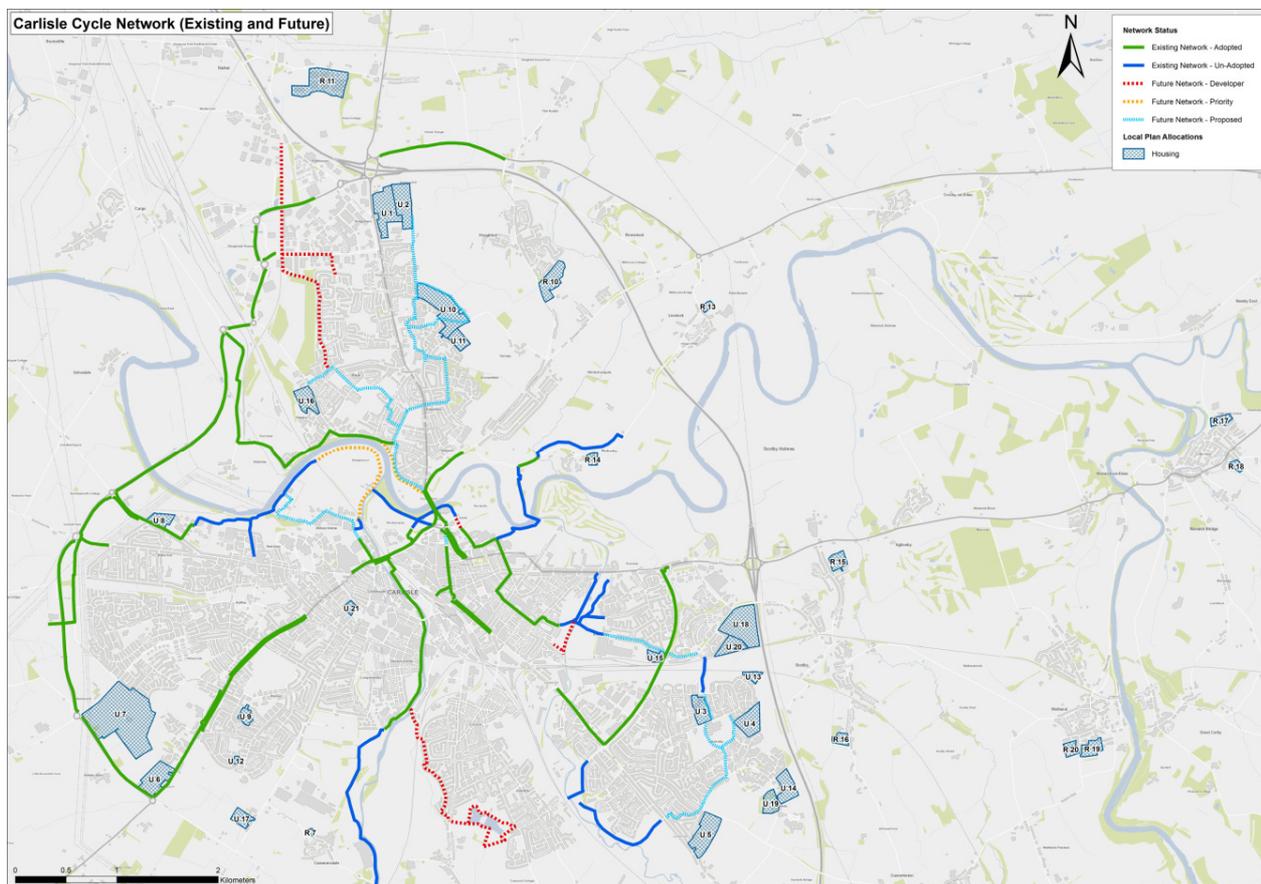


Figure 2 Existing and Proposed Cycle Network (not to scale)

Table 2 - Highway Infrastructure Improvement Costs

Scheme	Cost
Hardwicke Circus	£253,277

<b>Scheme</b>	<b>Cost</b>
Georgian Way/Victoria Place	£82,726
Currock Road/Crown Street (Option 1)	£495,545
Currock Road/Crown Street (Option 2)	£1,482,385
Stanwix Bank/Brampton Road	£39,091
Warwick Road/Eastern Way	£307,385
Warwick Road/Montgomery Way	£334,776
Botchergate/Crown Street/Tait Street	£843,068
London Road/Eastern Way	£204,246
Wigton Road/Caldcotes	£274,200
Shaddongate/Junction Street	£101,816
Wigton Road/Orton Road	£132,725
<b>Total</b>	<b>£3,068,854–</b> <b>£4,055,695*</b>

\* Total dependent on whether Option 1 or Option 2 is preferred for Currock Road/Crown Street

**2.52** It is anticipated that funding for these schemes would primarily be secured through developer funding mechanisms with delivery dependent on specific sites within the Local Plan coming forward.

**2.53** The above range of proposals concern the cumulative effects of the developments proposed as part of the Local Plan. This is, however, not an exhaustive list and further improvements may be identified over the lifetime of the plan. Moreover, planning applications for individual development proposals will need to be accompanied by a transport assessment or transport statement and travel plan where appropriate. This will include a detailed assessment of the transport impacts of the development at the time of the application, such as accessibility, highway design and safety. The outcomes of the transport assessment and travel plan may include further site specific mitigation measures required to support specific development sites.

### Strategic Proposals

**2.54** The measures identified above mitigate the cumulative impact of development in the short term and are essential to the delivery of the Local Plan. Additional to these, a number of other strategic proposals have been identified. If delivered these improvements would help support the objectives of the Local Plan and indeed support the further growth of Carlisle beyond the current Local Plan period.

**2.55** The following improvements are identified in Cumbria's Strategic Economic Plan (SEP) supporting the development of the M6 Corridor theme:

- Currock Bridge – the scheme aims to provide a key cycle link across the Cumbria Coastal Railway in Carlisle. The bridge will provide a missing link in the existing cycle network in Carlisle, providing a direct cycle route from residential

areas to the City Centre and associated employment opportunities. £2.2 million of funding has been provided by central government, via the Local Growth Fund (LGF) to allow delivery of this scheme.

- Durranshill – the scheme aims to improve access to Durranshill Industrial Estate to facilitate growth of the site. £2 million of funding has been provided by central government, via the LGF to allow delivery of this scheme.
- Carlisle Station – Located on the West Coast Main Line and with development growth in Carlisle City Centre, Carlisle Station is a key gateway to the City for tourists and business users. Improvements to Carlisle Station are required to respond to forecast growth in rail use and to improve the visitor experience, through enhanced facilities and excellent links to public transport and car parking.
- Junction 45 – identified as a priority to improve links to the north of the District, facilitating the development of key sites such as MOD Longtown.

**2.56** Other potential strategic improvements identified include:

- City Centre Improvements – improvements to the route through the City Centre for traffic travelling south to north. Traffic currently travels one way through the City Centre and this contributes towards a severance effect for pedestrians in and around the City Centre.
- Carlisle South – routes from the south of the City into the City Centre are congested. There is no clear route for vehicles travelling south to west without travelling through the City Centre. To support the longer term sustainable growth of the city beyond 2030, reduce congestion in the City Centre and to improve the City Centre for pedestrians, options for further major possible highways improvements between Junction 42 of the M6 and Wigton Road are being considered.

**2.57** The County and City Councils will continue to identify and assess longer term and strategic highway and transport improvements that improve access and movement into and around the city and alleviate the negative impacts of road traffic.

### **Who is responsible for providing new infrastructure?**

**2.58** The county council is the highway and transport authority in Cumbria and in that capacity has worked with the city council to help identify transport infrastructure improvements needed to enable development to take place while minimising detrimental impacts of traffic growth on safety, the local economy and environment.

**2.59** The county council's local committee for Carlisle manages an annual investment programme for the maintenance of the highway network and improvements to traffic management through parking and speed controls. The county council requires commuted sums to be provided in respect of future maintenance costs for any additional highway infrastructure on the existing network and in some circumstances, the provision of new highway.

**2.60** Any new infrastructure within the highway or becoming adopted highway will require the approval of the county council and must meet the council's design and construction requirements. Works to improve the highway and transport network may be carried out by the county council's own teams, the council's contractors or by others with the consent of the county council.

**2.61** Improvements to trunk roads will be the responsibility of the Highways England.

### **How will new infrastructure be funded?**

**2.62** New infrastructure will be primarily funded as follows:

- Developer contributions will be expected to deliver infrastructure needed to mitigate the effects of development, in particular S106 and S278 are expected to play a key role in addressing the direct effects of development. The delivery of more strategic improvements may be best delivered through future use of CIL.
- Government grants – the LEP, Growth Fund, and the DfT may help address any shortfall in the availability of funding or to deliver some more strategic improvement needed.

**2.63** Resources may also be available from other organisations that have an interest in transport in Cumbria. This may be because they operate transport services such as bus and rail operators or, like Sustrans who promote cycling and walking, are involved in a particular aspect of transport. Funding may also be available from bodies that promote the economy of Cumbria, including Cumbria Tourism, and other neighbouring authorities.

### **Summary**

**2.64** A comprehensive evidence base has been developed to identify the transport interventions needed to support delivery of the Local Plan. In total these interventions equate to an approximate cost of £8.9 million, with developer contributions necessary to aid their delivery.

# Electric Vehicle Charge Points

## Current Provision

**2.65** Electric vehicles are a relatively new technology, and are only just starting to gain momentum in terms of popularity and practicality. Presently, typical electric cars have a range of around 100 miles on a full battery. This means that their use is highly dependant on the availability of charging points. Provision within Carlisle District is slowly increasing, and there are currently five charging point locations available for public use within the District. Locations are varied and include:

- Asda (St Nicholasgate)
- Benfield Motors (Rosehill)
- Orton Grange
- Todhills Services (Both M6 North and Southbound)
- A guest house near Gilsland

**2.66** Outside the district other local charging points are currently located at Gretna services on the A74(M). There are also a number of points in Haltwhistle, just off the A69. Further down the M6 there is a charging point at Tebay Service Station. As part of its sustainable tourism initiative the Lake District National Park has a number of points spread across its area at Ravenglass, Ambleside and Glenridding, this is mainly to support various electric car hire businesses operating within the park. Whilst the spread of points across the county and beyond should make it technically possible to get around using an electric car, the limited number of available points would make operating an electric car in the area inconvenient for most.

## What is needed?

**2.67** The Government has stated its intention to make Britain a world leader in electric car technology. To facilitate this, more charging points are required across the country, but particularly within Carlisle City and the wider rural area to ensure the take up of electric vehicles is both sustainable and accessible. Whilst there is no clear data on the number of electric vehicles currently being operated within the District it is likely, given the infancy of the technology and the limited availability of supporting infrastructure, that there are not many. This provides the paradoxical issue of how to increase the use of electric vehicles in the area when the infrastructure required to support them is not available, and how to justify providing that infrastructure if there aren't the numbers of vehicles present in the area to ensure it would be viable.

## Who is responsible for providing new infrastructure?

**2.68** The Government has made it clear that it expects local councils to start seizing the initiative and provide on street charging points for electric vehicles, though as of yet no legislation has been passed requiring local authorities to do so, and, given that

currently this would only benefit a significantly limited number of motorists, it may be difficult to justify establishing provision using public funds unless a clear need/demand was identified within a particular area.

**2.69** Charging facilities could also be funded by parish councils or other local community groups to meet an identified need – this may be a particularly useful approach to securing public charging provision within smaller settlements. It would also serve as a clear indication of demand should a community be motivated enough to establish their own provision of public vehicle charging points.

**2.70** Private businesses may also be an important source of infrastructure provision be it to provide a wider range of refuelling options at road side services/garages such as those provided at Todhills and Asda; or a hotel or other hospitality business wishing to facilitate guests travelling to the area via electric car. Businesses, particularly those likely to generate a lot of traffic, will be encouraged to provide charging facilities along side off-street parking provision under the emerging Local Plan. There is no policy justification, as of yet, to require such infrastructure provision as part of new development.

#### **When will infrastructure likely be delivered?**

**2.71** Establishing electric vehicle charging points across the country is taking longer than expected by the Government. They had originally intended for 8,500 charging points to be available nationally by 2013 but it is understood delivery fell short of this target. Providing electronic charging facilities is therefore likely to be a long term aspiration, particularly in a predominantly rural county like Cumbria. Electric vehicles will need to become much more prominent and widely used before charging facilities begin to be more integrated with new development. There is a possibility that this could happen over the life time of the emerging Local Plan however, i.e. over the next 15 to 20 years, therefore it is worth considering this type of infrastructure to ensure there is some policy recognition should charging point provision become a more pressing issue.

#### **What will the likely costs of new infrastructure be?**

**2.72** For on street parking it is estimated that a charging point capable of recharging two vehicles would cost around £10,000, with rapid recharge units, capable of fully recharging a vehicle within minutes, as opposed to 8 hours, costing around £45,000. Small-scale domestic charging points, the kinds that could be provided by smaller businesses could cost between £1,000 to £2,000.

#### **How will new infrastructure be funded?**

**2.73** The Government has recently made available a fund of £11million to help local authorities to furnish on-street parking bays with electric chargers. Under the scheme the Government will meet up to 75% of the costs of providing charging facilities; this

includes both standard £10,000 and rapid £45,000 charging facilities should an authority seek to provide this infrastructure. This is part of a wider fund of £37million, which is also available to assist the establishment of private and domestic chargers. In Feb 2014 it was confirmed that the Government was going to make available £562,500 as part of an initiative to install a county-wide infrastructure network of electric vehicle charging points as part of their national 'Go Ultra Low' campaign.

**2.74** Beyond this, as electric cars become more widely used, local planning policy may evolve beyond encouraging provision of charge points to actively requiring them, at which point the securing of provision would be sought through planning conditions as per the standard planning application process – though this may be some years into the period of the next Local Plan.

### **Gaps in funding**

**2.75** There are concerns that Government assistance to local authorities may be somewhat stretched in order to cover all areas of the country. It is likely therefore that only those areas that can demonstrate increasing use of electric cars will benefit at first. Unfortunately Carlisle has no evidence of electric cars being used across the District, and may struggle to secure funding, should the Council wish to establish on street vehicle charging facilities. The difficult economic situation currently faced by the Council may subsequently rule out meeting the full cost of providing this infrastructure in the short term at least.

### **Summary**

**2.76** Electric vehicles are increasing in popularity. However, whilst provision of charging points is gradually increasing within the District and across the wider county, their availability remains limited. Electric vehicle technology is still in its infancy, though as a growing sector it merits some consideration within the IDP. Developers will be encouraged to include charging points within their proposals, where appropriate, but more compelling evidence of increased demand is needed before planning obligations/conditions could be used to secure the provision of charge points within developments.

## **Telecommunications**

### **Current Provision**

**2.77** The District is generally well served by mobile phone network coverage. Almost everywhere is capable of receiving a basic '2G' service (phone calls and text messages), with the exception of the most remote parts of the District such as in the far north east, around Bewcastle and small patches of higher ground to the south east, beyond Castle Carrock.

**2.78** Mobile internet services (3G) are enjoying increasing provision across the District. The Carlisle urban area enjoys near complete network coverage, beyond this however services are limited. There is coverage in Brampton and Longtown and expected to continue to expand into more rural areas across the district through the expansion of 3G nationally funded both by the Broadband Delivery UK's (BDUK) Mobile Infrastructure Project, which is providing funding to cover 'not spots' for mobile signal, and the changes in the mobile spectrum purchase obligations of mobile network operators who are being encouraged to meet geographical rather than population coverage targets.

**2.79** Superfast mobile internet, known as 4G, is currently only available within the urban area of Carlisle. It is expected that coverage will expand to include other settlements within the District as the Government begins to include geographical rather than population coverage targets in the mobile spectrum purchase obligations of mobile network operators; details of when or where these services will be rolled out is not currently available.

### **What is needed to support the Local Plan?**

**2.80** Mobile internet is going to play an important role in providing broadband internet to the most remote rural communities, which in turn is an important aspect of supporting the economic growth of rural communities. By ensuring people and businesses in rural areas are able to connect reliably and quickly to the internet we can help them to overcome the physical boundaries that a remote or isolated location can create. Within more urban areas, encouraging the growth of a comprehensive superfast mobile internet service through 4G would help to bolster Carlisle's image nationally and make it a more attractive location for potential investors. New masts and the upgrading of existing ones to support new technologies will be required to improve coverage across the District and to expand 4G services.

### **Who will provide new infrastructure?**

**2.81** Mobile phone masts are constructed and maintained by the various mobile network operators. There is currently a Mobile Infrastructure Project being undertaken

by BDUK, which is being managed nationally to provide funding to construct masts in areas which are not able to be commercially covered by mobile network operators.

**2.82** To provide services mobile operators must purchase mobile spectrum from the Government. Historically the Government has put coverage obligations on purchases of mobile spectrum based upon population; this has led to poor coverage in sparsely populated areas like the wider Carlisle District. The Government is currently changing its approach to focus on geographical coverage obligations for mobile operators which is expected to significantly improve coverage across the district in the next few years.

### **Summary**

**2.83** The quality and coverage of telecommunications is improving across the District. The provision of masts offering 3G/4G coverage is the responsibility of the various mobile network operators, and, as such, there is little the IDP can do to influence this provision beyond supporting the planning applications for new infrastructure planned either commercially or through the BDUK Mobile Infrastructure Project. The IDP will, however, continue to monitor the expansion of this important infrastructure network.

## **Broadband Internet**

### **Current Provision**

**2.84** Historically across the District broadband access has varied significantly, however the infrastructure across the county as a whole has been improved significantly in the past few years through a combination of increased commercial infrastructure deployment and the Connecting Cumbria project which is part of the Broadband Delivery UK (BDUK) national programme to improve broadband infrastructure across the UK.

**2.85** As a result of both commercial service deployment and the Connecting Cumbria project, most of the city now has access to fibre optic cable broadband technically capable of speeds between 30 to 75Mbps. Overall within the District, 73% of properties as at April 2015 have access to fibre optic cable broadband with further improvements planned to bring this to approximately 80% by Spring 2016.

**2.86** Further work is planned, through the Connecting Cumbria project and BDUK, to make provision for all properties throughout the county to be able to access services at a speed of at least 2Mbps. This scheme is due to be rolled out from December 2015.

### **What is needed to support the Local Plan?**

**2.87** The Government has set a national target of having all households in the UK able to connect to the internet at a speed of at least 2Mbps by 2016. In Cumbria this scheme will be delivered through Connecting Cumbria. The Government have also set a further target that 95% of properties across the country will have access to faster broadband, technically capable of speeds of at least 30Mbps, by the end of 2017. Carlisle is working towards the achievement of these targets and policy within the Local Plan (2015-2030) aims to facilitate an increase in well-connected homes and businesses.

**2.88** Developers will be required to consider available broadband provision in the area they are proposing to build, including any community led broadband initiatives, and will have to justify why they cannot achieve a connection technically capable of speeds of at least 30Mbps. Support for community led initiatives will be vital to enable the growth of broadband in rural areas, and to provide developers with a means to furnish proposals with fast broadband connections.

**2.89** Furthermore, developers should be encouraged to incorporate into building plans provisions for connecting broadband infrastructure, ideally fibre optic cable broadband, at the initial design stage.

## **Who will provide new infrastructure?**

**2.90** Retail broadband services are provided by internet service providers, who either develop their own broadband infrastructure networks, as Virgin Media predominantly does, or purchase access to large scale broadband networks on a wholesale basis. The two largest companies actively seeking large-scale expansion of fibre-optic networks are BT Openreach and Virgin Media, with incentives for this nationally from the Government as part of its superfast broadband ambitions. In addition to the large broadband infrastructure providers there are a number of small broadband infrastructure providers working in the District and satellite based broadband services are also available.

**2.91** The Government has a target of 95% of properties in the UK being able to access broadband technically capable of speeds of at least 30Mbps, by the end of 2017. To support delivery of this in commercially challenging areas of the UK a number of projects have been contracted through BDUK to provide gap funding for infrastructure building. Connecting Cumbria is the local delivery arm of this programme for the county and currently aims to make fibre optic broadband available to 93% of properties in the county by 2016.

## **What will be the likely cost of new infrastructure?**

**2.92** Costs for creating superfast broadband provision can vary significantly, depending on the scope of a project. Around 60-80% of the costs associated with installing fibre optic cable are due to the civic works that are required to get cables underground and into properties, the ducting required to hold the cable and indeed the cable itself. Digging work can incur costs of up to £100 per metre, depending on the topography and terrain – especially if a highway needs to be cut into.

**2.93** Rural Devon, an organisation looking at establishing community broadband initiatives in Devon has assessed the levels of funding that would be required before a broadband company would be able to install fibre optic cables in an area. To install fibre-to-the-home broadband, which is the most efficient and future-proof approach, subsidies of between £2000-3000 per property would likely be required. This subsidy amounts to a significant proportion (~90%) of the capital amount. The high costs are driven by the average costs incurred when deploying fibre along the typically long distances to sparsely populated rural areas.

## **How would future provision be funded?**

**2.94** BDUK has an ambition that all properties within the UK will be able to access superfast broadband and it is expected that schemes for the delivery of these services to the most difficult to serve parts of the UK will be put forward for Government consideration within 2015. Within the urban area demand should exist to make

continuous improvement of high speed networks viable, however, it is expected that Government initiatives will be required to extend and encourage further improvement in rural areas where purely market driven broadband schemes are unlikely to be viable.

### **Gaps in funding**

**2.95** None of the initiatives in Cumbria that have secured funding for community broadband are within Carlisle District. This could mean that a significant funding mechanism to provide fast broadband in the rural north and east of the District is not available, beyond the Connecting Cumbria project which is working county wide, making it harder for any community broadband schemes to come forward in these areas.

**2.96** Whilst there is a policy within the Local Plan, contributions to broadband provision from new developments will need to be balanced against other priorities and ultimately within the parameters of viability.

### **Summary**

**2.97** Broadband speeds have significantly increased in the last few years across the District as improvements are made to communications infrastructure both by an increased commercial deployment of broadband and the Connecting Cumbria project. The Plan's strategy to concentrate the majority of the additional growth within the urban area should act to ensure that most new developments are in areas where there is a realistic prospect of benefiting from investment in and the expansion of existing networks. To a lesser extent focussing rural growth predominantly in district and local centres should also ensure likewise – although it is recognised that initiatives to secure faster broadband speeds in other rural areas should also be supported where they arise.

## Utilities - Clean and Waste Water Infrastructure

### Current Provision

#### Clean Water Supply

**2.98** Most fresh water for Carlisle District is extracted from the Castle Carrock reservoir and from the River Eden at Cumwhinton. In noting the volume of development anticipated to come forward within the District across the plan period, United Utilities have indicated, on the basis of the information currently available to them, that there are currently no concerns regarding the capacity of provision, with an adequate supply anticipated to be available to meet the needs of residents and business.

**2.99** Notwithstanding the above, and given the volume of development to come forward, it is likely that there will be a need for some localised reinforcements in the network. This is a standard process however and is not considered unusual. In this regard United Utilities has identified a need for additional assessment of new development proposals in Morton (in the west of the City) to inform any potential infrastructure improvements. This assessment of development on the water supply infrastructure can be undertaken as and when proposals for development are formed. United Utilities will continue to monitor the volume and rate at which development will come forward to better understand the impact and the need to coordinate any investment with the delivery of development.

#### Waste Water Treatment

**2.100** United Utilities has explained that a full understanding of the impacts from proposed developments on their wastewater infrastructure can be better understood once more details are available on the proposed approach to drainage from development sites, especially in respect of surface water, with each case needing to be considered on its own individual merits and implications.

**2.101** Notwithstanding the need for additional information to better understand the impact of development proposals, the Council have engaged in meaningful discussion with United Utilities on the location of development and the policies in the preparation of the Local Plan.

**2.102** The provisional assessments undertaken by United Utilities, based on the information currently available have indicated that there are no issues with waste water treatment capacity within the urban area of the city. Recent investment of over £18million has provided spare capacity within Carlisle treatment works. Outside of the city, however, there may be some localised capacity issues.

**2.103** The provisional assessment has indicated that the District's main towns (Brampton and Longtown) have spare capacity at their respective works. Dalston, the

District's largest village, also has spare capacity. In the more rural villages however, some of the smaller treatment works may be at or very near to capacity. United Utilities has undertaken an initial assessment of Wetheral and Great Corby wastewater infrastructure in the context of identified proposed growth having regard to the pending and approved planning applications and the proposed residential allocations. United Utilities has advised that the wastewater infrastructure is near to capacity and there will be a need to coordinate the delivery of development with the delivery of infrastructure enhancements. United Utilities has sought more information regarding the proposed allocations to better understand the impact on infrastructure, in particular, in respect of the approach to surface water management. There has been dialogue between the site promoters, United Utilities and the City Council, and United Utilities are satisfied with the strategy put forward for dealing with surface and waste water. These issues will have to be considered in detail at pre-application discussions for future development sites.

**2.104** Other villages however have recently seen improvements to their local treatment works, with Irthington benefiting from significant improvements in response to the anticipated approval of development at Carlisle Airport.

### **What is needed to support the emerging Local Plan?**

#### *Clean Water Supply*

**2.105** There are no current significant concerns from United Utilities regarding the existing supply of clean water to the District. Given the volume of growth promoted within the city, United Utilities will closely monitor the impact of development and the rate at which development comes forward. United Utilities will be able to better understand the impact of development once more details are known on the development proposals. This allows any need for water supply improvements to be most appropriately determined. There may be a need for localised reinforcement in response to new developments coming forward. This is not unusual and would be dealt with through the normal process. Developers should contact Water Developer Services for all development proposals to understand any network reinforcement that may be required as a result of development taking place. As noted above, United Utilities has identified a need for developers / landowners in Morton to contact its Water Developer Services team at an early stage to allow additional investigations to be undertaken to identify any upsizing requirements of the network.

#### *Waste Water Treatment*

**2.106** On the basis of the provisional assessment and the information currently available, there are no concerns identified with the capacity at treatment works within the urban area of the city. There may, however, be issues regarding the sewer pipe network, which may be too narrow at the edges of the city to carry the levels of waste water resulting from large new developments. Given the nature of available sites in the city, as shown in the SHLAA, most new development over the plan period will have to

be located on the outskirts of the city. Surface water flows are significantly higher than foul water flows and therefore surface water has a greater impact on the capacity of wastewater infrastructure, particularly during times of heavy rainfall / storms. In order to minimise the impact of development on wastewater infrastructure, United Utilities requests that developers / landowners thoroughly investigate the surface water hierarchy to minimise surface water entering the sewer network. Should surface water enter the wastewater network, which is always a last resort, then United Utilities would expect this to be discharged at an appropriately attenuated rate (including an allowance for climate change) agreed with them.

**2.107** On the basis of information currently available and the provisional assessments, capacity exists within the towns of Brampton and Longtown. This said United Utilities have previously identified that they would be able to most appropriately manage the impact of growth if it came forward gradually over the plan period. At the current time no major investment is anticipated in the treatment works to increase capacity within these towns.

**2.108** United Utilities has undertaken initial investigations of the level of capacity available at Wetheral and Great Corby Wastewater Treatment Works in the context of identified proposed growth at these locations. Investigations have identified the need for investment at the works could be triggered as a result of an increase in population and changing environmental consents. In order to better understand the impact of development on infrastructure, United Utilities requests developers / landowners provide details of surface water management and foul drainage. This will enable United Utilities to understand the impact with improved accuracy. Developers / landowners are also encouraged to provide additional information such as delivery timescales and annual build rate to enable United Utilities to coordinate any infrastructure improvements that may be required with the delivery of development. Subject to the receipt of additional information, United Utilities has explained that it would be able to most appropriately manage the impact of development on wastewater infrastructure if this came forward in Wetheral gradually across the plan period.

### **Who is responsible for delivering new infrastructure?**

**2.109** United Utilities is currently the sole authority for both clean and waste water infrastructure provision. They are responsible for assessing what capacity exists within their network, identifying what is needed to support anticipated levels of new development and for delivering required new infrastructure.

### **When will required new infrastructure likely be delivered?**

**2.110** A number of improvements have recently been made to infrastructure capacity by United Utilities as a result of significant new investment within the City and District. Meaningful discussions have taken place with United Utilities about planned growth which in turn has influenced their current investment considerations for the next

investment period which runs from 2015-2020. The principal funding mechanism for water and sewerage companies is the five yearly funding cycle. The Plan period is therefore covered by three funding cycles.

**2.111** The principal issue raised by United Utilities is that of wastewater infrastructure. In order to better understand the impact of development on infrastructure in Wetheral and Great Corby, United Utilities requested developers / landowners to provide details of surface water and foul water drainage proposals. Discussions have been held between the site promoters, United Utilities and Carlisle City Council regarding housing allocations in Wetheral, and an acceptable drainage strategy has been outlined. United Utilities has explained that it can most appropriately monitor and manage the impact of development on its infrastructure in Wetheral and Great Corby if it comes forward gradually over the plan period.

### **Funding and Costs for Utilities Infrastructure**

**2.112** United Utilities has a complex funding system when it comes to providing new utilities infrastructure. It is a closed system and they are unable to accept contributions from developers as part of planning applications, either in the form of Section 106 agreements or through Community Infrastructure Levy. This emphasises the point that it is vital for developers to engage in early pre-application discussions with United Utilities to ensure that adequate infrastructure is available and/or that it can be planned for in order to deliver the development as quickly as possible.

### **Summary**

**2.113** There are no significant issues with water utilities provision currently, beyond potential capacity issues at a small number of local waste water treatment works. United Utilities has stressed that early engagement with them as part of the planning process is vital. The Council will also encourage applicants to engage with United Utilities during the pre-application stage. This will hopefully allow all parties to find a suitable solution to any issues that may arise without compromising new development. Due to the nature of United Utilities funding mechanisms, they are unable to accept developer contributions towards maintaining or enhancing utilities infrastructure – which serves to emphasise the importance of early engagement with them.

## **Utilities - Gas and Electricity**

**2.114** The supply of electricity and gas is a vital part of the District's infrastructure. Energy suppliers have made a commitment to make the transition to more sustainable forms of energy. There are also growing opportunities for consumers to choose suppliers and the sources and types of energy they use and also to generate their own. Other forms of energy such as solid fuels (e.g. wood, coal) are also used but electricity and gas are the main sources for most properties.

**2.115** Existing provision of utilities is sufficient to meet the needs of current developments in the District. The consideration here is not the supply of energy (from National Grid), but rather the capacity of infrastructure to distribute them. The distributors of electricity and gas have a statutory duty to supply new customers where it is economically viable to do so. To establish whether there is any deficit in current provision, the electricity and gas distributors have been contacted throughout the process of preparing the Local Plan.

### **Electricity**

**2.116** There are two main infrastructure providers to be considered when looking at electricity supply within the District. The National Grid manages the physical infrastructure, i.e. the power lines and pylons, whereas Electricity NorthWest manages the actual energy supply that runs through the National Grid's network.

### **National Grid**

**2.117** Specific development proposals within the District are unlikely to have a significant effect upon National Grid's gas and electricity transmission infrastructure. It is unlikely that any extra growth will create capacity issues for National Grid given the scale of these gas and electricity transmission networks. The existing networks should be able to cope with additional demands. The National Grid's infrastructure network at this stage is therefore not considered a major concern for the delivery of the Local Plan.

### **Electricity NorthWest**

**2.118** Discussions with Electricity NorthWest have indicated that they have no major concerns regarding energy supply within the district, and at this stage can not foresee any major constraints arising from the proposed levels or locations of growth in the Local Plan.

### **Gas**

**2.119** There is no evidence to support that the District's existing gas transmission infrastructure will be unable to cope with the increased demand arising from the proposed levels or locations of growth in the Local Plan.

## Summary

**2.120** Energy supply, be it gas or electricity, is not currently a cause for concern within the District. As development takes place, further utilities requirements may emerge. The council will work closely with utility provider partners to ensure that utilities in Carlisle meet the District's needs. Any deficit in future provision will be addressed through reinforcement of the networks and related infrastructure items. Deficits in provision are likely to be addressed systematically overtime and at the expense of new developments.

### **3. Social Infrastructure**

#### **Emergency Services**

##### **Fire Services**

**3.1** Fire cover in Carlisle is served by two stations crewed 24 hours a day; one in the west of the city and one in the east. Carlisle west has one enhanced rescue pump that responds to fires and other rescue situations. Carlisle east has one fire appliance and one ALP, which is a specialist high reach vehicle for incidents involving height.

**3.2** Currently no changes are planned but Cumbria Fire and Rescue Service use an integrated risk management planning process to assess risk and the resources required to minimise this risk.

##### **Police Service**

**3.3** As development on a major scale takes place throughout Carlisle and the wider District, the ability of the Constabulary to respond is constrained through combined pressures of reductions in resources and tightened budgets, coupled with the potential increase in demand from a growing population. These issues are compounded by the sparsity factor of small communities being scattered across large areas of Cumbria.

**3.4** In the first instance, Emergency Services infrastructure may refer to communications networks (presently reliant on the 'Airwave' Terrestrial Trunked Radio Scheme) – basically a county-wide private mobile telephony network, supporting data and voice traffic, with interoperability to neighbouring police forces. The Constabulary also relies heavily on internet broadband networks to link their assets - and between partners and the public - thereby encouraging contact and co-operation in the wider community. Internet access is regarded as a burgeoning means of contact with the public as budget cuts have forced the closure of older or smaller police stations.

**3.5** It is apparent that as the main centres of population grow (e.g. Carlisle, Penrith, Workington, Whitehaven, Barrow) through development, demands for emergency services and particularly policing will also increase. However, development in the smaller centres (e.g. Dalston, Brampton, Longtown) will place additional demands on the Neighbourhood Policing Teams embedded across these areas.

**3.6** From the Constabulary's perspective, other aspects of 'infrastructure' is beneficial to the wider community, in the context of Crime and Disorder reduction (references to S17 Crime and Disorder Act 1998). An example may be the recent announcement by the Police and Crime Commissioner's Office to design and implement a County-wide CCTV scheme, operated from Force Headquarters, Penrith. There was widespread media attention against various councils who declared that CCTV schemes could not be sustained from the repercussions of budgetary cuts. Yet the use of CCTV

to address crime and anti-social behaviour is widely supported by the public, so contributions by developers to enhance the proposed scheme could be acceptable as provision to emergency services infrastructure.

### **Funding of Policing Services**

**3.7** The Constabulary receives funding through the Office of the Police and Crime Commissioner from Central Government and a precept from local Council Tax that provides the majority of the Constabulary's recurring revenue needs - although they do not fully accommodate the unique geographical demands of policing Cumbria. Following the recent Comprehensive Spending review (2010) Cumbria Constabulary has identified a shortfall in funding of £17million with further savings expected towards 2017/2018.

**3.8** It follows that when development gives rise to increased demand for policing, it is reasonable to seek contributions to mitigate the impact. This is supported by the CIL Regulations which recognise that police and other community safety infrastructure fall within the definition of community infrastructure.

**3.9** It is also pertinent to highlight the direct impact of crime on the construction industry as development takes place, due to the criminal fraternity persistently targeting building sites for power tools, building materials and fuel. There is a requirement for the industry to carefully consider these implications and work towards creating a secure environment whilst undertaking the construction stage of new housing developments.

### **Summary**

**3.10** The Council will continue to work with the emergency services to ensure that, in the first instance, new development is designed to accommodate their needs. Regarding the prevention of crime, the Council will work with the police and developers to ensure that techniques are included as standard within development which help to deter crime – this should deter potential criminals passively through good design without developers incurring significant additional costs. The emergency services are consulted on planning applications and it is through this process that they can make the Council aware of specific requirements they may have relating to a particular development. Such requirements may indeed need to be funded (either in total or in part) through developer contributions – these instances will be assessed on a case by case basis.

## **Household Waste Recycling – Waste Disposal**

**3.11** Cumbria County Council is the waste planning and the waste disposal authority for Cumbria. The Adopted Cumbria Minerals and Waste Development Framework Core Strategy identified a need for two MBT plants to tackle municipal waste – one in the north and one in the south of the County. Locations were to be specified through a Cumbria Minerals and Waste Site Allocations Policies Local Plan. The municipal waste contract that was subsequently signed with Shanks, led to one MBT plant being built at the Hespian Wood landfill complex, near Carlisle, and one at Sowerby Woods Business Park, near Barrow-in-Furness.

**3.12** The County Council formally adopted the Cumbria Minerals and Waste Development Framework Core Strategy and Generic Development Control Policies Development Plan Documents on 23 April 2009. The Cumbria Minerals and Waste Site Allocations Policies and Proposals Map documents were in the process of being examined by the Planning Inspectorate on behalf of the Secretary of State in Spring 2012. However, during the Examination, the Government introduced the current development plan system. As a result, Cumbria County Council decided that the priority should be to commence work on a new Minerals and Waste Local Plan. The MWDF Site Allocations Policies and Proposals Map were therefore withdrawn from their examination process.

**3.13** Following this, Cumbria County Council published for consultation its Regulation 19 draft Minerals and Waste Local Plan 2013 to 2028. This includes strategic policies, development control policies and site allocations. Draft policies SP2 (Provision for waste), SP3 (Waste capacity), SP4 (Strategic areas for new waste management developments), DC7 (Criteria for waste management facilities), DC8 (Criteria for landfill), SAP1 (Household Waste Recycling Centres) and SAP2 (Waste treatment facilities, including MBT plants, Materials Recovery Facilities and transfer and bulking stations), are the most relevant. They set out provision for an integrated network of waste facilities and criteria for new facilities that are sustainable and able to accommodate the wastes arising within Cumbria until the end of the Plan period, with acceptance of limited cross-boundary movements in order to achieve net self sufficiency.

**3.14** Cumbria County Council's long-term municipal waste management contract is based around the two MBT plants at Carlisle and Barrow in Furness, which have throughput capacity for 150,000 tonnes of waste/year. It is anticipated that these plants will have a spare capacity of around 20,000 tonnes/year, which could be taken up by commercial waste. The municipal waste management contract takes account of population growth.

**3.15** Kerbside waste and other municipal waste collected by Carlisle City Council is currently delivered to the MBT plant at Hespian Wood near Carlisle. This MBT plant is designed to treat unsorted waste, and has a maximum capacity of 75,000 tonnes per

annum or up to an average of 289 tonnes per day, diverting 75% or more of the waste from landfill. The residual waste that is left after processing is landfilled at the Hespín Wood landfill site.

**3.16** Cumbria County Council is responsible for two Household Waste Recycling Centres (HWRC) in the Carlisle area. These are Bousteads Grassing HWRC in Carlisle and Brampton HWRC.

**3.17** Hespín Wood landfill in Carlisle has planning permission until 31 October 2020 (planning application reference 1/00/9005). The Local Plan does however include much lower estimates of need for landfill capacity than those included in the Minerals and Waste Development Framework Core Strategy, i.e. 1.3 million cubic metres from 2014 to 2029 instead of the 7 million cubic metres from 2008 to 2020. It remains to be seen if a new landfill would be a viable proposition.

**3.18** On the whole, the commercial waste stream is slightly ahead of municipal waste in terms of reduction/re-use/ recycling. However, the Environment Agency's 2009 survey for the North West concluded that around 75% of the commercial and waste that had been landfilled could have been fairly readily recycled/recovered and that 97.5% were potentially recyclable/recoverable.

**3.19** Policy SAP2 of the draft Minerals & Waste Local Plan estimates that six sites of 2 to 3ha will be needed for treating commercial and industrial wastes in the County. One of these proposed sites is located at Stephenson Industrial Estate, Willowholme in Carlisle (site allocations reference CA11). This site has an existing waste transfer and recycling facility and the proposed allocation considers developing further waste treatment facilities. Another site is located at Hespín Wood, in addition to the landfill and MBT, this site has an existing composting facility, MRF and aggregate recycling facility.

**3.20** All domestic waste disposal costs are paid for by Cumbria County Council with monies coming from Council Tax. At present it is down to the collection authority to collect and pay disposal for any recyclates it collects. Income is generated from the sale of materials, with this income and with a recycling reward paid from Cumbria County Council for every tonne of recyclate collected this offsets the cost of collecting these materials and gate fees.

**3.21** It is the responsibility of the collection authority (Carlisle City Council) to try and get the best value it can for all materials. There are however limited numbers of suppliers whom can deliver this service in this area and therefore it is hard for (Carlisle City Council) to generate a competitive price for its collected recyclable materials at this time. It will be up to Carlisle City Council to look at innovative ways to try to maximise its assets, and generate extra income.

## Summary

**3.22** In conclusion it is not considered, based on the available evidence at the present time, that waste infrastructure (including landfill and treatment capacity) will act as an impediment to growth.

## **Education Provision**

### **Background**

**3.23** Good quality and accessible education is an essential element in the creation of sustainable communities. This principle is reflected in the 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”.*

**3.24** How the education requirements of housing proposals can be met must therefore be considered during the development and implementation of the Local Plan, this is the purpose of this chapter.

### **Education Responsibilities**

**3.25** Cumbria County Council is the education authority for Cumbria and as required by Section 14 of the Education Act 1996, it 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.

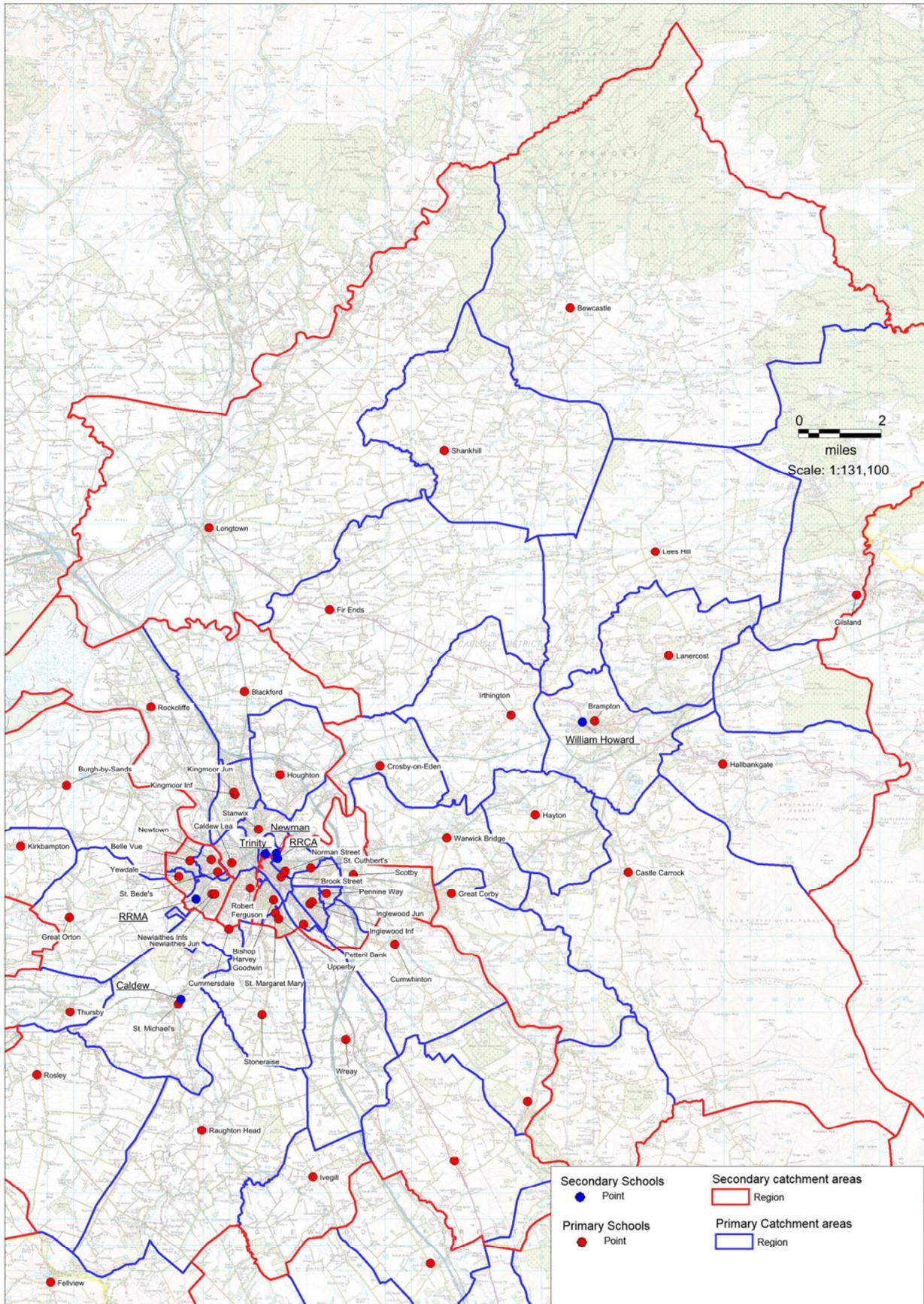
**3.26** In performing this role, the county council must ensure it complies with the requirements of the 2006 Education and Inspections Act. This requires that Local Authorities promote choice and diversity in relation to the provision of school places. In practice this means parents are able to express 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.

**3.27** Linked to these responsibilities, the county council is required to provide home to school transport where the 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.

### **Current Schooling Situation**

**3.28** Within Carlisle District there are 48 primary and 6 secondary schools. The district is divided into catchment areas as demonstrated Figure 1. These catchment areas are used in the event that a school is over-subscribed 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 1 – School catchments**



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## Assessment of the Effects of Development

**3.29** 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 Carlisle and seeks to highlight the various mitigation measures that may be needed to ensure new development takes place in a sustainable manner.

**3.30** 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.

**3.31** 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.

**3.32** The Draft Carlisle Local Plan proposes the allocation of 5,585 new homes (2,756 Urban, 1,379 Rural and 1,450 Carlisle South) between 2015 and 2030 the majority of which do not yet benefit from planning permission. As set out in Figure 2, the net estimated yield for this level of development is 1,124 primary pupils and 803 secondary aged pupils.

### Figure 2 – Calculation of pupil yield

5,585 Dwellings

Pupil yield  $(5,585 \times 0.345) = 1,927$

Of which the number of primary children would be  $(1,927 / 12 \text{ total year groups} \times 7 \text{ primary year groups}) = 1,124$

And the number of secondary children would be  $(1,927 / 12 \text{ total year groups} \times 5 \text{ secondary year groups}) = 803$

**3.33** 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.

**3.34** 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.

**3.35** It should also be noted that the below assessment is underpinned by the baseline primary projections (i.e. before the effects of housing growth are factored in). These are based on September 2014 pupil census and projected pupil numbers for 2015-2018. All baseline secondary projections are based on September 2014 pupil census and projected pupil numbers for 2015-2025. 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 (e.g. at academies)

*Carlisle – Urban Area - 2,756 new homes*

**3.36** To ensure the sustainability of development identified through the Local Plan there is expected to be a need for additional school places in some locations across Carlisle City.

**3.37** In particular, the north of the city (North of River Eden) is not considered to have sufficient primary school places to accommodate the development proposed there. To address this issue, there will be a requirement for a new primary school to be delivered as it will not be practical to extend existing schools. This issue was highlighted during the recent consideration of planning applications (ref. 2014/0761 and ref. 2014/0778). While options for this school are being considered, it is anticipated that this can be delivered to the east of Scotland Road where it would best address the effects of the development sites.

**3.38** Elsewhere across the City, it is anticipated that most school places can be delivered through extensions to existing schools; for example the new Pennine Way School has the capacity to be extended. Nevertheless, the detailed assessment of individual applications may identify a need for a new school to be delivered. This would normally occur in the case of larger development sites like at Morton and Crindledyke (ref. 2009/0413 and ref. 2009/0617) or where additional capacity cannot be provided through extended schools (like in north Carlisle).

**3.39** With respect to secondary schools, Carlisle is seeing a general increase in the primary school aged population. This increase will work through to the secondary phase and while there will be sufficient school places to meet the needs of the resident population, it is anticipated that additional places to meet the needs of planned housing growth will be required.

### *Rural Areas - 1,379 new homes*

**3.40** Within the Local Plan, further housing development is proposed at Brampton, Longtown, Burgh-by-Sands, Cummersdale, Cumwhinton, Linstock, Harker, Houghton, Rickerby, Moorhouse, Scotby, Warwick Bridge, Wetheral and Wreay. In many of these locations there will be a requirement for additional school places to address the effects of development.

**3.41** Housing proposals are anticipated to put particular pressure on primary schools in Brampton, Blackford, Cumwhinton, Houghton and Scotby. Detailed consideration will need to be given to how best to deliver additional places in these locations, for example a recent assessment has shown how additional primary school places could be delivered in Brampton.

**3.42** The effects of housing growth will have a direct impact on secondary schools at Brampton and Dalston. To address these impacts, it is anticipated that there will be a requirement for additional secondary school places to be delivered.

### *Carlisle South Urban Extension - 1,450 new homes to 2030*

**3.43** The level of development proposed in Carlisle South will create a need for significant amounts of additional primary and secondary school places up to 2030 and beyond.

**3.44** Subsequent to the current Local Plan, the shaping of this area will be subject to detailed masterplanning (through a Development Plan Document). Through this process, the infrastructure needed to support its growth will be quantified and a delivery strategy established. Funding has been identified to begin to quantify the effects of development here and to better understand and identify necessary infrastructure.

### **Delivery of School Places**

**3.45** During the detailed assessment of the effects of development close working between Carlisle City Council, Cumbria County Council, schools and the development industry will be important.

**3.46** 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 of entry primary school in

2015 is £3,934,588 (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).

**3.47** 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.

**3.48** It is envisaged that Section 106 agreements will play an important role, 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. Nonetheless, given that Regulation 123 of the Community Infrastructure Levy Regulations 2010 (as amended) limit the number of S106 agreements possible for a piece of infrastructure, in all likelihood CIL will have a future role in delivering elements of the education requirement across the urban area of Carlisle.

**3.49** 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.

**3.50** The county council's approach to planning obligations is set out within Cumbria County Council's Planning Obligations Policy; this can be accessed through the following link.

<http://www.cumbria.gov.uk/eLibrary/Content/Internet/538/755/1599/41590142248.pdf>

## **Libraries**

### **Current Provision**

**3.51** The main library within the District is at The Lanes in Carlisle, one of the busiest libraries in the north of England. There are other staffed libraries in the towns of Brampton and Longtown; as well as libraries on estates in Carlisle at Morton, Harraby and Denton Holme, which are run from local community centres. There are also a range of book drops in other community buildings.

**3.52** A mobile library van serves villages and remoter locations across the district area. It provides an enhanced service to the larger village of Dalston twice a week.

### **What is needed?**

**3.53** 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.

**3.54** 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.

### **Summary**

**3.55** There is considered to be no requirement for additional library facilities to meet requirements however this position will remain under review.

## **Adult Social Care**

**3.56** 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.

**3.57** 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.

**3.58** 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.

**3.59** 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.

**3.60** Despite the significant role of district Councils and Disabled Facilities Grants in supporting the needs of clients who require adaptations to their properties, ultimately the 'welfare duty' for meeting assessed needs rests with Cumbria County Council. In situations where DFG funding is restricted, Cumbria County Council may be required to provide appropriate support in the form of increased care packages, possible admission to a care home or direct funding of adaptations. Moreover, even when adaptations are provided there will frequently be a requirement for care within the home. The existing population composition in Carlisle gives rise to significant levels of need for support. Any new housing developments combined within an aging population may lead to an increased requirement for the provision of additional services. Partners across Cumbria prepare regular revisions to the Cumbria Joint Strategic Needs Assessment. To help ensure the sustainability of development, policies within the Local Plan seek to secure designs which can be more easily adapted to meet the through life needs of occupiers. In some circumstances where this is appropriate but not possible, developer contributions may be sought as a form of mitigation.

## **Extra Care Housing**

**3.61** The duty under the Community Care Act 1990 to provide residential accommodation to some adults over 18 years old who through age, illness, disability or any other circumstances are in need of care and attention which would otherwise be unavailable to them, also rests with Cumbria County Council. 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.

## **Current Provision**

**3.62** 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 those with mobility issues including 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.

**3.63** There are currently four extra care housing schemes in Carlisle and one under development in Brampton:

- Burnside Court, Stanwix (43 units for people with care needs) is provided by Anchor Housing;
- Heysham Gardens, Morton (60 units for people with care needs as part of a larger scheme) is provided by Eden Housing Association;
- Sycamore House (8 units focussed towards younger adults with disability) is provided by Impact Housing Association;
- Lister House (12 units focussed towards younger adults with disability) is provided by Impact Housing Association; and
- Brampton (38 units) is to be provided by Impact Housing Association.

**3.64** Combined these provide 161 units for extra care housing within the district.

## **What is needed?**

**3.65** 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.

**3.66** The County Council’s Extra Care Strategy makes projection of need for additional Extra Care housing in Carlisle District based upon an independent analysis of need provided by “Planning 4Care” (2009). This projects that 340 Extra Care units would be needed in Carlisle District by 2019 to meet need.

**3.67** The table below shows the projected overall requirement versus current supply for extra care housing in Key Service Centres within Carlisle district.

Town	Projected Demand 2019	ECH Supply 2014/5	ECH Supply & planned 2015/6
Brampton	55	0	38
City of Carlisle	215	126	126
City of Carlisle/Dalston	19	0	0
Dalston	29	0	0
Longtown	21	0	0
	340	126	164

**Table 3 - Requirement for extra care housing across the District**

**3.68** When current supply is removed from this total, this results in the need for 176 additional units by 2019. 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.

**3.69** The provision of an extra 8,475 new homes (565 x 15 years) in Carlisle over the plan period will create a further requirement for the provision of extra care housing over and above the conservative baseline requirement.

**3.70** As an estimate of the additional requirement, evidence supporting CCC’s Extra Care Strategy highlights a minimum requirement for 1,465 extra care housing units for older people in Cumbria in 2009. 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 (8,475 between 2015 and 2030)
- b) 0.0066 ECH units required per home
- a) x b) = ECH Requirement

8,475 x 0.0066 = 56 Extra Care Units over and above the baseline requirement specified in Extra Care Strategy

### **Who is responsible for delivering new infrastructure?**

**3.71** 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.

### **When will infrastructure likely be delivered?**

**3.72** Proposals for new extra care home schemes will likely continue to come forward throughout the plan period and, assuming they are in the right place and meet planning requirements, the Council will look to approve them in order to meet identified need.

### **Costs and Funding for Extra Care Housing**

**3.73** 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.

**3.74** 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 been enabled through the provision of public sector land being either sold or leased 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 also allocated £2 million to its Capital Budget to support the development of new schemes.

**3.75** 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.

**3.76** Developer contributions can also play an important role 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. The City Council can 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 at a significant discount.

**3.77** The Local Plan does not seek to allocate a site specifically for Extra Care Housing. Rather consideration will be given to the options to secure the delivery of necessary Extra Care Housing on individual sites as these come forward. Where the site is suitably located, and subject to viability, 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 of Extra Care Housing. The County Council and City 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 and overall housing mix.

### **Summary**

**3.78** There will always be demand for Extra Care Housing. The Council will continue to seek developer contributions towards it where it is considered, in consultation with Cumbria County Council, that it is appropriate, practical and viable to do so.

## **Health Provision**

### **Introduction**

**3.79** Planning is a powerful lever and major contributing influence on the wider determinants of health and the integration of planning, health, housing, economic and transport policies can help to produce healthy, sustainable communities.

**3.80** Carlisle became a World Health Organisation Healthy City in 2009. Since then, the City Council has worked closely with organisations such as the NHS, Riverside and Carlisle Leisure and has gained from the Healthy City approach and network. A healthy city is one that continually creates and improves its physical and social environments and expands the community resources that enable people to mutually support each other in performing all the functions of life and developing to their maximum potential.

### **Current Provision**

**3.81** The Council is involved in the on going process of the Cumbria Joint Strategic Needs Assessment (JSNA), which looks at a range of health related indicators, identifying those areas where action is required – possibly through the planning process. Currently, there are no indications of any major deficits regarding health care provision within the district. The JSNA process however allows us to keep a watch on the situation, and our on going partnership with the relevant health care organisations, will allow the Council to respond where it can through the planning process if necessary.

### **What is needed?**

**3.82** One of the core planning principles of the NPPF is that planning policies should ‘take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs’.

**3.83** For the rural area there has been an indication that a site for a medical centre will be required in Brampton over the course of the plan period. As such a site located off Carlisle Road has been identified for this purpose. It is expected that this will come forward through the delivery of new housing adjacent to the site.

### **Impacts of the Carlisle Local Plan**

**3.84** The main impacts relate to new housing developments and subsequent population increases. Growth plans for Carlisle align with the investment plans of the Clinical Commissioners Group (CCG) and where they will focus future investment. The Council continues to support health infrastructure through the Local Plan, and dedicated strategic policies for health and wellbeing. A possible new medical centre at Brampton

is still being discussed, and the Council continues to work with potential developers and the CCG to help realise proposals.

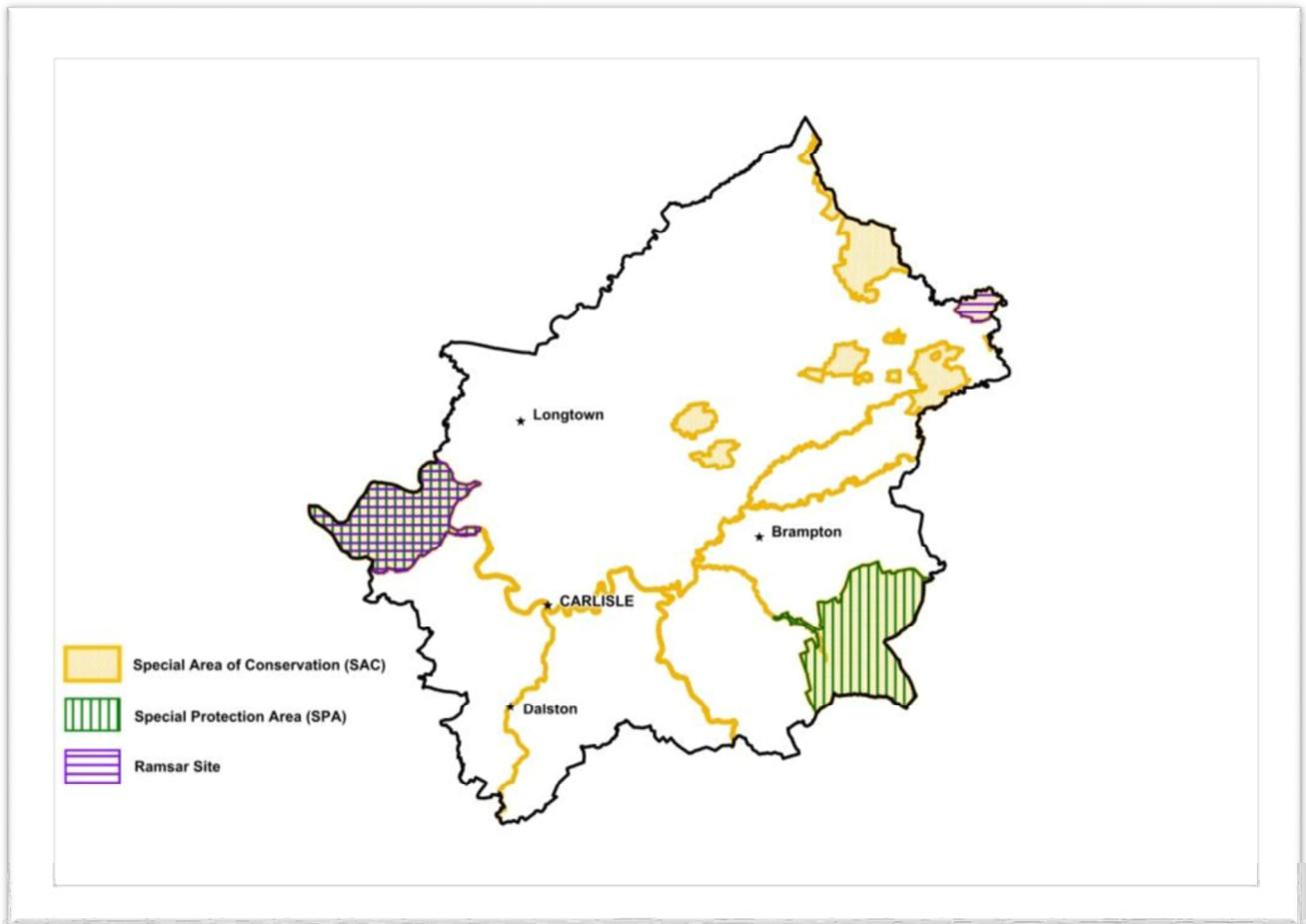
## **4. Green Infrastructure**

**4.1** Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to health and quality of life of sustainable communities. Carlisle's green infrastructure network includes parks, amenity and civic spaces, natural and semi-natural green spaces, provision for children and young people, allotments, cemeteries and crematoria, outdoor playing pitches, green corridors (including wildlife corridors, cycleways, footpaths and bridleways), rivers, streams and other water bodies, trees and woodland and agricultural land. Green infrastructure helps to create attractive locations, improve sense of place, promote healthier lifestyles, provide education opportunities, and mitigate and adapt to the effects of climate change.

# Biodiversity

## Current Provision

### International Designations



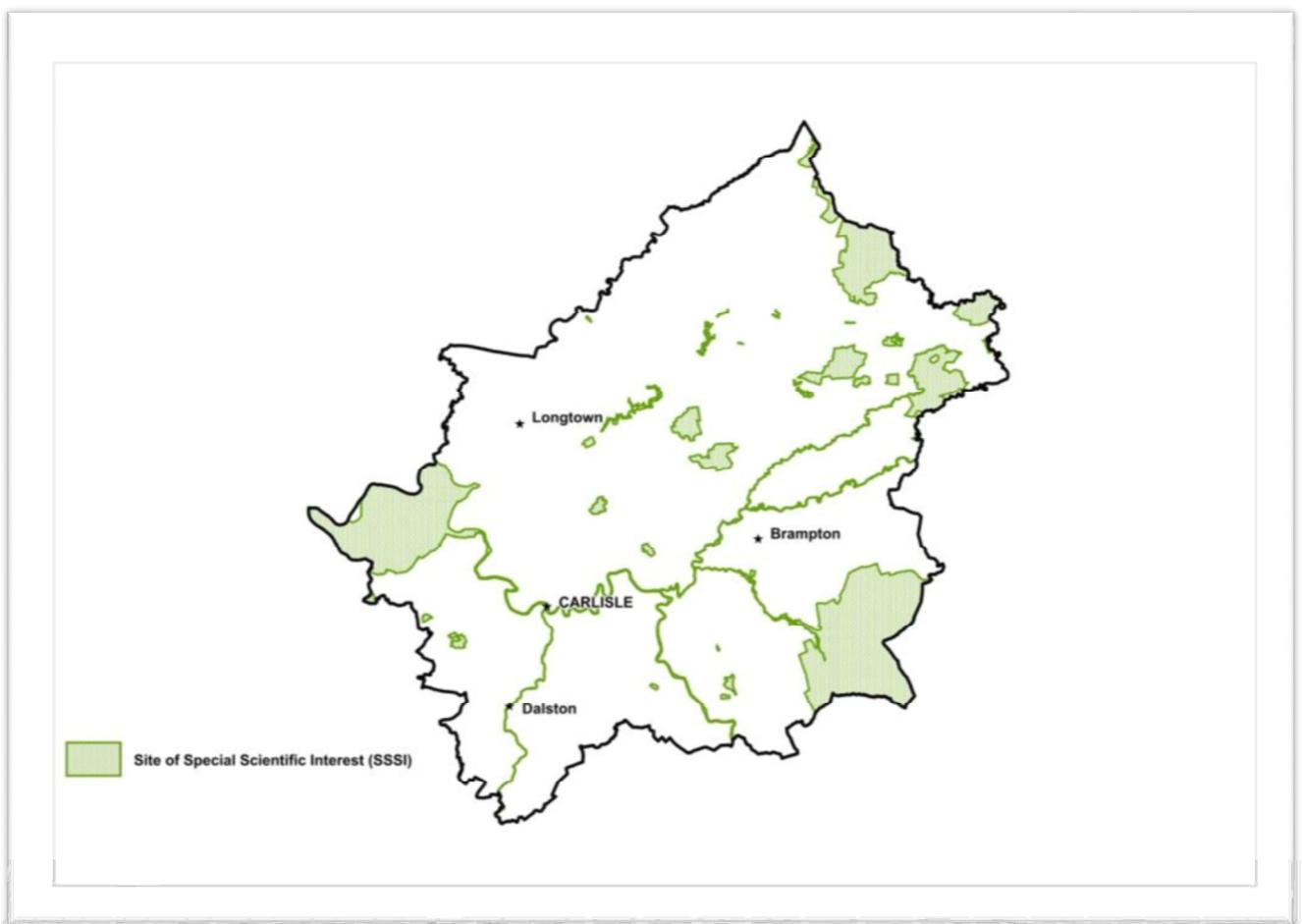
**4.2** International designations for the protection and enhancement of biodiversity are better known as the European Natura 2000 sites. These three designations; Special Areas for Conservation (SACs), Special Protection Areas (SPAs) and Ramsar Sites are areas considered to be of the upmost importance to wildlife and are afforded the highest levels of protection through planning.

**4.3** Special Areas of Conservation (SAC) are areas recognised for their importance to key species or as key habitats as defined by the European Union. The SAC designation provides a high and internationally recognised degree of protection from harmful development. SACs are the most abundant Natura 2000 site within the District. There are six distinct SACs in total, including the River Eden (and tributaries), North Pennine Moors, Solway Firth, Bolton Fell Moss, Walton Moss and Border Mires. In total SACs cover around 13,000Ha of land across the District, just over 10% of the District's total area.

**4.4** Special Protection Areas (SPA) are areas of land, water or sea which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within the European Union. There are two SPAs in Carlisle district, both of which are also Special Areas of Conservation, covering a total area of around 8,500Ha. These two areas are the Upper Solway Flats and Marshes, and the North Pennine Moors.

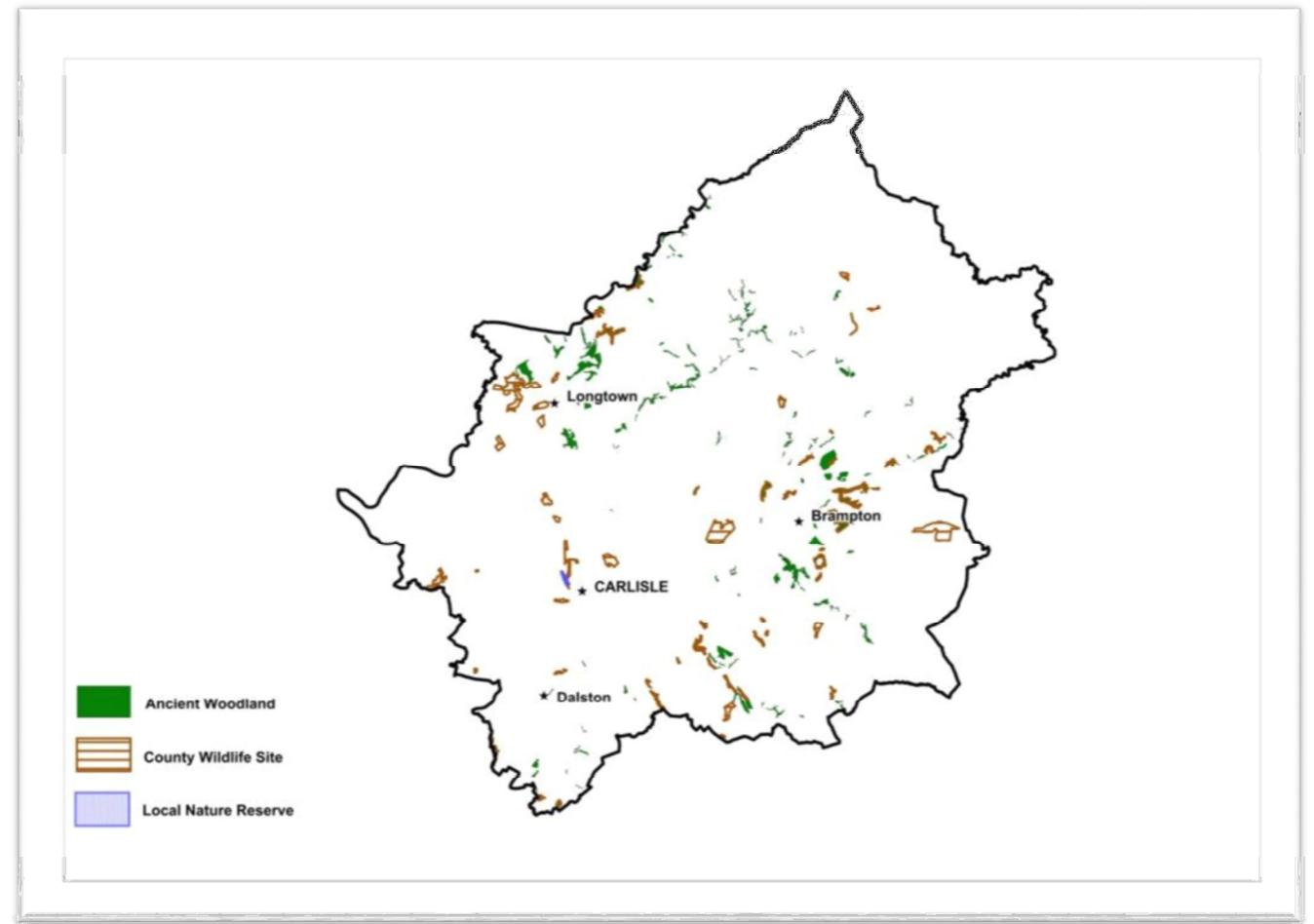
**4.5** Ramsar Sites are wetlands of international importance that were designated under the Ramsar Convention in 1971 in Ramsar, Iran. There are two Ramsar sites in the Carlisle District, both of which area also Special Areas of Conservation. They cover around 4,000Ha of land across the District and include the Upper Solway Flats and Marshes in the west and the Irthinghead Mires in the east.

### National Designations



**4.6** The District includes 34 Sites of Special Scientific Interest (SSSIs). These sites have been identified by Natural England. They represent sites important for nature conservation defined on the basis of national criteria and are identified as sites of national importance. They include a wide variety of sites of different types from large areas of salt marsh on the Solway, to Pennine moorland and small sites with some specific interest, such as geology.

## Local Designations



**4.7** Local biodiversity sites include County Wildlife Sites, Ancient Woodlands and Local Nature Reserves. Whilst Ancient Woodland and County Wildlife Sites can be found across the District, there is only one Local Nature Reserve, located at Kingmoor Sidings.

**4.8** Local Nature Reserves are sites designated by local authorities working with Natural England. A Local Nature Reserve (LNR) is for both people and wildlife. LNRs offer people special opportunities to study or learn about nature or simply to enjoy it. Ancient Woodland areas are that have had a continuous woodland cover since at least 1600 AD. Ancient woodlands are particularly important because they are exceptionally rich in wildlife, including many rare species and habitats; are an integral part of England's historic landscapes; and act as reservoirs from which wildlife can spread into new woodlands. County Wildlife Sites are designated by Cumbria County Council, in consultation with Cumbria Wildlife Trust to help preserve and protect locally important habitats and species.

## Summary

**4.9** The Local Plan seeks to protect the district's rich biodiversity where it can, through the recognition of the various designations of environmental protection listed above. In certain cases it may be necessary to secure contributions from developers to help enhance biodiversity provision either on or nearby to a development site, particularly if this is required through imposed mitigation requirements.

## Open Space - Sports Provision

### Existing Provision

**4.10** Carlisle currently enjoys open space provision within the urban area of approximately 3.6ha of land per 1,000 population. This is in accordance with national standards. An audit of open spaces by type was conducted in 2005. Whilst this is now dated it is still used and largely still accurate as provision has not altered significantly since 2005. It is recognised however that a full open space needs assessment needs to be conducted to help inform the evidence base and update the audit. It is not anticipated that a needs assessment will find Carlisle to have fallen below national open space standards, but it would help to identify localised deficiencies and gaps in provision. The IDP will be updated once information from an up to date open space audit and needs assessment has been conducted.

**4.11** The recent Carlisle Playing Pitch Strategy (2013) provides a strategic framework for the maintenance and improvement of existing playing pitches and ancillary facilities over the next 12 years (up to 2025).

**4.12** The strategy considers the following areas with a summary of key actions on each.

#### *Football - Key points to address*

- Over supply of senior pitches and shortfall of dedicated mini soccer pitches.
- Impact of The FA Youth Development Review - changing format of the game which will include the need for 5v5, 7v7 and 9v9 pitches.
- Priorities and options regarding how best to address the issue of drainage and flooding at certain sites.
- Poor quality of changing facilities particularly at some Council sites.
- Demand for additional 3G AGP provision in the City. Specifically in order to meet demand expressed for football training as well as potential future demand league fixtures.

#### *Cricket - Key points to address*

- Demand and evidence for appropriate training facilities for clubs in the City.
- Potential development of two non-turf wickets at Richard Rose Morton Academy in order to accommodate LMS cricket.
- Sites such as Lanercost CC being played to over capacity.
- A number of clubs with aspirations for ancillary facility developments.

#### *Rugby - Key points to address*

- Lack of spare carrying capacity at sites i.e. Creighton RFC is at capacity and Carlisle RFC is overplayed.
- Deteriorating quality of pitches at both club sites in the City; particularly with regard to flooding and drainage issues.

- Options to address club requirements for training facilities, especially for Carlisle RFC.

*Hockey* - Key points to address

- Continued sustainability of Carlisle Hockey Club as the only hockey club in the City.
- Likely requirement for refurbishment of the existing AGPs at Richard Rose Academy and William Howard Centre.
- The Sheepmount Stadium is the key facility currently for hockey use in Carlisle.

*Tennis* - Key points to address

- Importance of Bitts Park site as the main Council site providing tennis opportunities. LTA highlights site could benefit in terms of quality and capacity from greater ancillary facilities.
- Continued support to clubs expressing facility and/or improvement plans.

*Bowls* - Key points to address

- Continuation to provide appropriate bowling green provision; especially at council managed site such as Bitts Park and St James Park.

*Athletics*- Key points to address

- Options surrounding the football club demand and potential to accommodate a football pitch within the running track at the Sheepmount.
- Long term need to consider areas of improvement at Sheepmount particularly with a view to any increase in membership/participation levels.

*Golf*- Key points to address

- Continuation to provide appropriate access to golf provision across the City.

*MUGAs/Skate Parks/BMX/Basketball court* - Key points to address

- Continue to provide provision of good quality Other Facilities throughout Carlisle as and when opportunities allow.

*Schools Summary*- Key points to address

- Identify any potential opportunities for education sites to meet identified deficiencies of pitch provision including expressed latent demand.
- Explore proposed and any upcoming education projects such as the Harraby development; establishing how such opportunities can help to meet areas of shortfall in local provision.
- Establish priorities and options regarding how best to address the issue of drainage and flooding at certain sites.

## **Quality of current provision**

**4.13** Sites played at or beyond capacity may require remedial action to help reduce this, for example, overplay at six sites is attributed to 'adequate' or 'poor' pitch quality:

- Hartley Trust Playing Field
- Wetheral Playing Fields
- Park Side/ Hartley Avenue
- Richardson Street
- Spider Park
- Glebe Land
- Sheepmount Stadium is overplayed due to the large number of fixtures being played despite all pitches being of a good condition.

**4.14** Sites in Carlisle identified as being of a poor or adequate quality but with spare capacity (and the potential to accommodate further play if pitch quality improves) include:

- Cumwhinton Primary School
- Chances Park
- Keenan Park
- Richard Rose Morton Academy

## **When will new infrastructure likely to be delivered? What will the likely costs of new infrastructure be?**

**4.15** Through the preparation of the Local Plan the Council will seek to gather further evidence on the impact the Local Plan will have upon future open space provision.

## **Summary**

**4.16** There are no major concerns regarding the provision of open space within the District. Carlisle enjoys a large range of diverse and high quality public open spaces. Where local deficits do arise, these will likely need to be addressed through developer contributions – particularly if such contributions will be required as part of mitigation measures due to development having an adverse impact upon an existing open space.

## **Allotments and Communal Gardens**

**4.17** More information is currently being sought on the provision of allotments and communal gardens within the district. The Council will seek to explore the provision of these assets and their role in both recreation and in sustainable food production.

## **5. The Next Steps – Plan Delivery**

**5.1** This section of the report sets out how the Council proposes to deliver the necessary infrastructure required to support delivery of the Local Plan. It is based on the evidence gathered and identified in this report, taking into account what is considered to be critical infrastructure to the delivery of the Plan, and the likely available sources of funding to support infrastructure delivery at this point in time.

### **Identifying Infrastructure**

**5.2** Knowledge gained through the development of the Local Plan and its supporting evidence, coupled with ongoing discussions with infrastructure providers and other relevant authorities, have shown that education provision and capacity of the district's highways network are especially important issues that will need to be addressed in order to facilitate the delivery of the Local Plan. Key infrastructure schemes include:

- Delivery of highway improvements needed to address the cumulative and site specific effects of development
- Delivery of primary and secondary school spaces required to address the effects of new development

**5.3** It is also recognised that significant new infrastructure will be required to allow for the delivery of Carlisle South, the broad area of growth identified in the Local Plan for the latter part of the plan period. This will be looked at in more detail once master planning work for Carlisle South gets underway, and will likely be factored in to the master planning process.

**5.4** The delivery of infrastructure will rely on a range of potential funding streams and it is anticipated that both developer contributions like Section 106, Section 278 and a Community Infrastructure Levy (CIL) if introduced in the future, together with other external funding streams may play a crucial role.

### **Section 106 Agreements**

**5.5** Section 106 agreements have and will continue to have an important role in addressing the direct effects of development on services and infrastructure. Regulation 122 of the CIL Regulations 2010 (as amended) requires that S106 agreements be:

- 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.

**5.6** With a view to limiting the future use of planning obligations in favour of the introduction of CIL, the CIL Regulations (2010) prevent local planning authorities on or after April 2015 from applying planning obligations in the form of Section 106 planning

agreements to more than five separate applications within their area for the purposes of securing a single piece of infrastructure or types of infrastructure.

**5.7** In September 2013, Cumbria County Council adopted its Planning Obligations Policy. The policy document details the scope and range of planning obligations that Cumbria County Council as consultee, working with Cumbria's District and National Park authorities, may seek to secure through the planning process.

**5.8** Already in Carlisle S106 agreements have had an important role in funding the delivery of school places, highways and transport improvements and open spaces amongst others. They will continue to have this vital role and the City Council will continue to work with Cumbria County Council and others to ensure the continued, sustainable use of S106 agreements in the future.

### **Section 278 Agreements**

**5.9** Further to S106 Agreements, a S278 Agreement is made between a developer and a Highways Authority to enable works to be carried out on the public highway to facilitate development. The need to enter into a S278 Agreement usually arises as a result of a planning application. Examples of works delivered through S278 Agreements include construction of a new access junction, improvement of an existing junction, or safety related works. The use of S278 Agreements will continue to be an important delivery mechanism moving forward.

### **Community Infrastructure Levy**

**5.10** CIL operates as a square metre charge that would be applied to developments based on their viability, and how much money is needed to deliver the infrastructure required to support the growth of an area. Money raised by CIL would be kept in a single pot and spent on a range of specified infrastructure schemes. Parish and Town Councils would receive 15-25% of the CIL raised in their areas and up to 5% of the CIL raised can be used to fund its administration. Infrastructure to be funded by CIL cannot be also funded by S106 or S278 agreements.

**5.11** CIL can help deliver the infrastructure needed to support sustainable development and would be part of a toolkit of funding mechanisms. If implemented however, it is important to recognise that it would not in itself fund all of the required infrastructure, but instead would represent an additional source of funding which could be used either in isolation, or in combination, to aid delivery.

**5.12** Due to the limitations on the pooling of S106 agreements and the nature of current infrastructure needs, CIL is recognised as having a potentially key role to play in the delivery of strategic items of infrastructure which can meet the combined effects of several developments. In particular its relevance with regards to aiding the delivery of highways/transport and education infrastructure within the District is, based on the

emerging evidence, increasingly obvious. Consequently it is recognised that the City Council, working with partners as appropriate and relevant, will now need to actively explore the potential of CIL in supporting implementation of Carlisle's Local Plan. Ultimately the need for a timely resolution on whether or not to implement CIL is also recognised not least to ensure that CIL is in place in advance of the majority of Local Plan sites being brought forward.

## **Other Sources of Funding**

**5.13** Developer contributions may be curtailed by the viability of development locally. In this respect other sources of funding are likely to be necessary alongside developer contributions to support the delivery of required infrastructure. Such streams include (list is not exclusive):

- Local Growth Fund ;
- Cumbria Infrastructure Fund; and
- European Social and Investment Fund.

## **Local Growth Fund**

**5.14** In March 2014, Cumbria LEP approved Cumbria's Strategic Economic Plan (SEP). Cumbria's SEP outlines Cumbria's priorities for economic growth from 2014 – 2024 and forms the basis for Growth Deal funding from 2015/16 onwards. The SEP focuses on the following 4 priorities:

- advanced manufacturing growth;
- nuclear and energy excellence;
- a sustainable rural economy; and
- strategic connectivity of the M6 corridor.

**5.15** Through the SEP a number of key priorities schemes can be identified which may be eligible for bids to the Governments Local Growth Fund. Already in Carlisle LGF funds have been committed to deliver access improvements to Durranshill Employment Park, the delivery of Currock Bridge, new facilities at Carlisle College.

## **Cumbria Infrastructure Fund**

**5.16** The Cumbria Local Enterprise Partnership (LEP) was allocated money from the Government, through the national 'Growing Places Fund' to help support local economic growth. Renamed locally as the Cumbria Infrastructure Fund (CIF) the allocated money has been identified to help promote the delivery of infrastructure projects needed to unlock developments that can help to create jobs and homes in Cumbria.

**5.17** The CIF is not intended to be funding to bridge viability gaps but it can help by financing up front infrastructure and thereby financial risk associated with development

schemes. It is a revolving fund and it is expected that the amount of finance provided to help deliver the project is repaid to allow CIF to be replenished and recycled to help other schemes in Cumbria.

**5.18** The CIF is open to applications from across the whole of the County from the private, public sector and private/public sector partnerships, and thereby open to competitive bids. Already, for example, funding has been received via CIF for a flood defence scheme in Cummersdale.

### ***European Social and Investment Fund***

**5.19** It may be possible to secure European Social and Investment Fund (ESIF) to invest in activities to help Cumbria, including Carlisle District, to become more prosperous, and so a better place to live and work.

**5.20** EU regulations which govern these funds identify 10 thematic priority areas (these are identified in the draft document) for EU spend. Within these 10 areas, there are specific limits for financial allocation and there are also guidelines for the split between ERDF and ESF funding. In addition, the UK Government has indicated in detail the kinds of activities and projects it expects to see under each theme.

### **Monitoring and Review**

**5.21** The IDP provides a baseline position for the infrastructure requirements for Carlisle District. Whilst the information presented can provide only a snapshot of the current situation, the IDP is intended to be a living document. The Council will therefore continue to work with relevant partners and organisations to ensure that the data which supports the IDP is kept as up to date as possible. Throughout the plan period, the Council will continue to review and update the IDP in order to reflect progress on infrastructure delivery.

**5.22** Through this process, the IDP will aid the Council and relevant partners to prioritise spending on infrastructure and address funding gaps up to 2030 and beyond. Progress on infrastructure delivery will be monitored and reported on in the Annual Monitoring Report.

### **Next Steps**

**5.23** **The City Council will continue to engage and work with infrastructure providers to understand infrastructure capacity and how potential pressures which can be attributed to development can be appropriately mitigated.**

**5.24** **The City Council will now work with partners to explore the potential role of CIL in aiding delivery of important infrastructure including transport/highway improvements and expanding education provision to keep pace with growth. This**

**will enable the Council to reach and communicate a timely resolution on whether or not to introduce a levy.**