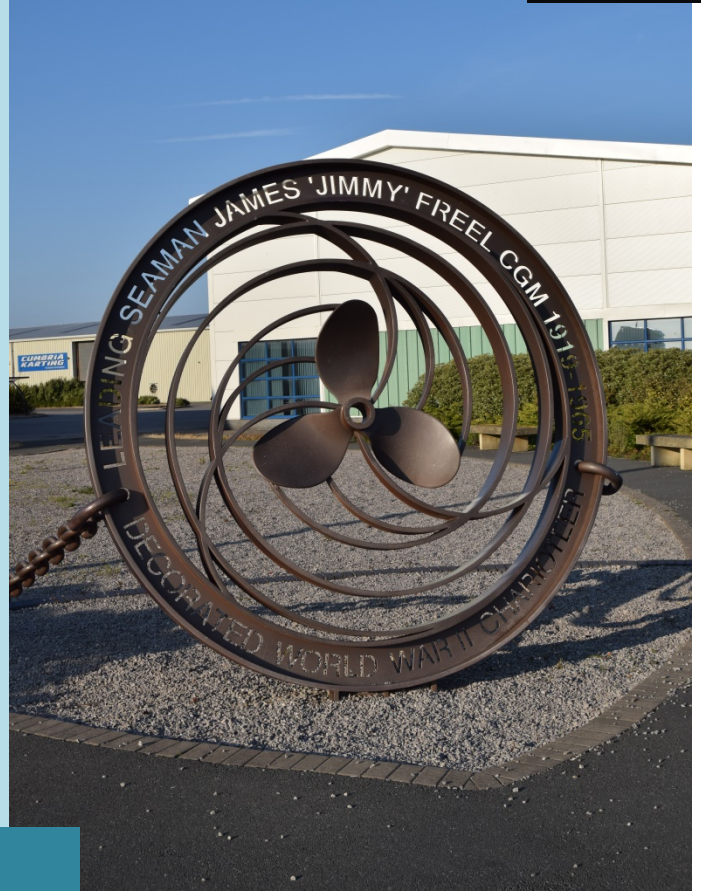
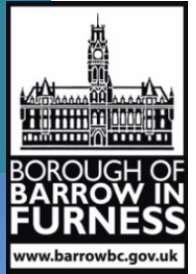
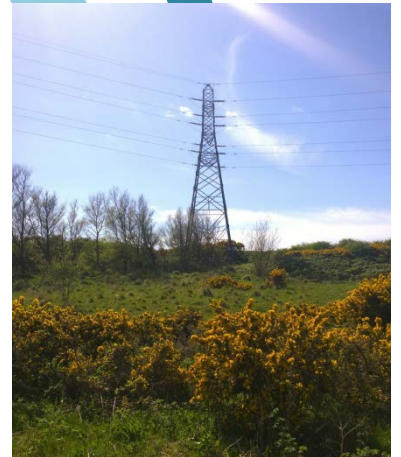


Infrastructure Delivery Plan



January 2018



Barrow Borough Local Plan

Working together to support sustainable development within the Borough of Barrow-in-Furness



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1.0 Introduction

- 1.1 The Infrastructure Delivery Plan (IDP) establishes what additional infrastructure and service needs are required to support the level of development proposed in the Barrow Borough Local Plan. This updates the May 2017 version of the IDP and has developed as a result of research and consultation with infrastructure providers. The IDP will help ensure that the additional infrastructure and services that are needed are identified and delivered in a timely, co-ordinated and sustainable way. It is a mechanism for improving delivery of facilities and services for the benefit of local communities and will provide a robust framework that will support bids for funding and assist decision making.
- 1.2 Infrastructure can take many forms – it can be defined in physical, green and community terms and is essential to support objectives of increased housing provision, economic growth and mitigating climate change, and of creating thriving and sustainable communities. In addition to housing and job opportunities, supporting infrastructure including green energy, utility services, transport, schools, open space, community, health and leisure services are all needed.

Policy Context

National Planning Policy Framework

- 1.3 The National Planning Practice Framework (NPPF) sets out a presumption in favour of sustainable development and the government is committed to ensuring that the planning system supports sustainable economic growth. This means that the planning system should encourage, not act as an impediment to, sustainable growth.

Planning Positively for Infrastructure

- 1.4 It is crucial that the Local Plan plans positively for the development and infrastructure required in the Borough to meet the objectives, principles and policies of the NPPF. One of the core planning principles set out in paragraph 17 of the NPPF is that planning should drive and support sustainable economic development, and this includes the delivery of infrastructure. Paragraph 21 requires that planning policies should recognise and seek to address potential barriers to investment, including any lack of infrastructure.
- 1.5 Specifically, Local Plans should include strategic policies for the provision of transport infrastructure, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management and the provision of minerals and energy. The Council should work with other authorities and infrastructure providers to assess the quality and capacity of this infrastructure and take account of the need for strategic infrastructure, including nationally significant infrastructure within their areas.

- 1.6 Paragraph 156 of the NPPF also requires strategic policies for the provision of health, security, community and cultural infrastructure and other local facilities. To deliver these facilities, paragraph 70 states that planning policies and decisions should plan positively for the provision of shared community facilities and other local services to enhance the sustainability of communities and residential environments.

Collaborative Working

- 1.7 For a Local Plan to be considered “sound” at examination, the Plan should be positively prepared and based on a strategy that seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so. The Plan must also be effective, which includes that it should be based on effective joint working on cross-boundary strategic priorities (NPPF, paragraph 182).
- 1.8 The NPPF emphasises the requirement to plan strategically across local boundaries. For example, paragraph 31 states that local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development and paragraph 180 states that local authorities should work collaboratively with utility and infrastructure providers. Paragraph 181 states that local planning authorities will be expected to demonstrate evidence of having effectively cooperated to plan for issues with cross boundary impacts, in order that the Local Plan will be able to provide the land and infrastructure necessary to support current projected future levels of development.

Delivery of Infrastructure

- 1.9 For a Local Plan to be considered “sound” at examination, the Plan must be effective, which includes that it should be deliverable over its period. Local planning authorities should ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. This requires that local planning authorities understand district-wide development costs at the time the Local Plan is drawn up. For this reason, infrastructure and development policies should be addressed concurrently (NPPF, paragraph 177).
- 1.10 To achieve sustainable development, paragraph 173 of the NPPF requires careful attention to viability and costs. To ensure viability, the costs of any requirements likely to be applied to development, including requirements for contributions towards the provision of infrastructure, should provide competitive returns to the land owner and developer to enable the development to be deliverable.

National Planning Policy Guidance

- 1.11 The National Planning Policy Guidance (NPPG) provides guidance on how infrastructure needs should be identified through a Local Plan. This states that, for at least the first five years of a plan, infrastructure needs should be identified with detail on how it will be funded and how this fits with the development in the Local Plan.

“The detail concerning planned infrastructure provision can be set out in a supporting document such as an infrastructure delivery programme that can be updated regularly. However the key infrastructure requirements on which delivery of the plan depends should be contained in the Local Plan itself” (Paragraph 018). The NPPG also advises that where delivery of key infrastructure is uncertain, alternative options and strategies should be outlined.

Cumbria Infrastructure Plan

- 1.12 The Cumbria Infrastructure Plan was commissioned by the Cumbria Local Enterprise Partnership (LEP) and is a strategic document that prioritises the infrastructure needed to facilitate economic growth and maximise opportunities from large scale projects in the County over the next fifteen years. The Plan supports the delivery of key infrastructure improvements to meet the priorities set out in the Cumbria Strategic Economic Plan.
- 1.13 The infrastructure priorities identified in the Plan represent new investment over and above existing Growth Fund priorities. The projects are those considered to have the greatest potential to address Cumbria’s infrastructure needs, contribute to the Cumbria LEP’s strategic objectives, the Government’s productivity agenda and Northern Powerhouse initiative. This Infrastructure Delivery Plan sets out the infrastructure priorities most relevant for Barrow.

Methodology

- 1.14 Engagement with infrastructure providers began at an early stage in the Plan preparation process. The Council consulted infrastructure providers as part of the Regulation 18 consultation that began in September 2012. The letter specific to infrastructure providers welcomed comments on infrastructure issues and the approach to infrastructure which the Local Plan should take. Several responses from providers were received by the Council.
- 1.15 Infrastructure and service providers were consulted as part of the Issues and Options consultation in September / October 2014. The Council followed this up with a further consultation directed specifically at infrastructure and service providers in November 2014. This generated several meetings and written responses from providers.
- 1.16 The Council consulted infrastructure and service providers on the Developing Infrastructure Delivery Plan as part of the Local Plan Preferred Options consultation in July / August 2015. Follow-up correspondence and meetings took place after this consultation in cases where further information was required from providers. In particular, highways modelling and the subsequent Barrow Transport Improvement Study was produced during this period.
- 1.17 Finally, the Council consulted infrastructure and service providers on the revised Developing Infrastructure Delivery Plan in September / October 2016. Again, follow-

up correspondence and meetings took place after this consultation where further information or updates was required from providers.

- 1.18 The Council has engaged with infrastructure and service providers throughout the Local Plan preparation process. A record of responses received and meetings held can be found in Appendix 1. All responses and records of meetings have been taken into account in the development of this document.

Delivery

- 1.19 The IDP shows how the infrastructure and services required to deliver the sites will be funded as far as possible. There are a number of key potential sources of funding, and these are outlined below:

Sub-Regional Funding

Local Growth Fund

- 1.20 Growth Deals provide funds to Local Enterprise Partnerships for projects that benefit the local area and economy. Significant funding for key projects in the County is taking place through the Cumbria Growth Deal, which is supporting growth by improving key infrastructure and bringing sites forward for housing and commercial development. The LEP's Strategic Economic Plan identifies strategic economic priorities and drivers for Cumbria and is designed to attract growth funding from 2014-2024 for specific projects which will deliver maximum returns to UK plc. The Plan has been successful in securing funding through the Growth Deal for a new Advanced Technology Training Centre at Furness College and the establishment of a Local Enterprise Zone at Waterfront Business Park, including necessary groundworks.

EU Structural and Investment Funds

- 1.21 The European Structural and Investment Funds (ESIF) are the EU's main funding programmes for supporting growth and jobs across the EU. The Cumbria Local Enterprise Partnership has been granted £87.2m of European Funding for the period 2014-2020 in the County.
- 1.22 The LEP will use the funding to support its Strategic Economic Plan in a variety of areas, including research and development, supporting business, job creation, skills development, low carbon initiatives, and rural growth. The programme provides opportunities for organisations to apply for funding, in areas relating to workforce skills, improvements to tourist accommodation and attractions, the establishment of a Low Carbon Hub and a commercialising innovation programme.

Cumbria Infrastructure Fund

- 1.23 The Cumbria Infrastructure Fund is part of the national Growing Places initiative. It offers funding to support infrastructure projects which unlock development, creating jobs and homes in Cumbria. It operates as a challenge fund, scoring applications against given criteria and selecting the best available projects for the County.

Government Funding

- 1.24 The Cumbria Infrastructure Plan states that there is a need for government agencies including national and regional bodies, central government and asset owners such as Network Rail and Highways England to play an active part in realising investment. Additional sources of funding are set out below.

Challenge Funding

- 1.25 In recent years, a number of competitive funding programmes have been used to enhance sustainable travel including the Cycle City Ambition Programme (available to 8 cities up until 2017/18) and the Local Sustainable Transport Fund. Cumbria County Council and Barrow Borough Council are now able to take advantage of a number of competitive funding rounds to fund emerging transport schemes, notably the Cycling and Walking Investment Strategy and Access Fund, as detailed below.

Cycling and Walking Investment Strategy

- 1.26 The Cycling and Walking Investment Strategy (April 2017) sets out a long-term vision for walking and cycling in England to 2040. The vision for this strategy is for walking and cycling to become the norm for short journeys or as part of longer journeys, and will be progressed through a series of 5-year strategies and funding allocations. The strategy seeks to ensure that streets and public places support walking and cycling, and that children and young adults are encouraged to walk to school and take advantage of cycle training programmes such as Bikeability.

Access Fund

- 1.27 2016/17 represented a transition year for local sustainable travel as a result of the ending of the Local Sustainable Transport Fund and the switch to a new £580 million Department for Travel Access Fund. Of this, £20 million was allocated through competitive funding to local councils between April 2016 and March 2017 to support sustainable and accessible travel projects as part of the Sustainable Travel Transition Year Revenue Competition.
- 1.28 The Access Fund supports further sustainable and accessible travel projects from 2017/18 through 2019/20 using the remaining £60m. The funding “will favour schemes that focus on cycling and walking” as well and support authorities who wish to improve access to jobs, skills, training and education by sustainable measures.

Coastal Communities Funding (CCF)

- 1.29 Since 2012, the Government has invested in over £120 million in more than 200 projects in seaside areas through the Coastal Communities Fund (CCF). The programme was extended in May 2016 to provide a further £90 million funding over the next 4 years with the target of increasing employment, promoting sustainable economic growth and revitalising coastal areas. Grants of up to £4 million each are available to individual businesses as well as local councils. As an example, Furness Enterprise was awarded a grant of £900,000 in August 2012 to support local companies and businesses, encourage new start-ups and deliver training to people not in work in order to develop new skills.

Non-Government Funding

Community Benefit Fund

- 1.30 The Community Benefit Fund is used to support community and environmental projects in coastal areas which host major wind energy projects. DONG Energy committed to constructing an extension to the Walney offshore wind farm in October 2015 and have subsequently committed to a Fund worth approximately £600,000 per year for each of the 25 years that the Walney Extension will be operating. £100,000 of the available fund per year will be ring-fenced for a skills fund, however the remaining £500,000 will be available to communities within funding areas along the coast, including Barrow. The fund is managed by Grantscape and applications can be made for individual grants of between £500 and £75,000. For each year that the fund is open, two application rounds are available.

Section 106 Agreements

- 1.31 Planning obligations under Section 106 of the Town and Country Planning Act 1990 (as amended) are a mechanism which make a development proposal acceptable in planning terms that would not be otherwise. They are focused on site specific mitigation of the impact of development. Planning obligations have an important role in ensuring the availability of sufficient infrastructure to meet requirements.
- 1.32 The legal tests for the use of Section 106 agreements are set out in regulation 122 and 123 of the Community Infrastructure Levy Regulations 2010 as amended. The tests are:
- Necessary to make the development acceptable in planning terms;
 - Directly related to the development; and
 - Fairly and reasonably related in scale and kind to the development.
- 1.33 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. In doing so it promotes a consistent and transparent approach so that communities and the

development industry are able to see and understand how development in their area is making a fair and positive contribution to sustainable communities.

Section 278 Agreements

- 1.34 Section 278 agreements are made between a developer and a Highways Authority to enable works to facilitate development to be carried out on the public highway. Examples of works delivered through Section 278 agreements include construction of a new access junction, improvement of an existing junction, or safety related works.

Community Infrastructure Levy

- 1.35 The Council will consider whether it will develop a Community Infrastructure Levy (CIL) after the Local Plan is adopted in 2018. The CIL is the Government's response to the need for development to contribute to the provision of infrastructure either directly or indirectly related to development; and the view that the planning obligations (Section 106) provisions provided only a partial and variable response to capturing funding contributions for infrastructure.
- 1.36 Under the CIL, local authorities are empowered (but not required) to set a charge for most developments, through a formula related to the scale and type of the scheme. The monies must be spent on local and sub-regional infrastructure which supports the development of the area. CIL differs from previous Section 106 regimes in that (1) it will capture a much wider range of development thereby sharing the burden whereas Section 106 had tended to focus mainly on larger schemes, and (2) it breaks the direct link between the obligation and the development, so that infrastructure spending can be managed at a strategic level. Planning Obligations through S106 agreements will still continue alongside CIL, but they will only be available for a restricted number of purposes.
- 1.37 Whilst CIL would be expected to provide significant additional monies for infrastructure, it would not replace existing mainstream funding. Core public funding will continue to bear the main burden, and local authorities will need to utilise CIL alongside other funding streams to deliver infrastructure plans locally.

Tax Increment Financing (TIF)

- 1.38 In the 2010 Local Growth: Realising Every Place's Potential White Paper, the Government confirmed its commitment to introducing tax increment financing (TIF) schemes. These permit local authorities to borrow money for infrastructure and other capital projects based upon expected tax receipts that result from the infrastructure. If Cumbria County Council is to pursue TIF as a potential funding source for schemes within this study, a number of key considerations will need to be taken into account. Most significantly, there needs to be a degree of certainty that development will occur once borrowing has taken place in order to ensure that the new infrastructure has discernible benefit. If no development takes place, there will be no increase in tax revenues and the Council will end up in debt.

Private Business/Employers

- 1.39 Beyond Section 106 and 278 contributions, developers and private investors can also contribute to the delivery of the strategy through schemes that enhance the individual development as well as providing an upgrade to the general setting of Barrow.

Charities and Voluntary Groups

- 1.40 Within the promotion, funding and delivery of schemes, both the Borough and County Council could take advantage of the interest and expertise that charities and voluntary groups have in relation to transport. Sustrans, a charity concerned with promoting everyday travel by foot, bike and public transport, could help to promote a number of schemes within the Parking and Movement Study including improvements to town centre walking routes and the development of contra flow cycle lanes as outlined in scheme 39. In 2014/15, Sustrans delivered £41.6m of projects and have worked on the design and construction of cycling facilities in a number of locations including Bristol, Edinburgh and Newcastle.

Local Transport Funding

Highways Maintenance Funding Allocations

- 1.41 The National Infrastructure Plan 2014 states that the government is to provide £5.8 billion to local authorities in England until 2020/21. Of this figure, £4.7bn will be allocated according to a needs-based formula. The funding covers major resurfacing as well as maintenance or replacement of bridges, footways, cycleways and other assets; it is not ring-fenced and can be spent according to local needs and priorities. The funding is paid out as supported borrowing as part of the local transport funding process. The remaining £1.1 billion will be allocated between large one-off maintenance and renewal projects (£575 million) and as an incentive for good asset management and efficiencies (£580 million). These funds will be allocated through a competitive process.

Integrated Transport Block Capital Grant

- 1.42 The Integrated Transport Block (ITB) provides funding support for capital improvement schemes costing less than £5 million. As in the case of the Highways Maintenance funding, the funding is not ring fenced and combines both capital grants and supported borrowing. The funding allocated to each local authority is calculated according to a number of elements including road safety, public transport provisions, congestion, pollution and population size.

Local Pinch Point Fund

- 1.43 This has been set up to remove bottlenecks on the local highway network which are impeding growth by restricting the movement of goods and people. The fund is aimed at those schemes that can be delivered quickly with immediate impact.

Flood and Coastal Erosion Grant in Aid (FCERM GiA)

- 1.44 New powers available to Cumbria County Council as Lead Local Flood Authority (LLFA) under the Flood & Water Management Act 2010 (FWMA 2010) enable the LLFA to bid for funding to support the development of schemes to reduce local flood risk. These powers complement those already available to Barrow Borough Council both as a Flood Risk Management Authority (RMA) and as a Coastal Protection Authority. Defra funding for FCERM GiA schemes is managed by the North West Regional Flood & Coastal Committee which also allocates spending of funds raised for flood defence via a local levy on the Council Tax.
- 1.45 Barrow Borough Council is identified as a RMA by the FWMA 2010 and as such has significant responsibilities to work in partnership with other RMAs, share information on flood risk, promote sustainable development and flood defence schemes.

Heritage

- 1.46 The historic environment can contribute to and benefit from the delivery of infrastructure. For example, the proposed redevelopment of the listed former Alfred Barrow school to an NHS health centre will conserve and enhance a disused grade II listed building, and the post-war extensions to this building have already been demolished (see section 15 for more information). Also, the historic environment will be enhanced if the proposed public realm improvement schemes are delivered (see section 23 for more information).
- 1.47 Successful initiatives have already taken place such as the Central Barrow Townscape Heritage Initiative which has delivered significant improvement to the historic environment at one of the key gateways to Barrow town centre and almost £2.16m of funding. The Council has also been allocated £3.4m from the Clusters of Empty Homes Fund to help bring empty properties back into use on Barrow Island with work taking place on an environmental improvement scheme focussing on the listed tenement flats and recognising the importance of their setting.
- 1.48 More information on where heritage can contribute to or benefit from the delivery of infrastructure schemes is set out in the relevant sections of this document. In addition, the Council's Heritage Impact Assessments of the proposed Local Plan housing sites highlight opportunities to enhance or better reveal the significance of heritage assets. In particular, sites SHL001 Marina Village, Barrow; REC02 Duke Street, Askam; and OPP5 Former Kwik Save Premises, Barrow (formerly identified as a housing site) provide opportunities to enhance or better reveal the significance of heritage assets.

Physical Infrastructure

2.0 Highways

- 2.1 The delivery of the Local Plan depends on the identification of development sites that can be accessed safely whilst mitigating or avoiding adverse impacts on the highway network. It also depends on longer distance connections to West Cumbria and the rest of the UK by road, however journey time reliability to West Cumbria via the A595, and to the M6 motorway via the A590/A590(T), is poor and there is a need for investment on both routes.
- 2.2 Highways England is responsible for operating, maintaining and improving the A590(T). The local highway network (i.e. most non-trunk roads) is the responsibility of Cumbria County Council, which is the Highway and Transport Authority for the Borough. Some roads in the Borough are unadopted, which means individuals, often adjacent property owners, are responsible for the cost of maintaining them.

Evidence Base

- 2.3 The key studies and strategies that have informed this section are set out below:
- **Cumbria Transport Plan Strategy 2011-2026 (LTP3), Cumbria County Council**
This is a statutory document that sets out how roads, footways, cycleways, rights of way and bus and train services in Cumbria will be improved and managed. The new Plan contains a strategy for the next 15 years, 2011 to 2026, the policies to implement the strategy and a rolling programme of implementation plans showing where funding will be directed.
 - **Delivering Cumbria's Transport Needs: Implementation Plan (LTP3), Cumbria County Council**
This sets out where the authority's capital and revenue funding, council tax, developer contributions and other external funding will be directed to deliver the priorities of the LTP3 Transport Strategy, the Council Plan and the 6 Council Area Plans between April 2012 and March 2015. Details of the delivery programme for 2012/13 are incorporated.
 - **North Pennines Route-Based Strategy Evidence Report, Highways England, March 2017**
This identifies and describes the key operational, maintenance and capacity challenges for the route, which includes the A590.

- **North Pennines Route-Based Strategy, Highways England, April 2015**
The route strategy outlines the priorities for Highways England for the Road Period and beyond. The current road period runs from 2015/16 to 2019/20.
- **Cumbria Infrastructure Plan, AECOM, May 2016**
The Cumbria Infrastructure Plan is a strategic document commissioned by the Cumbria LEP that prioritises the infrastructure needed to facilitate economic growth and maximise opportunities from large scale projects over the next fifteen years. The Infrastructure Plan supports the delivery of key infrastructure improvements to meet the priorities set out in the Cumbria Strategic Economic Plan.
- **West of M6 Strategic Connectivity Study, WSP | Parsons Brinckerhoff, August 2016**
This study has been undertaken on behalf of the Cumbria Local Enterprise Partnership, Cumbria County Council and Highways England. The purpose of the study is to examine the issues and constraints associated with the strategic road connectivity of the Port of Workington, and the route capability, resilience and reliability of the A595, A590 and A66 to the west of the M6.
- **Barrow Transport Modelling Report, Cumbria County Council, August 2016**
The Barrow Transport Modelling Report summarises the transport modelling study undertaken to assess the cumulative impact of the Local Plan proposals. The results of this study have informed the Barrow Transport Improvement Study which identifies potential transport improvements in Barrow.
- **Barrow Transport Improvement Study, WSP | Parsons Brinckerhoff, September 2016**
This identifies the impacts of growth allocated in the Local Plan before identifying a range of sustainable and transport improvements, including potential highways improvements at roads and junctions agreed with Cumbria County Council and Barrow Borough Council.
- **Barrow Town Centre Parking and Movement Study: Transport Improvement Plan, Mott MacDonald, July 2016**
This identifies how all traffic moves around the town centre and develops a holistic and coordinated series of transport and parking improvements that will bring benefits to all town centre user groups.

General Highway Issues

- 2.4 Both the A590 and A595 are of strategic importance in delivering access to the M6 and West Cumbria, however there is a need for significant improvements and continued enhancement on both routes. Journey time reliability is a major issue on the A590 between Barrow and the M6 Motorway and also on the A595 and A5092 towards West Cumbria. This acts as a brake on the local economy, hampering access to markets, the movement of freight and the ability of supply chains and

clusters to become embedded and grow. Growth in Barrow and Ulverston is expected to increase pressure on the road network.

A590

- 2.5 The A590 provides Barrow and Ulverston with the only direct link to the nationally significant M6 Motorway at Junction 36. The strategic route is the A590(T) which starts at the Park Road traffic island north of Barrow and supports the movement of freight. The A590 has a key economic function in connecting the area to the M6 and the wider strategic road network. Significant growth is taking place on the Furness Peninsula, particularly in the advanced manufacturing sector. Improvements to the route and its infrastructure are integral to the successful delivery of advanced manufacturing growth. The route is also a major access route for tourists into the southern parts of the Lake District National Park as well as the South Cumbrian coast.
- 2.6 Regionally the A590 is a key east-west route across South Cumbria, providing the main access for residents to the wider trunk road network. It is the main commuter route and is seen as key to local regeneration.
- 2.7 As a local route, the A590 helps people with their day-to-day activities connecting them with schools, shops, healthcare and leisure facilities as well as other services. It is important to the farming community for the movement of agricultural vehicles.

Route Issues

- 2.8 Maintaining access and reliability on the A590 is essential to the economic growth potential of the Furness area. Improvements to the existing highway infrastructure are required to support the successful delivery of advanced manufacturing and energy sector growth, including nuclear developments on the west coast of Cumbria and the marine and bio-pharma industry in Furness. The key issues with the route are outlined below:
- The A590 between Ulverston and Barrow is in the top third of SRN roads for delays and is one of the most unreliable routes in Cumbria.
 - Of the key route sections examined across Cumbria in the West of M6 Strategic Connectivity Study, the highest average traffic flows by a notable margin were along the A590 between the M6 and Barrow.
 - Low peak hour speeds exist on the A590 between Newby Bridge and Barrow, as most of this stretch is single carriageway.
 - Single carriageway sections of the route can lead to congestion, especially near to Ulverston and Lindal.
 - There are sections of the A590 that have high collision rates. A number of factors contribute to these issues including a large proportion of HGVs and agricultural vehicles making short local journeys, with numerous bends, hills and side road junctions present.

- Flooding is a major contributor to road closures and overall resilience of the route. Of the key route sections examined within the Cumbria Study Area in the West of M6 Strategic Connectivity Study, the A590 between the M6 and Barrow suffers from the worst flood risk and covers large portions of the route, causing severe disruption and severing the main transport link for rural communities.
- The rural nature of the A590 and the large sections of single carriageways means that the number of local alternatives are limited should the route become unavailable due to an incident, road works or a severe weather event.
- For the A590 formal diversion routes are mainly unsuitable for HGVs or result in strategic traffic passing through residential areas of Kendal and Windermere.
- A significant cause of traffic delays on the A590 is where the route passes through Ulverston, where the strategic road network also functions as the local road network.

2.9 The DfT's 'Action for Roads' states that major A-roads need as much attention as the motorways, and need to present motorists with a similar quality of journey. As part of the government's investment programme, the DfT will set clear expectations for what expressways should be able to deliver. They will be:

- **Expected to meet a minimum standard** – a dual carriageway that is safe, well-built and resilient to delay.
- **Subject to much clearer expectations over performance** – so Highways England is held to account for how well traffic is moving.

2.10 The Cumbria Transport Plan Strategy 2011-2026 (LTP3) states that the County Council will work with the Highways Agency (now Highways England) with the aim of securing the required improvements to the A590 to enable new development to come forward in Barrow and South Lakeland.

A595

2.11 The A595 forms the key strategic link along the coast, and north and south between Carlisle and Barrow. It is the key link between Barrow and West Cumbria, and in particular is the only direct route to Sellafield from Barrow. There are significant issues with the route, including between Sellafield and Furness. Key issues with the A595 are outlined below:

- The A595 is single carriageway and, particularly south of Sellafield, is very poorly aligned in places. For example, parts of the route take the form of narrow rural lanes and part of the route at Grizebeck can only accommodate traffic one way due to the narrowness of the route.
- The route is considered to be dangerous in parts, and campaigners have been lobbying for investment on the route for many years. There have even been calls for a new bridge over the Duddon estuary.

- As well as connections to the region, there are sub-regional issues around poor links to Millom and nearby towns.
- The A595 is also a key route for evacuations in case of an incident at Sellafield. For significant stretches of the route there are no alternatives.
- There is a particular need to make the route safer whilst improving journey time reliability.

2.12 The Cumbria Transport Plan Strategy 2011-2026 (LTP3) states that the County Council will work with the Department for Transport and nuclear industry development bodies to secure journey time reliability improvements to the A595.

Priorities for Investment

2.13 The government has allocated £317m to Highways England to deliver its pinch point programme, which forms part of the Government's growth initiative. The pinch point programme is being designed by Highways England to deliver smaller scale improvements to the strategic road network that will help to stimulate growth in the local economy and relieve congestion and / or improve safety.

2.14 Under the pinch point initiative Highways England has provided Variable Message Signs at both ends of the A590, close to M6 Junction 36 and on the outskirts of Barrow, which provide increased driver awareness and information of diversions and adverse weather conditions. The scheme aims to help reduce daily congestion, reduce journey times, boost the economy and improve safety. However, the pinch point schemes only make a start in addressing the congestion and safety concerns on the route.

Cumbria Infrastructure Plan

2.15 Infrastructure schemes have been identified as priorities for investment by the Cumbria LEP in the Cumbria Infrastructure Plan. These represent new investment over and above existing Growth Fund priorities. The projects are those that have the most potential to address Cumbria's infrastructure needs, support the imminent demands that will arise from major private sector investment projects and maximise Cumbria's contribution to the northern economy. The following highway schemes are most relevant to Barrow:

Table 1: Cumbria Infrastructure Plan – Medium / Long Term Priorities 5-15 years
(Source: Cumbria Infrastructure Plan)

Proposed Scheme	Description
A590 Road Enhancements	Package of schemes which seek to enhance capacity and reliability on the A590. The package includes junction and capacity improvements and measures to improve safety. Improvements would provide improved links across the

Proposed Scheme	Description
	south of the County and with the M6. This would support access to markets, the development of supply chains and travel to work areas.
Ulverston Bypass	A bypass of Ulverston to accommodate future growth along the A590 Corridor. The scheme would help to unlock employment and housing sites and support the future investment plans of key businesses. This improvement would therefore support the continued growth of Ulverston and the wider Furness area.

Delivery

- 2.16 The Cumbria Infrastructure Plan states that the priorities need to deliver against Cumbria LEP and Government objectives to maximise positive impacts for the County. Given the competition and relative scarcity of finance there is a need to demonstrate that projects respond to real and evidenced demand within individual project proposals and business cases. Continued engagement between Highway's England, the County Council and the Borough Councils along with the Cumbria LEP will be important in delivering the Cumbria Infrastructure Plan. The plan states that a number of funding sources and delivery mechanisms will be important in taking forward the infrastructure priorities outlined in the document. These include:
- Government agencies (e.g. central government, Highways England)
 - Local Growth Fund
 - Local Infrastructure Fund
 - Growing Places Fund
 - European Structural Investment Funds
 - Developer Contributions
 - Third-party grant funding opportunities such as the Coastal Communities' Fund.
- 2.17 Details of these and further funding opportunities are set out in section 1 of this document.

West of M6 Strategic Connectivity Study

- 2.18 The findings of the West of M6 Strategic Connectivity Study show that there are a number of schemes that could be delivered to improve connectivity from the M6 to West Cumbria and to provide economic, environmental and resilience benefit. The list of prioritised schemes for the A590 and A595 that are most relevant for Barrow are set out in Table 2 and maps of the schemes provided on pages 22 to 24. Note that the delivery timescales are based on the potential delivery of each project if funding were made available to commence the design.

Table 2: Prioritised Schemes and Deliverability
(Source: West of M6 Strategic Connectivity Study, August 2016)

Package	Scheme	Journey Time Range Benefits £M if available (2010 prices)	Scheme Cost Range £M	Delivery Timescales: Short <3 years; Medium 3-7 years; Long >7 years
Section 6: Gosforth to Dalton / Greenodd				
19	Grizebeck Bypass	10-50M	5-10M	3-7 years
Section 7: Barrow to Greenodd				
20	A590 Geotechnical issue at Greenodd			<3 years
21	A590 Junction Improvements in Ulverston		2.5-5.0M	<3 years
22	A590 Junction Improvements in Swarthmoor		5-10M	<3 years
23	Lindal-in-Furness Resilience			<3 years
24 ¹	A590 / A595 & A590 / Ulverston Road Junction Improvement			
25	Offline scheme between Ulverston and Dalton	10-50M	10-50M	>7 years
26	Ulverston Bypass connecting in with A590 near Swarthmoor (Southern bypass)	>100M	50-100M	>7 years
27	A590 Dualling – Greenodd to Ulverston	10-50M	10-50M	3-7 years
Section 8: Greenodd to M6 Junction 36				
28	1) Dualling – Greenodd to Haverthwaite & 2) 2+1 – Haverthwaite to Newby Bridge & 3) 2+1 – Newby Bridge to Ayside	50-100M	100M+	>7 years

¹ Package 24 has not been progressed any further in the Study as detailed assessment work revealed original identified problems did not warrant any further development solutions at these locations. This could potentially change, however, pending the results of a further assessment that is expected to take place in accord with advice from Mouchel on behalf of Highways England. See paragraphs 2.47 to 2.49 of this IDP for further information.

Package	Scheme	Journey Time Range Benefits £M if available (2010 prices)	Scheme Cost Range £M	Delivery Timescales: Short <3 years; Medium 3-7 years; Long >7 years
29	A590 Dualling – Town End to Levens	5-10M	10-50M	3-7 year
30	Newby Bridge Flooding Alleviation			<3 years

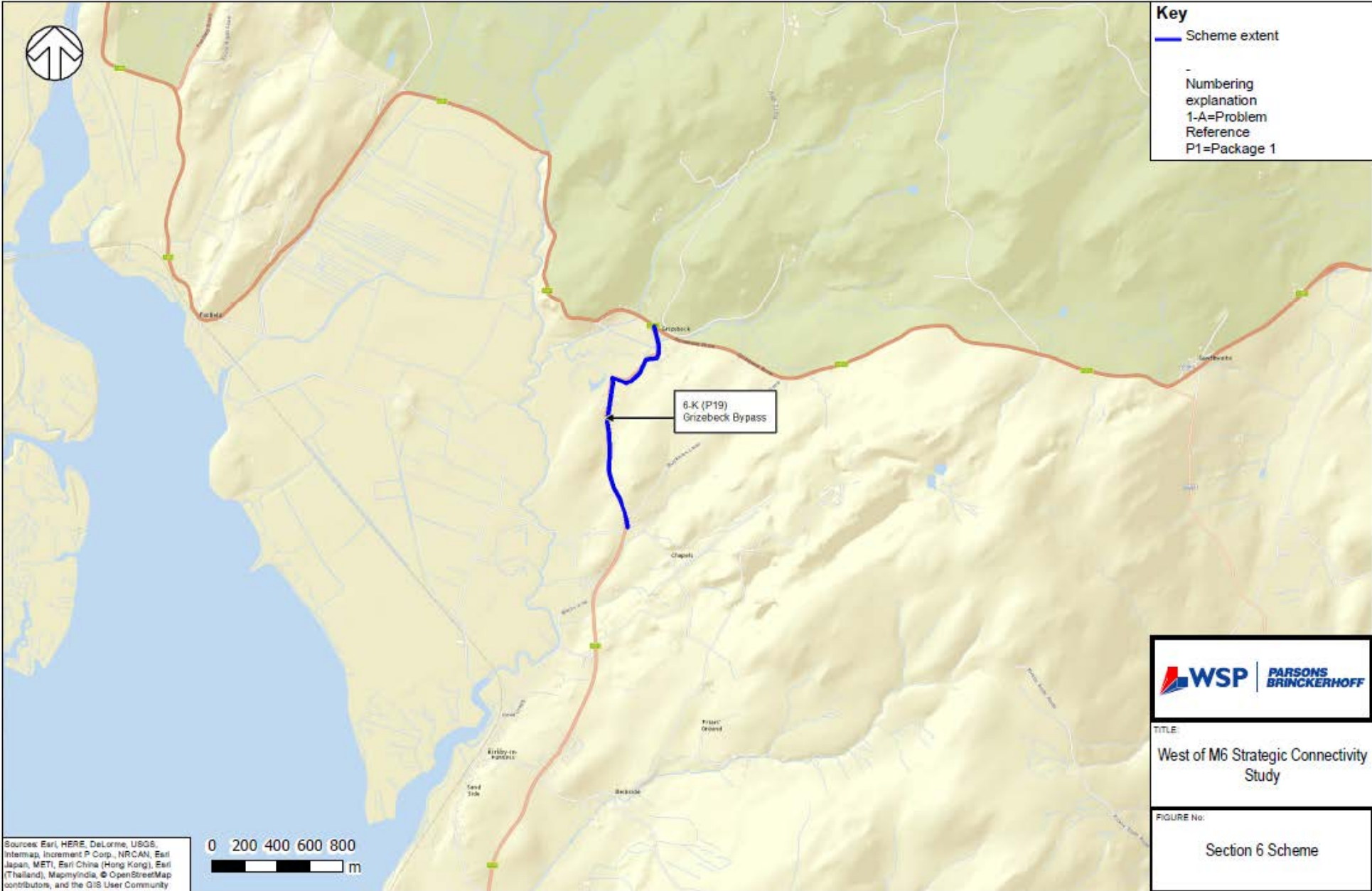
Delivery

- 2.19 Table 4.4 in the study expands on the above table by presenting the strategic fit of each scheme. This can be used to interpret how each scheme meets the individual objectives of the study. Economic benefits associated with journey time savings are also presented along with the associated costs. The benefits and costs are presented in broad range categories and have only been subject to feasibility design at this stage. Subsequently, there are no benefit cost ratios presented in the study. However, it can be seen that some schemes do not provide much journey time benefit in relation to the cost, and therefore it is unlikely that these schemes would progress in the future based on the assumptions used in this study.
- 2.20 In order to prioritise the schemes for delivery following the conclusion of the West of M6 Strategic Connectivity Study, it will be important to consider the following:
- The impact of the scheme in relieving the existing problem
 - Availability of funding.
- 2.21 The study states that in general the public sector is best placed to take the lead. It adds that the private sector is often reluctant to act in a cohesive and composite manner (as an effective single entity) and often look to the public sector to act in their collective interest. Therefore, Cumbria's approach in identifying what infrastructure is required to support economic growth should extend to leading the development of a funding framework to pay for the infrastructure.
- 2.22 The split responsibilities in the public sector for transport infrastructure (Transport for the North, Highways England, Network Rail, Train Operating Companies and Local Highway Authorities) results in a need for a single party in the public sector taking the lead to guide public sector investment in transport infrastructure.
- 2.23 The private sector's role in the development of a funding framework will be dependent on their willingness to engage both directly as interested parties (land & property owners, transport operators) and more generally through the LEP. The

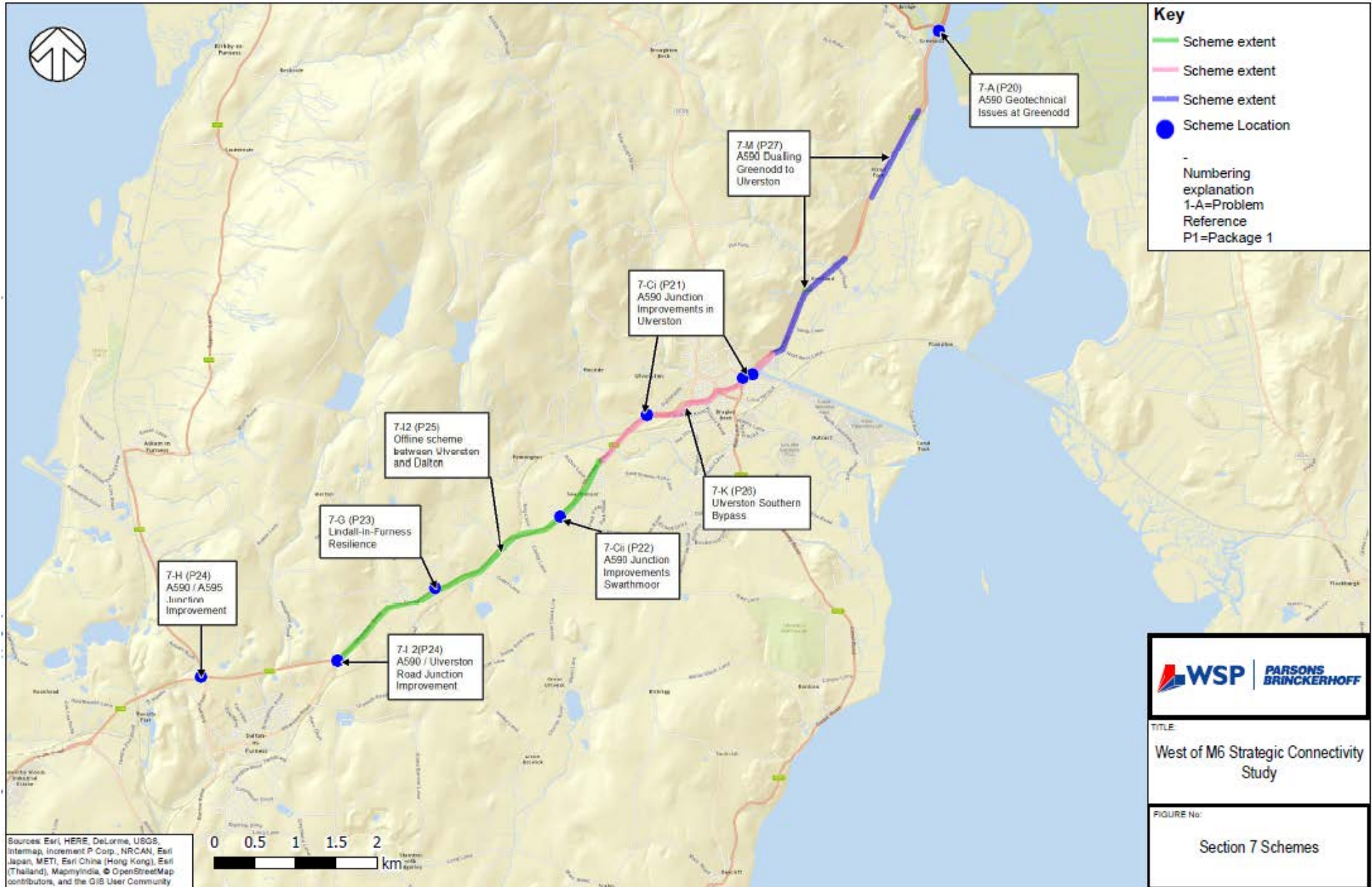
private sectors' buy in and political support for the funding framework developed is important and essential if any of the funding requires voluntary agreements with the private sector.

- 2.24 There is a range of possible funding sources and funding mechanisms to fund the identified schedule of infrastructure identified in the study report. The study states that the following capital funding sources are currently available:
- Local Highway Authority Government Grants
 - Highways England Existing Programme and the Route Investment Strategy refresh
 - Private developer funding (Section 106 Monies or CIL)
 - Cumbria LEP
 - Central Government Local Major Schemes Investment Programme.
 - Cumbria's own capital on account or from future asset sales
 - Banks (Indirect lending)
 - Institutional Investors (Pension Funds)
 - Capital receipts to the Council from the sale of Council owned development land (if any is present).
- 2.25 Finally, the key conclusions from the study are:
- The majority of the schemes assessed in further detail will have several different types of positive impact on the local and regional economy and it is important to distinguish between 'wider economic benefits' that cannot readily be converted into a revenue stream and those that can give rise to actual cashflows capable of paying back a proportion of the initial capital investment.
 - The preferred funding mechanism must be capable of realistic implementation.
 - Developer and other private sector contributions should be maximised before public sector contributions are offered to fund infrastructure.

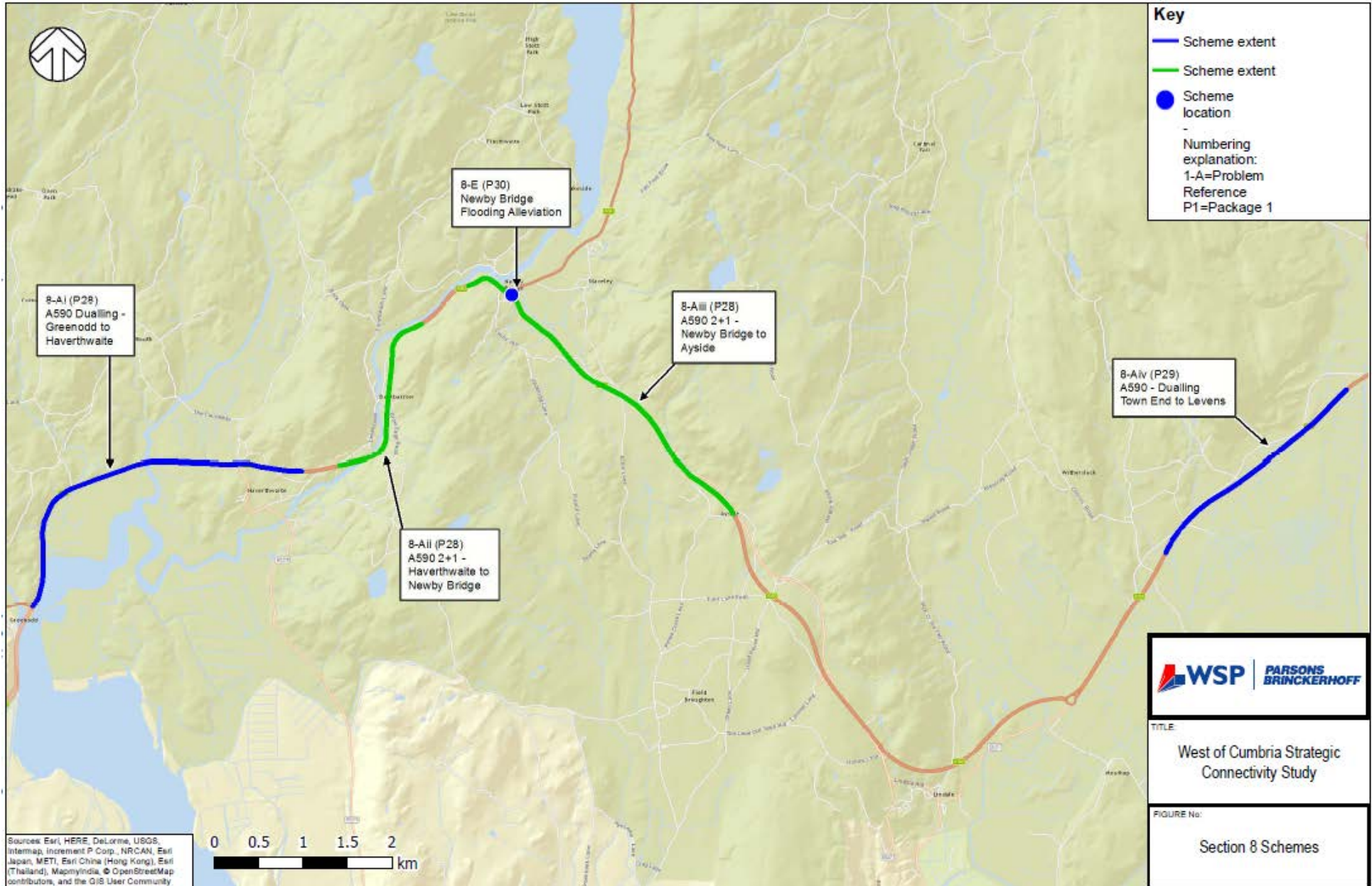
Map 1: Section 6 Scheme



Map 2: Section 7 Schemes



Map 3: Section 8 Schemes



Potential Development Sites in Barrow Borough

- 2.26 The impact of the development of the sites proposed in the Local Plan will result in a requirement to improve some highways and junctions to achieve safe access into the sites and to ensure that the highway network can accommodate development. Access arrangements would normally be negotiated with the developer at an early stage in the planning process. However, where access to a proposed site is particularly difficult, or the highway is not able to accommodate the amount of traffic that would be generated by development, the Infrastructure Delivery Plan will need to demonstrate that the necessary infrastructure upgrades can be provided to support development.
- 2.27 The County Council have provided an assessment of the proposed housing and employment allocations. The assessment showed that whilst most of the housing sites would require one or two points of access, there are some sites that would require further work to make them acceptable to the Local Highways Authority. Also, the County Council state that a Transport Assessment and Travel Plan would be required for any development exceeding 30 two-way trips during the peak hours. Site specific comments can be found in the Proposed Housing Sites Assessments Document (March 2017) and the Employment Land Review (July 2016).
- 2.28 In addition, the sites have been modelled to assess the impact of future proposed development on the highway network. The sections below provide further details.

Transport Modelling Results – Stage 1 Assessment

Background

- 2.29 The Barrow Transport Improvement Study – Stage 1 Assessment, undertaken by the Local Highway Authority, is a traffic model of the Barrow urban area and the surrounding district. The model has been used to assess the impact of the Local Plan development proposals on the highway network, and is a SATURN traffic model of the morning and evening weekday peak periods. The model outputs include traffic flows, queues, delays and the ratio of flow to capacity, which is a measure of congestion. The results show that congestion and journey times are forecast to increase on key routes from 2014 to 2031 as a result of the Local Plan proposals.²

Results

- 2.30 The Barrow Local Plan Transport Modelling Report summarises the Transport Modelling Study undertaken to assess the cumulative impact of the Local Plan proposals in Barrow Borough.

² Note that at the time the Local Plan Publication Draft was proposing 105 dwellings per annum. The Council later consulted on the Pre-Submission Local Plan which proposed 133 dwellings per annum. The Local Plan Submission version proposes 119 dwellings per annum over a revised plan period 2016-2031.

- 2.31 Scenario 1, *2031 Base*, is the reference case scenario. It includes developments which have planning permission and live applications with the potential to gain permission soon. Other developments that are likely to gain planning permission and be constructed by 2031 will be included where information is available; this will include the proposals at BAE.
- 2.32 Scenario 2, *2031 Local Plan*, is the Local Plan scenario. As well as the development in Scenario 1, it includes all Local Plan proposals for housing, employment and leisure.
- 2.33 A summary of the junction performance results for both scenarios is presented below in Tables 3 and 4. The maximum ideal junction performance is when all movements have a Ratio of Flow to Capacity (RFC) of around 0.85–0.9. A junction is defined as operating over capacity if it has a movement with an RFC greater than one. Over capacity junctions experience an increased sensitivity to variations in traffic flow which manifest in unreliable journey times and an increase in queuing.
- 2.34 Tables 3 and 4 show how the number of over capacity junctions is expected to increase in each scenario.

Table 3: Summary of over junction capacity results (>0.85 and <1.00)

Scenario	Morning Peak	Evening Peak
Scenario 1: 2031 Base	12	9
Scenario 2: 2031 Local Plan	7	11

Table 4: Summary of over junction capacity results (>1.00)

Scenario	Morning Peak	Evening Peak
Scenario 1: 2031 Base	17	24
Scenario 2: 2031 Local Plan	32	37

- 2.35 The tables show that the number of over capacity junctions is forecast to increase in the future as a result of additional Local Plan development. The impact of the development can also be considered by analysing the average speed of vehicles across the whole of Barrow. Table 5 shows the average network speed in kilometres per hour across Barrow for all forecast scenarios.

Table 5: Average speed across Barrow (kph)

Scenario	Morning Peak	Evening Peak
Scenario 1: 2031 Base	28.9	31.3
Scenario 2: 2031 Local Plan	25.6	26.6

- 2.36 The table shows that the average speed is expected to decrease in the future with the addition of committed and Local Plan development. This decrease generally correlates with typical increases in the journey time results.
- 2.37 These results are average results for the whole peak hour and represent what is forecast to typically occur. Small changes in traffic flow can result in large variations in queuing and delay throughout the peak hour, and certain traffic effects are not included in the transport model.

Barrow Borough Transport Improvement Study – Stage 2 Assessment

- 2.38 The modelling work was followed-up by a Stage 2 Assessment by WSP/Parsons Brinkerhoff (WSP/PB). Baseline sustainable travel infrastructure has been reviewed as part of this study with the aim of identifying potential location specific interventions. Having identified areas for potential improvement on the transport network, a range of sustainable infrastructure measures have been recommended with the target of further improving viable alternatives to car-based trips.

Traffic Impact Assessment

- 2.39 The assessment is based on the results of the Barrow-in-Furness SATURN strategic model set out above. The outputs from the traffic model were analysed by Cumbria County Council for delay at junctions and a list was prepared containing a total of 57 junctions that would operate at more than 85% of their operational capacity in 2031. This list was independently reviewed by WSP/PB.
- 2.40 All the traffic flow information used in the assessment was provided to WSP/PB by Cumbria County Council and originated from the Barrow SATURN model.

Results

- 2.41 A number of junctions in Barrow Borough are operating at and above capacity, and without interventions traffic flows would be expected to worsen as Local Plan development is completed. There are a number of opportunities to enhance junction capacity at a number of pinch point junctions through the redesign of junctions. Detailed junction modelling supports that proposed highway improvements are capable of enhancing capacity on the Barrow road network and therefore enabling future development growth.

Table 6: Highway Infrastructure Costs

(Source: Barrow Borough Transport Improvement Study, WSP | Parsons Brickerhoff, August 2016)

JN ID	DESCRIPTION	IMPROVEMENT	TOTAL ESTIMATE	DRAWING NO
1180	A590 Park Road / Bank Lane	New roundabout layout	£1,210,293	Dr_1100
		New pedestrian crossing only	£91,743	
1190	A590 Park Road / Ormsgill	New roundabout layout	£1,119,002	Dr_1190
1210	A590 Walney Road / Phoenix road	New gyratory layout comprising A590 Walney Road, A590 Ironworks Road and Phoenix Road, including left in left out priority junctions	£253,078 (Resurfacing at junctions only)	Dr_1210
1220	A590 Walney Road / Wilkie Road			
1225	A590 Walney Road / Asda			
1240	A590 Walney Road / Ironworks Road		£445,346 (Full resurfacing)	
1980	A590 Ironworks Road / Phoenix Road			
1790	Risedale Road / Greengate Street	Signal crossroad layout	£901,621	Dr_1790
1800	Park Drive / Bridgegate Avenue /			
1050	Abbey Road / Hollow Lane	Junction widening on all arms	£460,987	Dr_1050
1100	Abbey Road / Rawlinson Street	New staggered ped crossing on Rawlinson Street arm	£140,124	Dr_1100
1490	A5087 Roose Road / Risedale Road	Junction widening and staggered pedestrian crossings	£334,309	Dr_1490
1530	Holbeck Road / Leece Lane	Change of priority	£30,687	Dr_1530
1910	A590 North Road / Bridge Road	Junction Improvement	£725k - £1.25m	Dr_1910
3030	Abbey Road / Markey Street	Change of priority	£48,928	Dr_3030
3060	Long Lane / Newton Road	New roundabout layout	£1,241,186	Dr_3060

2.42 The report sets out the details of the improvement works for each of the junctions along with a cost estimate for each improvement. A breakdown of the costs is also set out in the report. Table 6 is taken from the report and lists the improvement works along with a cost estimate for each of the improvements.

2.43 The total construction cost of the highway improvements is estimated to be in the range estimate of £6.6m - £7.2m. This assumes:

- The roundabout option for A590 Park Road / Bank Lane junction
- Higher of the two costs for the new gyratory system
- A range of £725k to £1.25m for potential improvement at A590 North Road / Bridge Road junction.

2.44 Note that this does not include land take costs, therefore the overall cost of all improvements is likely to be higher than £7.2m.

Delivery

2.45 The Transport Improvement Study states that it is intended that funding for these schemes should primarily be secured through developer funding mechanisms such as through Section 106 or 278 Agreements. Where there is a shortfall in developer funding, the study states that Cumbria County Council and Barrow Borough Council will work jointly to secure funding through other external sources such as the Cumbria Local Enterprise Partnership. Examples of external funding sources include:

- Department for Transport
- Cumbria Local Enterprise Partnership Funding
- Local Growth Fund
- European Regional Development Fund.

2.46 Further details of potential funding mechanisms can be found in section 1.

Impact on the A590(T)

2.47 The modelling and assessment work set out above included the potential impact of proposed future development on the strategic road network. Following the assessment, Mouchel recommended that the Arcady models produced to assess the operational impact on the A590/Askam Road and A590/Park Road junctions in the Transport Improvement Study require further review, in particular consideration of whether unequal lane usage has been properly accounted for. Where there is significant unequal lane usage (i.e. were an arm of a roundabout has at least two lanes and one lane has a much higher demand) then Entry Lane Analysis Mode should be used. With this in mind, the capacity assessments have been converted by Mouchel using the Entry Lane Analysis Mode.

2.48 The results for 2031 Scenario 1 using the Entry Lane Analysis Mode indicate that both junctions would operate over capacity even without the Local Plan additional traffic. The additional traffic forecast in the Local Plan is expected to further reduce capacity on at least one arm at both junctions.

2.49 Mouchel note however that in all scenarios the One Hour traffic flow input option has been used, which can in many cases be considered to be a worst-case assessment when compared to the Direct Input option as it synthesises a peak traffic flow profile. Mouchel therefore recommend that a more detailed assessment of the two junctions be carried out to determine the true impacts of the Local Plan proposals upon them. The Council are in the process of liaising with Highways England and the County Council to address this issue.

Jubilee Bridge

2.50 One of the key local highway issues is the capacity of the junctions at either end of Jubilee Bridge, which links Barrow Island to Walney Island. The Transport Improvement Study recognises that there will be capacity issues at both junctions as

a result of the development proposed in the Local Plan, and the Study proposes potential junction improvements to address the impact of increased traffic.

- 2.51 The investment that is taking place at the shipyard in connection with BAE Systems will also increase the pressure at these junctions. To address this, BAE Systems have proposed highway works as part of their site redevelopment programme. These works include the removal of the existing roundabout at the eastern junction and construction of a 3-arm traffic signal controlled junction. The upgrading of the traffic signal controls at the western junction is also proposed. BAE Systems have also proposed improvements to the approaches to the bridge.
- 2.52 In the longer term there is an aspiration for a second crossing point between Walney and Barrow. Such a crossing would support existing communities on the island and future development beyond the plan period.

Barrow Town Centre – Parking and Movement

- 2.53 Mott MacDonald was appointed by Cumbria County Council and Barrow Borough Council in December 2015 to undertake a Parking and Movement Study for Barrow town centre. The aim of the study was to identify how all traffic moves around the town centre and to develop a holistic and coordinated series of transport and parking improvements that will bring benefits to all town centre users.
- 2.54 At all stages of the development of the study, the needs of the different user groups have been considered in terms of:
- Vehicle movement and accessibility
 - Pedestrian movement and accessibility
 - On and off-street parking supply and demand
 - Sustainable transport provision (including public transport, walking and cycling).
- 2.55 A number of schemes have been selected to be taken forward in the study and have been subject to development, design and costing. These schemes are set out in the Infrastructure Schedule (see Appendix 3), whilst further details are set out in the Parking and Movement Study.

Delivery

- 2.56 The Parking and Movement Study identifies a range of potential funding sources for the implementation of schemes within the study. These sources include:
- Highways Maintenance Funding Allocations
 - Integrated Transport Block Capital Grant
 - Local Growth Fund
 - EU Structural Investment Funds
 - Challenge Funding
 - Coastal Communities Funding

- Community Benefit Fund
- Community Infrastructure Levy
- Section 106 and 278 Funding
- Tax Increment Financing
- Private Business / Employers
- Charities and Voluntary Groups.

2.57 Further details of these potential funding sources can be found in section 1.

3.0 Public Transport

Evidence Base

3.1 The key studies and strategies that have informed this section include:

- **Cumbria Transport Plan Strategy 2011-2026 (LTP3), Cumbria County Council**

This includes how bus and train services in Cumbria will be improved and managed. The Plan contains a strategy for the next 15 years, 2011 to 2026, the policies to implement the strategy and a rolling programme of implementation plans showing where funding will be directed.

- **Delivering Cumbria's Transport Needs: Implementation Plan (LTP3), Cumbria County Council**

This sets out where the authority's capital and revenue funding, council tax, developer contributions and other external funding will be directed to deliver the priorities of the LTP3 Transport Strategy, the Council Plan and the 6 Council Area Plans between April 2012 and March 2015. Details of the delivery programme for 2012/13 are incorporated.

- **Cumbria Infrastructure Plan, AECOM, May 2016**

This is a strategic document commissioned by the Cumbria LEP that prioritises the infrastructure needed to facilitate economic growth and maximise opportunities from large scale projects over the next fifteen years. It supports the delivery of key infrastructure improvements to meet the priorities set out in the Cumbria Strategic Economic Plan.

- **Barrow Transport Improvement Study, WSP | Parsons Brinckerhoff, September 2016**

This identifies the impacts of growth allocated in the Local Plan before identifying a range of sustainable and transport improvements, including potential highways improvements at roads and junctions agreed with Cumbria County Council and Barrow Borough Council.

- **The Four Pronged Attack: Cumbria Strategic Economic Plan 2014-2024, Technical Annex**
The 'Infrastructure' section outlines the LEP's plans to improve infrastructure in Cumbria with the objectives of allowing the economy to expand and individuals to prosper.
- **Furness Line Community Rail Partnership "Strategy and Action Plan 2013/14"**
This report considers the potential rail service options, for inclusion into the specifications the new Northern and TransPennine Express rail franchises. The report was been prepared by the Railway Consultancy Ltd in response to a tender issued by the Furness Line CRP.
- **Furness Line Study, August 2014, The Railway Consultancy on behalf of the Furness Line Community Rail Partnership**
This report considers potential rail service options for inclusion in the specifications for refranchising.

Bus Services

- 3.2 Bus travel is a key contributor to economic growth, with many people relying on bus services to access shopping, leisure, work, education and training. Development in the Local Plan may generate a need for bus services to be rerouted or for new routes to be created to serve new development. Also, the frequency of services may also need to be increased where current services are close to capacity.
- 3.3 Cumbria County Council works with local bus operators to provide bus services in the County. Bus routes are generally provided by commercial operators who determine the route and frequency of services. Where there are gaps in the services the County Council fund services to fill these gaps, where they consider the service to be socially necessary. The main bus operator in Barrow is Stagecoach.
- 3.4 Services to the rural villages are infrequent, and the village of Newton has no service. It is often not commercially viable to serve sparsely populated rural areas with ordinary bus services. An initiative that the County Council has introduced to help address this issue is the Rural Wheels service, which provides door-to-door transport for people who do not have, or are unable to access scheduled transport.
- 3.5 The industrial estates and business parks to the east and west of Park Road north of Ormsgill do not benefit from a bus service, although they are situated on a bus route. This means that some of the proposed employment sites cannot presently be accessed by public transport.

Barrow Borough Transport Improvement Study – Bus Service Improvements

- 3.6 The Barrow Transport Improvement Study includes an assessment of public transport requirements. The 2011 census travel to work data indicates that only 6.8%

of Barrow residents travel to work by public transport compared to the 16.4% national average. Many bus stops in the area have limited facilities and the town does not have a central bus station. The current bus shelters outside the Town Hall are classed as the town's major interchange. The potential for a new bus interchange is considered in paragraphs 3.19 to 3.21 below.

- 3.7 With the close proximity of employment sites to housing sites in Barrow Town Centre, the Study states that it is evident that public transport modal share is in part a consequence of people choosing to travel to work by cycling or walking once wait times and bus fares are taken into account.
- 3.8 BAE, the area's largest employer, had only 1.74% members of respondents from their travel survey travel to work via public transport. Staff reasons for not travelling to work by bus included 45.87% indicating that service times were unsuitable, and lack of services near where staff reside. Other reasons included inconvenience (39.12%), journey duration (26.88%), expense (27.28%) and unreliability (22.0%). Staff may be persuaded to use more public transport if services were more conducive to shift patterns and the implementation of financial incentives.
- 3.9 The bus stops are made up of shelters, particularly in the town centre with many stops outside of the town centre consisting of no more than a flag pole. Due to the simplicity of the stop, waiting for a bus particularly in poor weather is likely to be a key factor that discourages bus use across Barrow. New bus stops would also benefit of real time information which help the traveller to make an informed decision of how, and when to travel.
- 3.10 The current extent of the bus network in Barrow is shown in Maps 4 and 5 for all regular services. Routes are typically radial and pass through the town centre. The list of services are as follows:
- 1 – South Walney to Hawcoat
 - 2 – North Walney to Town Centre
 - 3 – Newbarns to Ormsgill
 - 4 – Holbeck Park to Asda/Furness College
 - 5 – Walney Island to Town Centre
 - 6/X6 – Town Centre to Ulverston/Kendal/Windermere
 - 7 – Runs as a school bus in some areas, only runs 2-3 times a day.
- 3.11 Working alongside the County Council Bus Services Officer, a gap analysis of the existing public transport provision and future development locations has been undertaken with new routes being identified for future consideration. The Study proposes that bus services in the area are extended to serve potential developments identified in the Local Plan. In particular, there appears to already be potential demand for a bus route to serve the industrial estate along Park Road, as currently there is no direct bus route that runs through this area other than a school bus. Service frequency would also expect to increase as buses begin to exceed capacity with greater demand. Locations of new Local Plan sites are highlighted in Maps 4 and 5, identifying nearby existing bus network and the potential expansion routes.

- 3.12 As local sites come forward in the planning process, developers should seek to engage with local bus operators to identify the specific requirements of public transport provision to manage sustainable travel. It should be ensured that new development sites are within easy access of a bus stop.
- 3.13 In light of this, and to align with Local Plan development sites, the Barrow Transport Improvement Study recommends that routes 1, 3 and 4 should be extended (or new routes created) to capture the demand from new and existing sites. This is shown on Maps 4 and 5.
- 3.14 To include new bus stops it is anticipated that new stops near Local Plan sites could receive developer contributions. Many of the bus stops across Barrow will also be subject to an upgrade. It has been estimated that this would cost £6k-8k per bus stop.
- 3.15 An estimate of cost for a new bus service operating with a 20 minute frequency would expect to cost £240k per annum, however, a diverted service would be anticipated to cost around half of this sum.

Table 7: Proposed Bus Routes and Developer Contributions

(Source: Barrow Borough Transport Improvement Study, Parsons Brickerhoff, August 2016)

Proposed Route	Location	Developer Contributions
1	Waterfront Business Park	EMR03
3	Rakesmoor Lane/Bank Lane	SHL082, SHL037
	Park Road (West)	EM14, EMR05, EMR07, SHL037
4	Park Road (West)	EMR01, EMR16, EMR08, EMR06, EMR07, EMR14, EMR06
	Leece Lane	REC05 REC26

- 3.16 A detailed cost breakdown of potential proposed bus infrastructure relating to new bus stops and extensions of existing routes has not been prepared due to the detailed nature of these requirements usually developed during masterplanning or a planning application. It should be required that contributions from developers fund these sustainable bus measures.

Summary of Recommendations

- 3.17 The recommendations from the Barrow Transport Improvement Study are as follows:
- Extensions of routes and increase of frequency to allow improved accessibility to current and Local Plan sites.

- Enhancements to bus stop infrastructure in residential areas, where appropriate they should include upgrading flag poles to shelters and seating, raised curbs for wheelchair and pushchair access.
- Ensure all bus stops have printed timetables and to consider real time information, particularly for major routes, with sustainable funding sources.
- Secured funding arrangements for ongoing maintenance of new bus infrastructure.
- New Local Plan sites should be planned with the consideration to have a layout that accommodates easy access to bus stops.
- Improved bus connectivity to Dalton Rail Station in addition to existing Route 6.

Delivery

- 3.18 It is likely that new bus stops and bus service upgrades / extensions will continue to be negotiated on a development by development basis. A detailed cost breakdown of potential proposed bus infrastructure relating to new bus stops and extensions of existing routes has not yet been prepared. This is due to the detailed requirements usually being developed at the masterplanning or planning application stage. It is likely that contributions from developers will fund these sustainable bus measures, through a legal agreement linked to the planning consents.

Town Centre Transport Interchange

- 3.19 The Barrow Town Centre Parking and Movement Study identifies the provision of a town centre transport interchange as a potential scheme for beyond the plan period. The development of a new transport interchange in the town centre is a long term aim for the Borough and County Council.
- 3.20 The study envisages that this interchange will act as the central bus, taxi and coach terminus for Barrow and therefore significant work will be required to determine sites for an interchange that are highly accessible by all modes of travel, including by bicycle and on foot.
- 3.21 The study includes a cost estimate of £5m for the project. This cost accounts for a four stand bus interchange with covered waiting area, ticket office and drivers facilities, based on a rate of £1,900 per square metre. The future role of the interchange and its delivery can be considered as part of the proposed Barrow Town Centre Masterplan.

Rail Services

- 3.22 The rail service in the County (away from the West Coast Main Line) is extremely poor and is in dire need of investment. Network Rail own and operate Britain's rail infrastructure, and they have an obligation to maintain and enhance the network. Network Rail does not own passenger or commercial freight rolling stock. Although it owns over 2,500 railway stations, most are managed by train operating companies. Enhancements to rail infrastructure are not determined by Network Rail, but are solutions offered by Network Rail to outputs specified by funders, unless the enhancement is performance related to meet targets.³ Northern is the train operator in the Borough, operating long-distance inter-urban services with limited stops, notably on routes between Manchester Airport and Barrow, along with local services and services to Carlisle.
- 3.23 There has been under investment in rail infrastructure in the County (away from the West Coast Main Line), meaning that it is of poor quality and not fit to support major project developments. This also impacts upon tourist activity and commuting. The

³ Source: Network Rail

issues associated with the Cumbria Coast and Furness Lines, including infrastructure and facilities, are documented in local and sub-regional plans and strategies which set out the need for investment. The key issues are summarised in the sections below.

Cumbria Coast and Furness Lines

- 3.24 The Cumbrian Coast Railway Line links Carlisle to Barrow via the Cumbrian coast. It passes through all the main West Cumbrian towns and major nuclear employment sites. The line carries significant volumes of rail freight, including the transportation of nuclear materials to Sellafield and the Low Level Waste Repository at Drigg. Connections to the West Coast Main Line and other parts of the national rail network at Carlisle and Lancaster enable freight to be transported to and from West Cumbria from all regions. The line is vital to meeting the freight demands of forthcoming construction projects at Moorside (Nuclear New Build), Drigg (Low Level Waste Repository) and Sellafield (Hazard Reduction Programme).⁴
- 3.25 The Furness Railway Line links Barrow and West Cumbria to the West Coast Main Line and is a continuation of the Cumbria Coast Line. Although the Furness Line is important for commuting to work and education, particularly in Barrow, Lancaster and Preston, the line has a relatively low proportion of commuters. The Furness Line Community Rail Partnership (CRP) “Strategy and Action Plan 2013/14”, states that the line is particularly important for leisure and tourism traffic, and that between 60% and 70% of journeys are for leisure and tourism purposes. However, the line is also important for longer distance services to Manchester and beyond, including connections with West Coast inter-city services to London, the West Midlands and other major urban centres.
- 3.26 Within the Borough there are four railway stations, all of which are either situated on the Cumbria Coast or Furness lines. These are as follows:
- **Barrow Station** – This is where the Cumbria Coast Line meets the Furness Line. The station provides connections north to Whitehaven, Workington and Carlisle, via the Cumbrian Coast Line; and to Ulverston, Grange-over-Sands, Carnforth and Lancaster to the east, via the Furness Line. Both routes connect to the West Coast Mainline.
 - **Roose Station** – Also situated in Barrow, this station serves the suburb of Roose on the Furness Line.
 - **Dalton Station** – This serves Dalton and is located on the Furness Line, giving connections to Barrow, Ulverston, Grange-over-Sands, Carnforth and Lancaster. This line is also connected to the West Coast Mainline.
 - **Askam Station** – This is situated on the Cumbria Coast Line and some through trains to the Furness Line stop here.

⁴ Source: Cumbria Strategic Economic Plan: Technical Annex

Infrastructure Issues

3.27 The network is characterised by a number of critical factors as summarised below:

- **Journey times** – Journey times between urban areas are not competitive with the car. Maximum speed limits along significant stretches are slow. The tables below provide examples of the comparatively lengthy journey times on the Cumbria Coast and Furness Lines compared with a similar distance of journey on the West Coast Main Line. The vast differences in journey times can clearly be seen. The Cumbrian Coast and Furness Lines are also particularly vulnerable to disruption at certain locations where the railway forms the sea barrier and where it runs along the foot of cliffs. The tables below do not take account of such potential delays.

Table 8: Journey times – Barrow and Preston to Carlisle

(Source: National Rail Enquires)

Route	Line	Maximum Journey Time (approx.)	Average Speed, inc. stops (approx.)
Barrow to Carlisle	Cumbria Coast Line	2hrs 45mins	35mph
Preston to Carlisle	West Coast Main Line	1hr 15mins	68mph

Table 9: Journey times – Barrow to Lancaster and Lancaster to Wigan NW

(Source: National Rail Enquiries)

Route	Line	Maximum Journey Time (approx.)	Average Speed, inc. stops (approx.)
Barrow to Lancaster	Furness Line	1hr 4mins	30mph
Lancaster to Wigan North Western	West Coast Main Line	33mins	72mph

- **Timetabling** – Timetabling is poor and services are infrequent, including limited evening services (e.g. the latest train to Whitehaven from Barrow on a weekday is

at 18:30). There is no comprehensive weekend schedule, including no Sunday services from Barrow to stations on the Cumbria Coast line through to Carlisle.

- **Poor quality rolling stock and passenger facilities** – The Northern trains are ageing, of very poor quality and are subject to cancellations. Within the Borough, Askam station has poor wheelchair access, the station is unmanned and there are no passenger information systems or ticket purchase facilities. There is a small car park, but with the high volume of Sellafield commuters who use the station, many commuters park their cars in nearby streets. Dalton Station is unmanned and is not DDA compliant and both Dalton and Roose Stations do not have a car park.
- **Inadequate infrastructure** – The majority of route mileage is still operated using traditional local mechanical signal boxes and Absolute Block working. There are numerous staffed signal boxes and level crossings. This creates inefficiencies on the network being expensive to staff whilst limiting capacity and route opening hours. Key areas of the Cumbria Coast Line are single track, constraining the line's capacity. There is a lack of electrification on all lines in Cumbria with the exception of the West Coast Mainline.

3.28 Addressing the various issues affecting the rail network are vital to sustainable transport and economic growth in Cumbria. They would bring significant benefits for Cumbria by increasing the network's capacity to support major investment projects, the movement of workers and visitors to the County and the development of supply chains. The Cumbria Infrastructure Plan shows that the improvements required include increases in the number of services to support nuclear development along the Cumbria Coast line; investment in rolling stock; an increase in services between Barrow and Manchester Airport and along the Cumbrian Coast Line; and additional evening and weekend services across the County.

3.29 The Local Transport Plan 3 (2011-2026) states that the County Council and its partners work with the rail industry to improve station facilities in Cumbria, including car and cycle parking, and also interchange arrangements between rail and other modes, and to promote rail travel. The County Council also talk to the government and the rail industry to improve the frequency and quality of train services serving Cumbria. In Barrow, the Furness Community Rail Partnership and the Cumbrian Coast Rail Community Partnership also play a significant role in promoting better rail services and in encouraging people to travel by train.

Services to Manchester

3.30 A high quality of connectivity between Barrow and Manchester and its airport will be an important factor to the future economic success of the Furness area. Many industrial companies in Furness are global, meaning that senior staff and visiting business partners need good transport links with Manchester Airport as the international airport for the area. Good connections will also contribute to the success of the South Lakes tourist trade.

- 3.31 The Furness Line Study states that all stakeholders have emphasised the importance of frequent, high-quality and direct links to Manchester – both to the city centre as the regional seat of government, science and universities, business services, culture, entertainment, sport and major shopping – and to the airport for overseas business links and holiday flights. It states that the tourism strategy for Cumbria is to increase demand from overseas through Manchester Airport and to switch domestic tourists from a heavy reliance on their own cars to use of public and other sustainable transport.
- 3.32 Electrification of the West Coast Mainline has resulted in reductions to the number of services between Barrow and Manchester, including Manchester Airport. This is because the diesel trains that operate on the Furness line cannot join the electric services on the West Coast Mainline, as they are not compatible. Since May 2014, these changes have seen a reduction in through services between Barrow and Manchester from six to four, and reduction in the Manchester to Barrow direction from ten to six. In order to ensure that through services at key times of the day are maintained, some of the services will join with Blackpool to Manchester trains at Preston. The overall level of train service between Lancaster and Barrow will remain the same and some of the smaller stations along the line will benefit from a slightly improved service.
- 3.33 One of the key objectives of the CRP is “to work with the Train Operating Companies to retain as many through services between Manchester / Manchester Airport and Barrow as possible.” The Furness Line Study recommends that a frequent through train service should operate between the Furness line and Manchester Airport, via the city centre and Preston. Promoting the area for inward business investment would be severely hampered without a direct service to the Airport.

Refranchising

- 3.34 On the 1st April 2016, Arriva launched the new Northern franchise, and this will contribute towards alleviating some of the current concerns. According to Northern, “rail passengers across the North will soon benefit from new trains, a 37% increase peak time capacity and revamped ticketing.” The new trains are expected to join the Northern fleet in 2018. £1 billion will be injected over nine years, including:
- Within three years, Arriva will introduce 281 new carriages, fully refurbish the remaining fleet and remove all pacer trains. All trains will have free WiFi by 2019.
 - A 12% increase in the number of services by 2019, giving passengers greater choice with over 2,000 more services each week.
 - With more and longer trains, there will be a 37% increase in peak time capacity within the next three years.
 - Significant station improvements.⁵

⁵ See <https://www.northernrailway.co.uk/> for more information.

- 3.35 'In-Cumbria' report that Arriva plan "to have new 100 mph trains operating on a network of fast Northern Connect services from Barrow-in-Furness and Manchester Airport by 2019." Also, "there will be eight services per day between Barrow-in-Furness and Manchester Airport and four services a day between the airport and Windermere."⁶
- 3.36 The Cumbria Infrastructure Plan states that more needs to be done to improve Cumbria's rail services and network over and above the enhancements planned via refranchising. These are needed so that projects of national significance can be delivered on time and their impacts effectively managed.

Strategic Priorities for Investment

- 3.37 The Cumbria Infrastructure Plan sets out the strategic infrastructure schemes that have been identified as priorities for investment in the County. They have been selected as they have the most potential to address Cumbria's infrastructure needs, support the imminent demands that will arise from major private sector investment projects and maximise Cumbria's contribution to the northern economy. The following schemes are most relevant to Barrow:

Table 10: Short Term Priorities – Cumbria Infrastructure Plan Priorities

(Source: Cumbria Infrastructure Plan)

Proposed Scheme	Description
Critical	
Cumbria Coastal Railway Enhancements	Package of measures to enhance the Cumbrian Coastal railway between Carlisle and Carnforth via West Cumbria and Barrow. Measures include line speed and infrastructure improvements, signalling changes, station upgrades and improved access. These enhancements are required to provide increased capacity, usage and resilience to support economic, supply chain and employment growth across Cumbria while also supporting the delivery and operation of new investments in the west of the county. This improvement can also support the growing importance of the Port of Workington. The measures would also help to address issues of line efficiency and vulnerability to flooding and coastal erosion.
Rail Station Improvements	A fund to support packages of measures at rail stations across Cumbria. The nature of improvements at each station will vary at each location but could include improved parking, station access, ticketing and platform improvements. This will help to address issues of congestion on the roads by encouraging journeys by train.

⁶ See <http://www.in-cumbria.com/> for more information.

- 3.38 The Cumbria Infrastructure Plan states that there will be a need to continue to work with the Department for Transport and Transport for the North to secure further additional infrastructure improvements to the strategic railway network. A further scheme is proposed as set out below:

Table 11: Further Scheme – Cumbria Infrastructure Plan

(Source: Cumbria Infrastructure Plan)

Proposed Scheme	Description
Electrification of Furness Line, Lakes Line and Hadrian's Wall Country / Tyne Valley Line in addition to improvements to Cumbrian Coast Line	The lack of electrification has resulted in a number of connectivity shortfalls. In particular the Furness Peninsula has infrequent direct train connection to Manchester / Manchester Airport (e.g. four direct services a day), impacting on interregional and international connectivity. Electric trains are not able to traverse the Tyne Valley connection between the electrified East and West Coast Main Lines, reducing resilience for major north-south electrified rail arteries and interregional connectivity between the North East and southwest and central Scotland via Cumbria. Passenger services are limited to diesel multiple units running mostly between Carlisle and Newcastle. The shortfall impedes business-to-business connectivity for the advanced manufacturing sector in South Cumbria and between North City Regions West Cumbria and central Scotland.

- 3.39 The Barrow Transport Improvement Study recommends that improvements are made to station facilities (parking, cycle parking and waiting facilities) to encourage longer journeys to be made via rail. Frequency of rail services should be assessed and an improvement to the quality of facilities at stations.
- 3.40 The SEP Technical Annex states that scaleable infrastructure enhancements would be of huge benefit for rail capacity, adding that the ultimate aim is for full re-signalling of the Cumbria Coast Line along with infrastructure enhancements and doubling of track throughout. Improving street-side access to the railway for travel-to-work, education and leisure users is also vital through better pedestrian and cycle links and adequate off-street car parking.

Delivery

- 3.41 The Cumbria Infrastructure Plan identifies several funding sources and delivery mechanisms. Such mechanisms will be important in taking forward the infrastructure priorities outlines in the plan. These include:
- Government agencies, including central government and Network Rail
 - Local Growth Fund
 - Growing Places Fund
 - European Structural Investment Funds

- Developer Contributions
 - Third-party grant funding opportunities such as the Coastal Communities' Fund.
- 3.42 For the schemes identified in the Barrow Transport Improvement Study, the study states that these should be primarily be secured through developer funding mechanisms such as through Section 106 or 278 Agreements. Where there is a shortfall in developer funding, Cumbria County Council and Barrow Borough Council will work jointly to secure funding through other external sources such as the Cumbria Local Enterprise Partnership.
- 3.43 These and other funding sources are summarised in section 1 of this document.

Impact of Local Plan Sites on Rail Infrastructure

- 3.44 Network Rail has provided the following information regarding development growth in the Borough:

Network Rail, July 2015

Where growth areas or significant housing allocations are identified close to existing rail infrastructure, it is essential that the potential impacts of this are assessed. Many stations and routes are already operating close to capacity and a significant increase in patronage may create the need for upgrades to the existing infrastructure including improved signalling, passing loops, car parking, improved access arrangements or platform extensions. As Network Rail is a publicly funded it would not be reasonable to require Network Rail to fund rail improvements necessitated by commercial development. It is therefore appropriate to require developer contributions or CIL contributions to fund such railway improvements; it would also be appropriate to require contributions towards rail infrastructure where they are directly required as a result of the proposed development and where the acceptability of the development depends on access to the rail network.

The likely impact and level of improvements required will be specific to each station and each development meaning standard charges and formulae may not be appropriate. Therefore in order to fully assess the potential impacts, and the level of developer contribution required, it is essential that where a Transport Assessment is submitted in support of a planning application that this quantifies in detail the likely impacts on the rail network.

Level Crossings

- 3.45 The cumulative impact of development could impact upon level crossings. In the Borough, this could potentially be an issue at the level crossing in Askam, where 146 dwellings are proposed over the plan period. Following monitoring of a level crossing, Network Rail have stated that they will notify the Council of its concerns should the proposal or the impact from cumulative proposals in the area result in a material increase in the type and / or volume of users at a crossing. An increase in type and / or volume of users may result in an increase in risk, in which case Network Rail will be required to undertake an assessment of how best to mitigate this risk.

- 3.46 In the event that mitigation measures are required, Network Rail would seek the support of the Local Planning Authority, together with that of Highways and Public Rights of Way to progress any necessary mitigation measures to ensure that the risk at any level crossing is either reduced or eliminated.
- 3.47 Developers would provide funds (either via CIL or Section 106 agreement) to either fully fund or contribute towards funding of mitigation measures at level crossings. As Network Rail is a public body it is not reasonable to expect Network Rail to fund mitigation measures that are necessary as a result of third party commercial development.
- 3.48 Should the Council be minded to approve any planning application, Network Rail would expect full support in undertaking the mitigation measures if required as a result of the new development. Local Planning Authorities are also encouraged to consider the cumulative impact of smaller multiple developments on level crossings.

4.0 Walking and Cycling

- 4.1 Walking and cycling needs to be safe, attractive and convenient for residents and visitors to make everyday journeys by foot or bicycle, and current infrastructure must be good enough to encourage more people to walk and cycle. Cumbria County Council is responsible for the network of public rights of way, footpaths and bridleways.

Walking

- 4.2 The Barrow Transport Improvement Study includes an assessment of walking and cycling infrastructure requirements. It states that currently 17% of people in Barrow walk to work, which is significantly higher than the national average of 9.8%. In the centre of Barrow, up to 39% of people walk to work. This high proportion demonstrates the proximity of existing employment areas to houses in Barrow town centre and also the good availability of walk routes connecting employment sites.
- 4.3 Parts of Barrow town centre are now pedestrianised as a result of extensive public realm improvement works, which further helps to encourage walking. There have also been significant improvements to the pedestrian environment on key routes into the town centre from surrounding areas. Outside of the town centre, new coastal footpaths have been created which enable local opportunities for leisure walking.

Recommended Improvements

- 4.4 Proposed employment and housing developments should provide good quality links to the existing pedestrian network to encourage and maintain the high percentage of walkers within the town. There are also further opportunities to increase the proportion of trips by walking.

- 4.5 The Barrow Transport Improvement Study recommends the following borough wide infrastructure improvements in order to consolidate and improve the pedestrian infrastructure that already exists in the Borough:
1. High quality residential streets with coherent connections to the existing network.
 2. Improved way finding and signage to assist in linking pedestrians between key attractors in the town centres, the bus stops and railway stations.
 3. Improved access to public transport stations, stops and routes.
 4. Improved access to cycle parking.
 5. Further incentives provided by businesses and the local authority to encourage the health benefits of walking.
- 4.6 The Parking and Movement Strategy proposes a range of pedestrian facilities in Barrow town centre. These include improved walking routes to edge of town retail parks; Duke Street public realm improvements; and creation of a new pedestrian space between Portland Walk and Duke Street. A full list of schemes can be found in the Infrastructure Schedule (Appendix 3), with further details in the Parking and Movement Strategy.

Cycling

- 4.7 The Barrow Transport Improvement Study states that 5.2% of the Barrow population cycle to and from work, and the figure is as high as 8% on Walney Island. These figures are significantly greater than the national average of 2.9%.
- 4.8 The existing cycle network in Barrow consists of a number of on road and off road cycle routes and serves only a few key corridors in the Borough. The greatest density of cycle networks is located in Barrow town centre, and there are notable gaps between Askam, Dalton and other residential areas further away from Barrow town centre. The Study states that improvements to the cycle network in areas of high car use, where there is no current network, is likely to have a larger impact than improving existing cycle facilities on designated cycleways.
- 4.9 At present there are a number of unadopted cycle lanes along carriageways, which are currently used for cycle access. The Study states that it would be beneficial to convert some of these unadopted routes into cycle paths shared with pedestrians, such as along Park Road between Barrow and Dalton. This is one route recommended for improvement.
- 4.10 Maps 6 and 7 show the existing cycle network in the context of future proposed Local Plan developments. The proposed employment sites are heavily concentrated to the North West of Barrow. Whilst the sites in this area are currently served by a cycle route, they would benefit from wider connections to residential areas. In terms of the proposed housing developments, these are not currently served by nearby cycle lanes. Cycle infrastructure would need to be delivered to provide a coherent link between the town centres and these sites. The Study states that this should be a

requirement of planning permission for new housing sites, through Section 106 agreements.

4.11 In summary, the Barrow Transport Improvement Study identifies the following issues as part of a review of the Borough's cycle facilities:

- The need for improved connectivity in the cycle network within the town's residential areas, and east and west of National Route 70.
- Lack of cycle network connections to new Local Plan sites, in particular the proposed housing developments.
- Areas of high proportion car journeys to work which can be targeted for cycle improvements.
- Due to the narrow nature of Bank Lane and Rakesmoor Lane and a recent cycling fatality, careful consideration will be given at the design stage into what improvements for both pedestrians and cyclists are possible in this area.

Recommended Improvements to Cycling Infrastructure

4.12 To increase the mode share of cyclists in the Borough, the Barrow Transport Improvement Study identifies a number of new potential cycle routes. The delivery of the new routes has been designed to provide cycle access between the proposed Local Plan sites and the town centres. They have also been designed to connect to the existing cycle network. The proposed routes are shown on Maps 6 and 7.

4.13 The improvements are linked to new development sites and therefore are targeted at new trips, for which sustainable behaviours could be influenced at the outset. Developer contributions could be sought to fund the delivery of these improvements as outlined in Table 12 with outline costs.

4.14 The new potential network provides completeness to many pre-existing gaps in the network and provides significant expansion to provide near complete connections between all major residential and employment sites in the Borough. With the widespread locations of proposed housing allocations across the Borough, there has been in total 12 proposed cycle routes to increase the accessibility by cycling in the area.

4.15 Map 7 shows the new routes designed for the Borough in relation to housing sites. It is noted that each of the new sites will have direct access within 100m of a new or existing cycle route. It has been proposed for new cycle lanes to extend northwards on Walney Island where the new sites are proposed and also connect to West Shore Park providing a path for recreational rides for tourists.

4.16 These routes have also been considered in relation to new employment sites (see Map 6). The majority of new employment is located along the A590 corridor along the west of Barrow town. There is already a cycle route which connects with some residential areas, so it is proposed that new routes spur off to make the employment areas better connected to the wider area. This would improve accessibility for

residents, including a route along Rakesmoor Lane and Ainslie Street connecting onto Abbey Road.

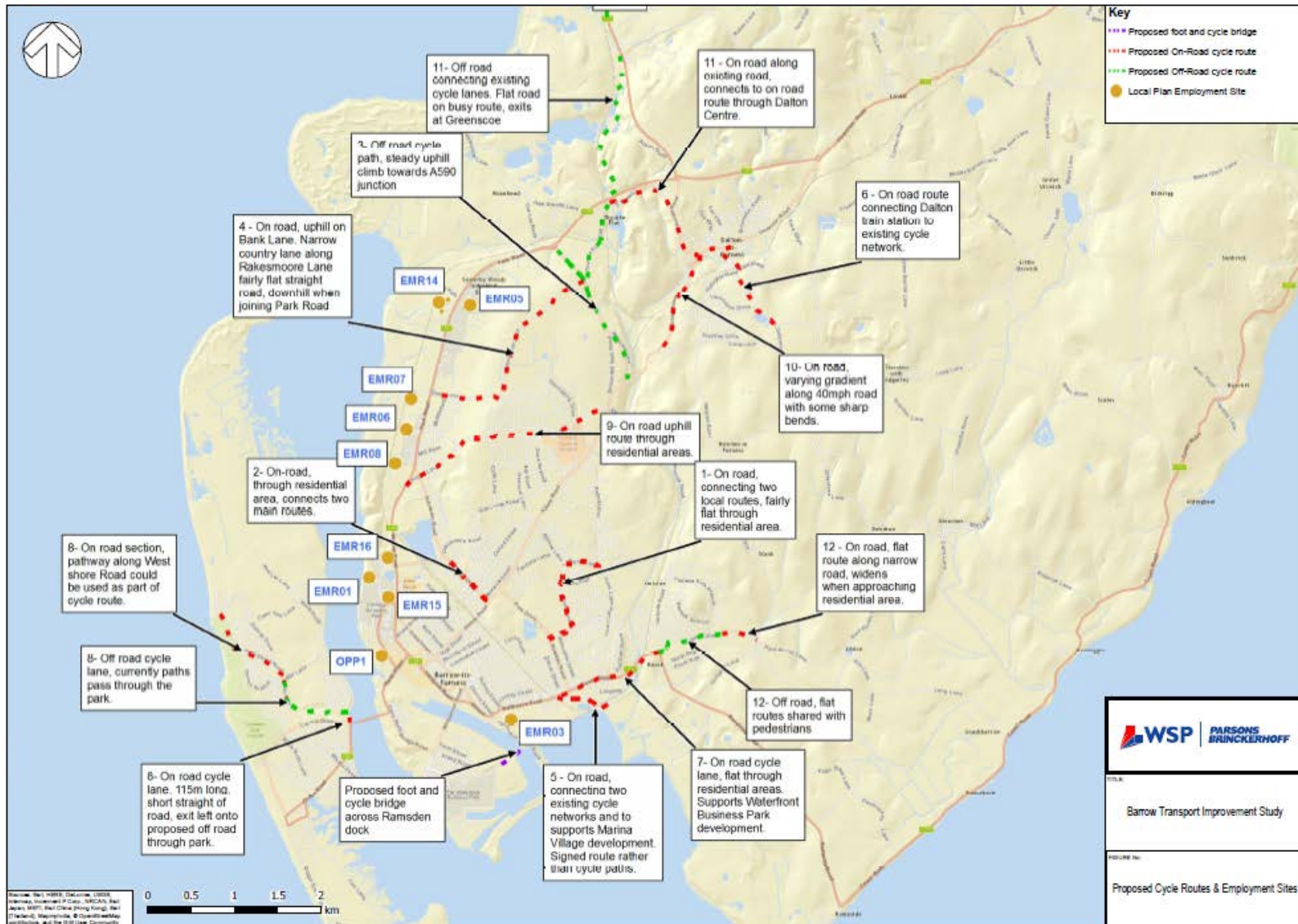
- 4.17 The Study states that Travel Plans for each development site will be important to secure through the planning process, and facilities should include cycle parking and proposing additional suitable cycle links through the masterplanning process of sites. For employment sites, these should include secure cycle parking.
- 4.18 Shower facilities should also be encouraged at employment generating development. The Study advises that new employment sites build shower facilities to encourage staff to walk/cycle to work. It also recommends to improve cycling facilities along Jubilee Bridge, with the potential for dedicated cycle lanes.
- 4.19 In addition to the above, the Parking and Movement Study identifies several schemes for the improvement of cycle infrastructure in Barrow town centre. These include contra flow cycle lanes on one-way streets and improvements to the cycle network (e.g. new directional signage and cycle parking facilities). A full list of schemes can be found in the Infrastructure Schedule (Appendix 3), with further details in the Parking and Movement Study.

Table 12: Estimate Costs for Cycle Infrastructure

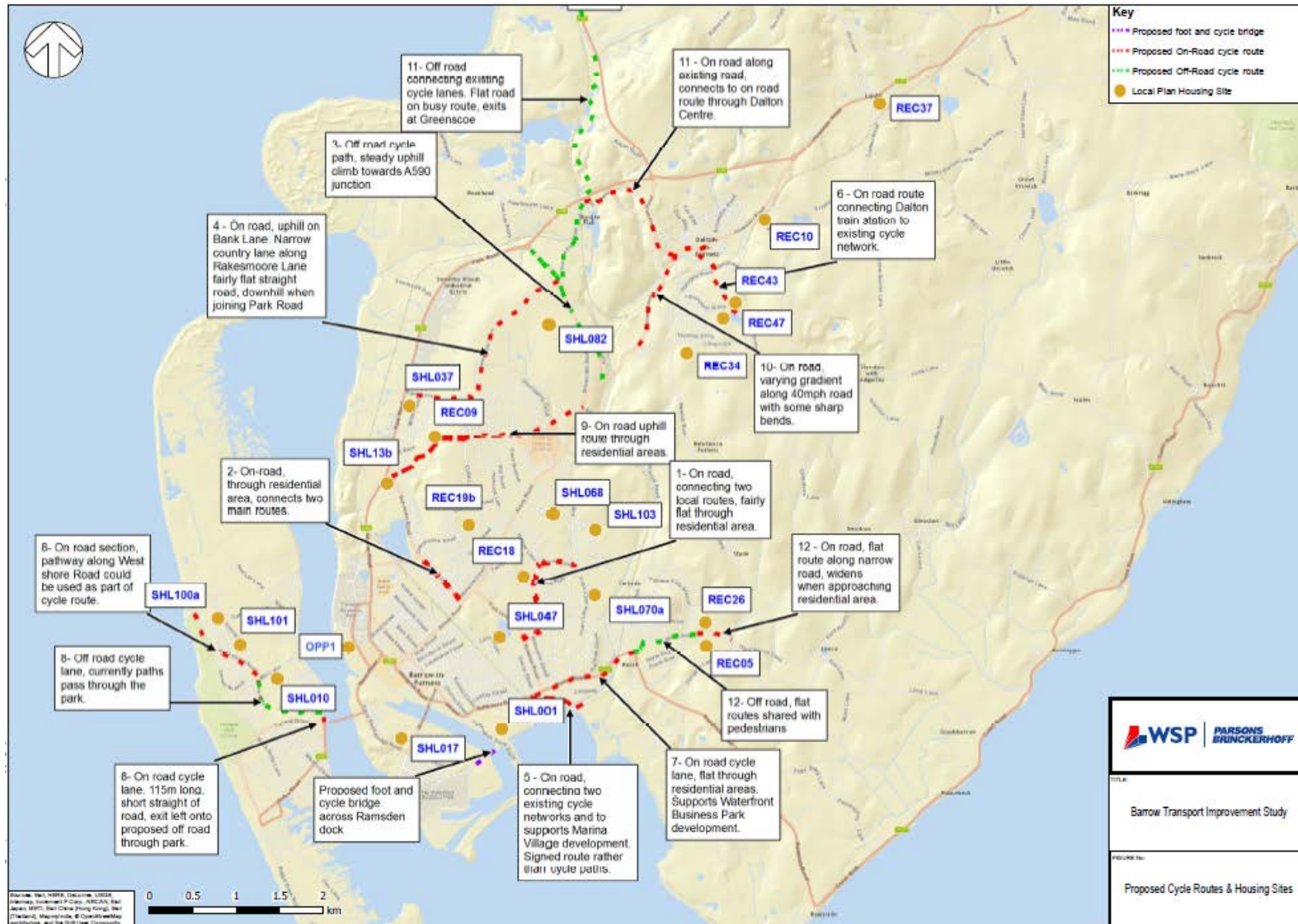
(Source: Barrow Borough Transport Improvement Study, Parsons Brickerhoff, August 2016)

PROPOSED LANE ID	LOCATION	TYPE	LENGTH (M) (APPROXIMATE)	ESTIMATED COST
1	Lesh Lane/Harrel Lane	On-road	1500	£21,600
2	Ainslie Street	On-road	750	£10,800
3	Park Road (East)	Off-road	1800	£360,000
4	Bank Lane/Rakesmoor Lane	On-road	2600	£37,440
5	Salthouse Road	On-road	650	£9,360
6	Greystone Lane/Station Road	On-road	1150	£16,560
7	Roose Road	On-road	1500	£21,600
8	Walney Island	On-road	1500	£21,600
		Off-road	700	£140,000
9	Dalton Lane/Ormsgill Lane	On-road	2500	£36,000
10	Barrow Road	On-road	2450	£35,280
11	Askam to Thwaite Flat	On-road	5000	£72,000
12	Leece Lane	On-Road	500	£7,200
		Off Road	500	£100,000
Total			23,100	£889,440

Map 6: Proposed Cycle Routes and Employment Sites
 (Source: Barrow Borough Transport Improvement Study, Parsons Brickerhoff, August 2016)



Map 7: Proposed Cycle Routes and Housing Sites
 (Source: Barrow Borough Transport Improvement Study, Parsons Brickerhoff, August 2016)



- 4.20 The Cumbria Cycling Strategy 2017-22 promotes cycling in the County and sets out measures to “make Cumbria the very best place to cycle in Britain both for recreation and everyday journeys.” Such measures include seeking funding to identify and develop multi user routes within the County’s main towns and identifying and providing attractive and safe cycling routes out of the main settlements into the wider countryside. It also includes setting up partnerships to support the implementation of the Strategy and attract further investment into cycling. There is potential for new cycling routes to be identified as the strategy starts to develop.

Paths and Cycle Routes

- 4.21 Below are the key paths and cycle routes that pass through the Borough, both existing and proposed.

Walney to Wear Route

- 4.22 National Route 70, which forms part of the National Cycle Work, passes through the Borough. This is the Walney to Wear route, which starts at Furness Golf Club on Walney Island, along Central Drive before crossing Walney Channel onto the coastal path, eventually joining Abbey Road through Barrow and then onto Manor Road past Furness Abbey and onto the country lanes into South Lakeland.

Bay Cycle Way

- 4.23 The Bay Cycle Way is a new route that improved 81 miles of relatively flat cycle routes along traffic-free paths and quiet lanes around Morecambe Bay. The route runs from Walney to Glasson and is part of the National Cycle Network as National Route 700. Development took place as part of the Morecambe Bay Partnership’s Coastal Communities funded 700 Days Scheme and their Heritage Lottery funded Headlands to Headspace Scheme.

National Route 70

- 4.24 Again, this forms part of the National Cycle Network. Upon completion, this route will start in Kendal and works its way around the Cumbrian coast via Barrow and Whitehaven and beyond. Within the Borough, only a short stretch fronting the Walney Channel has so far been implemented.

North West Coastal Trail

- 4.25 The North West Coastal Trail is a project that aims to create a continuous, multi-use trail running along the coast from Carlisle to Chester. When complete, the Trail will provide access for walkers, cyclists and, where practicable horse riders, and all-abilities access, for the North West’s residents, day visitors and tourists. Rather than creating a new path, the project seeks to link together existing coastal trails and improve access where necessary. Implementation of the Trail will involve a wide

range of national, regional, sub-regional and local partners, funders, businesses, communities, user groups, volunteers and other stakeholders.

England Coastal Path (Cumbria Coastal Way)

- 4.26 The route of the Cumbria Coastal Way passes along the coastline of the Borough. However, this will be upgraded and possibly rerouted in some sections so as to form part of the England Coastal Path, which will be rolled out over the plan period. The England Coastal Path will enable public access along England's entire open coast. The path is being created in sections, and work along the stretches around Walney Island and from Silecroft to Silverdale is currently in progress.
- 4.27 Work on the Walney section is slightly more advanced than the Silecroft to Silverdale section. The Walney section will start and finish at Jubilee Bridge and link with the section of the main coastal path that runs from Silecroft to Silverdale. There are not anticipated to be any significant infrastructure requirements on the Walney route, other than way markers. Any necessary infrastructure will be maintained by the County Council.

Local Rights of Way

- 4.28 The County Council's Rights of Way Improvement Plan (ROWIP) is designed to provide funding to parishes and community groups to develop and enhance the rights of way network in their areas. The Plan is currently out of date, therefore the County Council has developed a Countryside Access Strategy 2014-2019 (CAS) that incorporates the ROWIP. The CAS states that the County Council will identify and implement practical countryside access network improvements to provide a more effective resource for utility journeys and recreational activities.
- 4.29 As part of the Barrow Borough Local Plan Issues and Options consultation, the County Council provided a site by site assessment of the sites that the Council are considering for inclusion in the Local Plan. The assessment concluded that for each site the County Council require sufficient pedestrian / cycle links from the sites to adjacent streets.
- 4.30 The Local Plan Submission Draft includes a policy which states that development will need to provide direct and safe access to the existing footpath and cycle network. It adds that where this would require the provision of links beyond the development site, an appropriate planning obligation will be negotiated between the Planning Authority and the applicant. In terms of cycle routes, it states that development proposals located on, or adjacent to a proposed network of cycle routes, should incorporate the appropriate section of route and / or links to it.
- 4.31 In their response to the Local Plan Preferred Options consultation, the County Council identified the sites that are affected by public rights of way. These are listed below:
- SHL037 Land South of Ashley & Rock, Park Road, Barrow – Public

- OPP3 footpath No.601089 (Parrock Green) to consider
Salthouse Mills, Barrow – Public footpath No.601006 to consider.

It is also noted that a further three sites are affected by public rights of way:

- SHL005 Land at Crooklands Brow, Dalton – Public footpath Nos.602018
- SHL082 Land East of Rakesmoor Lane, Barrow – Public footpath
Nos.601094, 601102, 601093 and 601095
- REC025 Land at Greenhills Farm, Dalton – Public footpath Nos.602006
and 602004.

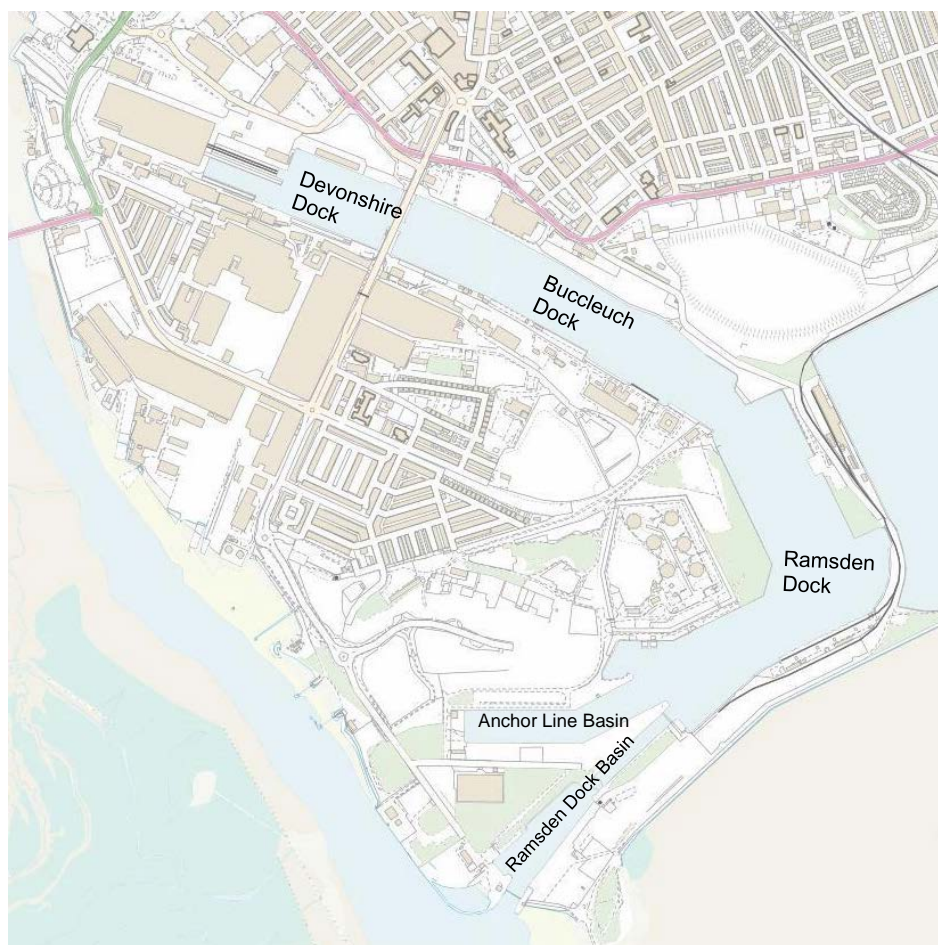
- 4.32 There is a statutory duty imposed under Section 130 of the Highways Act 1980 for the County Council to “*assert and protect the rights of the public to the use and enjoyment of,*” and “*prevent so far as possible, the unauthorised stopping up or obstruction of*” all these public rights of way. The aim is to ensure that all Public Rights of Way remain in a safe and usable condition.

Delivery

- 4.33 The Barrow Transport Improvement Study states that the walking and cycling schemes identified within the Study should be primarily be secured through developer funding mechanisms such as through Section 106 or 278 Agreements. Developer contributions could be used to fund the delivery of improvements to paths and cycle routes based on the proximity of the schemes to the development sites.
- 4.34 The Parking and Movement Study identifies a range of potential funding sources for the implementation of schemes within the study. More information can also be found in the Parking and Movement Study and in section 1 of this document.

5.0 Port of Barrow

- 5.1 The Port of Barrow is a key element in the operation of both the advanced manufacturing and energy sectors. The Port of Barrow comprises of Buccleuch Dock, Cavendish Dock, Devonshire Dock and Ramsden Dock, as well as associated port land located primarily to the north and south of Ramsden Dock (see Map 8 for the location of the docks).
- 5.2 The vital role the UK's ports play in local, regional and the national economies is recognised and supported in national policy. The National Policy Statement for Ports (NPSP), published in January 2012, recognises the “essential role of ports in the UK economy”, particularly in terms of freight and bulk movements, energy supplies and tourism and leisure, as well as the wider economic benefits associated with these. Paragraph 3.3.1 of the NPSP sets out the Government's policy for ports, including to:

Map 8: Port of Barrow – Docks

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“...allow judgments about when and where new developments might be proposed to be made on the basis of commercial factors by the port industry or port developers operating within a free market environment.”

- 5.3 Paragraph 3.4.16 of the NPSP sets out the Government’s belief that “there is a compelling need for substantial additional port capacity over the next 20–30 years, to be met by a combination of development already consented and development for which applications have yet to be received.”
- 5.4 The information set out below has been provided by BNP Paribas Real Estate, on behalf of the Association of British Ports. Their responses to the Local Plan show that there is demand at the Port for further port-related development.

BNP Paribas Real Estate, on behalf of the Association of British Ports, Oct 2016

Associated British Ports (ABP) is the UK’s leading port operator. The Port of Barrow land holding extends to approximately 56 ha, the majority of which is occupied by a number of port related operators on a leasehold basis, in addition to warehousing

and quay side occupied by ABP.

The role of the port as a short sea shipping port is expected to increase going forward.

The port is linked to the M6 by the A590 and also has a direct connection to the national rail network. Vehicular access to the land north of Ramsden Dock at the Port of Barrow is provided by Harding Rise / Ramsey Way which was improved as part of the Waterfront Business Park development.

Vehicular access to ABP's land to the south and east of Ramsden Dock via Cavendish Dock Road is, however, much inferior in comparison. ABP is keen to see the construction of a new road along the existing route as part of the Marina Village development, so as to help attract new investment by improving access to the southern and eastern areas of the Port of Barrow, the proposed Marina Village development and the other businesses accessed via Cavendish Dock Road.

The Port of Barrow is also expected to play an important role in the following projects going forward:

1. BAE System's proposed Successor nuclear submarine deterrent programme, including the following to facilitate the programme:
 - a) The import of materials and equipment through the port;
 - b) Short term lease agreements for overflow car parking and storage; and
 - c) Works to increase the depth of the water to in order to facilitate the movement of the new submarines.
2. The proposed new Moorside Nuclear Power Station adjacent to Sellafield, with materials and equipment expected to be imported via the port to facilitate construction.
3. National Grid's North West Coast Connections Project to service the proposed new Moorside Nuclear Power Station, with the importation of materials and equipment through the port anticipated in connection with National Grid's proposed route for new power cables at Morecambe Bay in connection with this project.
4. The handling of construction materials for the Walney 3 and 4 Offshore Wind Farms.

Notwithstanding the above, ABP's land holdings at the Port of Barrow were significantly reduced following the sale of port land in 2006 to facilitate the regeneration proposals set out in the Barrow Port AAP. More specifically, approximately 29.6 ha was sold to Cumbria County Council for the development of the Waterfront Business Park, with a further 7 ha sold to Barrow Borough Council to facilitate the Marina Village development proposals.

ABP excluded land which provided deep water access to the Walney Channel, as well as Ramsden Dock, from the 2006 sale, in order to accommodate future port related development at the Port of Barrow. Since 2006, however, there has been a significant increase in development at the Port of Barrow, particularly in connection

with the offshore wind farm developments in the Irish Sea e.g. Operations and Maintenance bases and Construction and Storage bases. This has resulted in land take up which is considerably more than anticipated at the time of the 2006 land sale, creating increased pressure in terms of accommodating future development needs on the land that remains at the Port of Barrow.

As a result of the above, demand for land at the Port of Barrow with direct deep water access to the Walney Channel (rather than through the Ramsden Dock entrance gates) has increased significantly, and is anticipated to continue to do so going forward. This is due to the 24/7 access provided to the Irish Sea, which is particularly important for Operations and Maintenance bases, in order to facilitate the unrestricted access necessary for the emergency repair and regular maintenance work required in connection with the off shore wind farms in the Irish Sea.

ABP state that the land at the Port of Barrow with existing, or the potential to create, direct deep water access to the Walney Channel is of increasing strategic importance. Much of the land at the Port of Barrow with existing direct deep water access to the Walney Channel has, however, now been developed, principally to provide Operations and Maintenance bases to serve the offshore wind farms.

Accordingly, ABP is currently exploring the development potential of all its remaining port land which offers direct deep water access to the Walney Channel. These principally relate to the following:

1. Deep water facilities to support large scale construction requirements.
2. Channel side pontoon facilities to support both servicing and commissioning, as well as the long term operation and maintenance requirements associated with the anticipated growth in the burgeoning offshore energy sector.

Therefore, ABP state that demand for the use and development of the land within the Port of Barrow for port and energy related uses is likely to remain high in the short, medium and potentially the longer term, particularly for the land fronting the Walney Channel.

Not foregoing this and subject to it's priority, ABP state that it is happy to work with the Council and other partners to investigate and evaluate the opportunity for a Marina Link to the Port over the longer term, subject to funding sources being identified and a scheme being physically and financially deliverable.

- 5.5 In light of the above, ABP requests that all of the land within ABP's ownership at the Port of Barrow is allocated in the Local Plan for port related use and development. In response, the Council proposes to address this issue in the forthcoming review of the Barrow Port Area Action Plan. The Port of Barrow provides significant employment for the area and the Barrow Port AAP seeks to ensure the ongoing operation of the port as an integral element of the regeneration of the port area. Currently policy BP8 of the AAP states that the ongoing operation and development of the commercial port as part of the mixed-use approach to the regeneration of the Action Plan Area will be supported by:

- 1) Ensuring development proposals do not impede the operational requirements or prejudice the economic viability of the port; and
 - 2) Protecting current and future port operations by safeguarding port related employment land, as identified on the Proposals Map (55.18 ha) for such uses.
- 5.6 The AAP states that a new Marina Link will be required to provide access for small leisure vessels into and out of the dock system in order to provide certainty of access and avoid potential conflicts with the operational elements of the port. The proposed site for this third element of the development is located between Walney Channel and Anchor Line Basin on Barrow Island. As stated above, the development of a marina link would be subject to funding sources being identified and a scheme being physically and financially deliverable.
- 5.7 The AAP also makes reference to the port being in an ideal location for easy access to the Lake District National Park and there is a berth available to accommodate vessels up to 160 m length. There are currently no regular passenger services that operate from the port.

Delivery

- 5.8 A new access road along Cavendish Dock Road is required to service Marina Village. It is expected that this road will be constructed alongside (or before) the development of Marina Village. New berths at the port are expected to be delivered privately.

6.0 Electricity

Electricity Transmission

- 6.1 National Grid is the operator of the high voltage electricity transmission system for Great Britain and its offshore waters. It is also the owner of the high voltage transmission system in England and Wales. National Grid is required to provide an efficient, economic and co-ordinated transmission system. Currently, there are no high voltage electricity transmission lines within Barrow, although this is expected to change with the delivery of the North West Coast Connections project.
- 6.2 It is not anticipated that extra growth within Barrow will have a significant effect upon National Grid's electricity transmission infrastructure, given the scale of the electricity transmission network and allowing for the future upgrading of the network, and no issues have been raised by National Grid in this regard.
- 6.3 National Grid have provided comments on the proposed sites that cross or are in close proximity to National Grid infrastructure. Site SHL001 (Marina Village) is

crossed by a National Grid intermediate pressure pipeline. National Grid requires that no permanent structures are built over or under the pipeline.

North West Coast Connections Project

- 6.4 NuGen are proposing a new nuclear power plant at Moorside next to Sellafield (in the neighbouring Borough of Copeland). National Grid is developing the North West Coast Connections Project (NWCC) to connect Moorside into the existing transmission network. This project also includes the connection of power generated by other new energy projects in the North West. The project will decide how and where these new connections are made.
- 6.5 As shown in Map 9, Moorside is isolated from the electricity transmission network, which runs alongside the M6 Motorway. There are existing pylon lines⁷ around the coast of Cumbria and Lancashire that connect to the transmission network. However, these are 'distribution' lines that operate at 132kV and below and therefore cannot carry the amount of electricity a power station the size of Moorside will generate.
- 6.6 This means that National Grid need to build a new high voltage connection from Moorside to the existing national electricity transmission network. National Grid have identified a need to build four 400kV transmission circuits, or two double circuits, to connect Moorside.
- 6.7 After studying various paths, or route corridors, going north and south where the new connection could be built, along with extensive consultation, National Grid have decided to go ahead with plans for a new connection that will take the following route corridor, made up of two parts:
- A route going north from Moorside to a point on the existing grid network at Harker substation, near Carlisle; and
 - A route going south from Moorside across the Furness peninsula then under Morecambe Bay to connect in at a point on the existing grid network at Middleton substation near Heysham in Lancashire.
- 6.8 The route corridor that National Grid have decided to progress will, in the main, follow the path of existing pylon lines owned and operated by Electricity North West. The chosen route is shown on Map 10 and more detailed maps can be found on the North West Coast Connections project website. The route runs across the Furness peninsula to Roosecote, before tunnelling underground at Roosecote and under Morecambe Bay to connect in at a point on the existing grid network at Middleton substation near Heysham in Lancashire.
- 6.9 To transfer the overhead lines to underground cables before the connection goes through the tunnel, a new 400kV substation is proposed at Roosecote. This substation will also maintain local electricity supplies when National Grid remove existing Electricity North West pylons. As part of the project, an existing substation

⁷ These are Electricity North West distribution lines.

at Sandgate, near Salthouse Road will need replacing with new equipment to make sure it continues to provide resilience to the system in the event of a fault.

Map 9: The Existing Electricity Transmission Network
 (Source: North West Coast Connections – Public Consultation 2014 Information Booklet)



Map 10: Chosen Route Corridor

(Source: North West Coast Connections website www.northwestcoastconnection.com)



- 6.10 National Grid is working in partnership with various stakeholders as the project develops. These include Britain's Energy Coast, Electricity North West, Local Authorities, SLR and Hetherington Nuclear Consulting. It was anticipated that a planning application would be submitted to the Planning Inspectorate in 2017, with construction work starting in 2019. However, the project is currently delayed (see paragraph 6.12).
- 6.11 The total cost of building the proposed connection is around £2.8 billion, and would mainly be paid for through the electricity bill payer. The project aligns with the wider masterplan for Britain's Energy Coast, which is a package of regeneration projects that aims to establish West Cumbria as a major national hub for low carbon and renewable energy generation.

Project Delay

- 6.12 In 2017, NuGen announced that it is conducting a strategic review as a result of financial issues affecting Toshiba (who are the owners of NuGen), and are therefore pausing work on their development consent order for Moorside. In light of this, National Grid has also decided to pause work so as to understand NuGen's programme and make sure their (National Grid and NuGen) projects are aligned. National Grid have stated that despite the pause, they are confident that the connection will still be ready when NuGen requires it and are continuing to work closely with them.⁸

Centrica

- 6.13 Centrica are planning to develop two types of facility which will work to provide back up to the electricity grid and help ensure a consistent energy supply for the local area:
- 1) The first proposal is to build a new gas-fired plant on the site of the former Roosecote plant that was demolished in 2015. This plant would be capable of producing just under 50MW which is enough electricity to meet the needs of 50,000 homes.
 - 2) The second proposal is to build an energy storage unit to store up to 44MWh of power and be able to start returning this to the local network in less than a second to ensure energy demand is met.
- 6.14 Centrica have stated that due to the intermittent nature of renewable energy and the phasing out of older, coal-fired power stations, there is a growing need for new energy solutions that can respond quickly to local demand and help make sure the electricity grid stays balanced. The new plant will complement the existing electricity network in the area by providing fast response capabilities to support the network.⁹

⁸ Source: North West Coast Connections website www.northwestcoastconnection.com

⁹ Source: "Our Plans for the Roosecote Power Station Site," Centrica, April 2016

Electricity Distribution

- 6.15 Electricity North West (ENW) owns, operates and maintains the North West's electricity distribution network, connecting 2.4 million properties and more than 5 million people in the region to the National Grid. This includes the overhead lines and underground cables that transport power to the region's homes and businesses.¹⁰ ENW have set out a business plan for the period 2015-2023, and this shows that ENW are investing £2.6bn in the local power network during this period, with the cost mainly being spread across ENW's customers.
- 6.16 In the Furness area, ENW will need to upgrade or replace some of their assets as part of the North West Coast Connections (NWCC) project. Their earlier estimate is that around 45% of the £207m estimated cost will be funded by ENW's customers, with the remainder being charged to National Grid.¹¹ The NWCC Project Information Booklet 2016/17 quotes a figure of approximately £465m to reconfigure or remove parts of ENW's distribution network.
- 6.17 ENW has stated that they can advise whether any network reinforcement will be required once details of the specific site requirements are known. In the meantime, they have stated that the sites proposed in the Local Plan do not indicate any significant power requirements. Table 13 shows that the higher voltage substations in the area are generally not currently operating close to capacity, although Askam substation is operating at 80% capacity.

Table 13: Utilisation of Higher Voltage Substations¹²

Substation	Category	Current substation firm capacity under single circuit outage conditions	Substation current maximum demand	Substation current maximum demand as % of substation firm capacity
Substation Name	Voltage	MVA	MVA	%
Barrow and Sandgate	132kV – EHV	128.0	81.7	63.8%
Askam	EHV – HV	12.0	9.6	80.3%
Dalton	EHV – HV	12.0	8.6	71.4%
Barrow	EHV – HV	17.5	10.7	60.9%
Ulverston	EHV – HV	17.5	9.1	52.2%
Ulverston	132kV – EHV	78.0	41.1	52.8%

¹⁰ Source: www.enw.co.uk

¹¹ Source: Well Justified Business Plan 2015-2023, Electricity North West, March 2014

¹² Information obtained from Electricity North West, January 2015

Delivery

- 6.18 In terms of connecting the development proposed in the Local Plan to the electricity network, details would normally be established at the planning application stage. As stated above, the NWCC project is being delivered by National Grid in partnership with a number of stakeholders.

7.0 Gas

Gas Transmission

- 7.1 National Grid owns and operates the high pressure gas transmission system in England, Scotland and Wales. There are two high pressure gas transmission pipelines within Barrow, the first is situated north of Askam, which connects eastwards to a second pipeline that runs south to Rampside Gas Terminal. To view the precise location of these pipelines, see the National Grid website at <http://www2.nationalgrid.com/uk/services/land-and-development/planning-authority/>. Any proposed crossing of a National Transmission System pipeline by road, railway, runway or buildings may result in the pipeline needing to be diverted. Therefore, wherever possible new development should avoid crossing such pipelines.¹³
- 7.2 Gas is delivered to nine reception points in Britain, one of which is Rampside Gas Terminal. After the gas is treated, the gas is transported around the country through the national transmission system, which is the high pressure part of National Grid's pipeline network. There are eight distribution networks that operate pipes at lower pressures which supply end consumers, including domestic customers (see 'Gas Distribution' below).¹⁴
- 7.3 It is not anticipated that extra growth within Barrow will have a significant effect upon National Grid's gas transmission infrastructure, given the scale of the gas transmission network, and no issues have been raised by National Grid in this regard.

Centrica

- 7.4 Centrica plc owns and operates significant assets in the Barrow area, namely the Barrow Gas Terminals north of Rampside. The terminals are split into three terminals:
1. The South Terminal which processes gas from the South Morecambe field (now decommissioned).

¹³ Source: www.nationalgrid.com

¹⁴ Source: www.nationalgrid.com

2. The North Terminal which processes gas from the North Morecambe field.
 3. The Rivers Terminal, which Centrica Energy operates for ConocoPhillips. It processes gas from the Calder field from where it is transported to the terminal via the Calder platform.
- 7.5 Centrica has invested £84m on a new pipeline project at Rampside Gas Terminals, in order to deliver a 1.1km 36inch underground pipe to connect the south terminal to the north terminal. The new pipeline is needed because of European Union legislation, which will prohibit the sale of Freon (refrigerant) from the end of 2014. Freon is used to cool the gas piped to the south terminal as part of the process to clean it before it can be pumped into the National Grid. Now complete, all gas produced offshore at the Morecambe fields will be processed by the north terminal before going into the National Grid's gas transmission system.¹⁵

Gas Distribution

- 7.6 Gas leaves the National Transmission System at 49 points across the UK, where it is transported at lower pressure in the distribution networks for final delivery to consumers. There are eight regional distribution networks in the UK, four owned by National Grid and four by other companies.¹⁶
- 7.7 National Grid Gas Distribution (NGGD) owns and operates the local gas distribution network in Barrow. Within the gas distribution system there are sections that operate at different pressures. Generally, the closer the gas gets to a customer, the smaller the pipe diameter and the lower the pressure.
- 7.8 When NGGD quote any connections to the gas distribution network, the quote is valid for 90 days and the connections are assessed on a 'first past the post' basis. This means that capacity available today will potentially not be there tomorrow and due to the long term nature of the Local Plan, the information that NGGD would be able to provide regarding current available capacity would be out of date by the time any development details were finalised.
- 7.9 In consideration of the sites included in the Local Plan Issues and Options consultation draft, NGGD stated that over the long term there is likely to be "no show stoppers", as development can generally be managed and completed with the right timing. However, NGGD state that the cumulative effect of a large number of loads could possibly overload the upstream systems and these reinforcements can cause delays in "gas on dates".
- 7.10 All of the proposed sites are either within or adjacent to existing settlements. The gas maps provided by NGGD indicate that there will not be significant problems in accessing gas for each of the housing, employment and opportunity sites in terms of

¹⁵ Source: www.centrica.com

¹⁶ Source: www.nationalgrid.com

proximity. The potential exception to this is site OPP2 (Former Golf Driving Range, Barrow) which is c.270m from a gas main and will require a connection.

- 7.11 NGGD envisages that any reinforcement projects identified will be delivered in a timely manner, subject to specific engineering difficulties. This could affect the phasing of the delivery of the sites.
- 7.12 In December 2016 NGGD conducted a final high level analysis of the network. This showed that at that point in time, network reinforcement would be required for the following sites:
- REC10 Land to West of Crooklands Brow, Dalton
 - EMR11 Ulverston Road, Dalton
 - EMR12 Land at Billings Road, Dalton
- 7.13 NGGD again stated that their gas networks are dynamic and that the capacity that is available today may not be available when official connection requests are received, meaning reinforcement may still be required.

Delivery

- 7.14 Regarding funding sources, if a new connection to the system triggers a requirement for NGGD to reinforce the network, an economic test is carried out to calculate the level of customer contribution, if required at all. Details of connection requirements would be established at the planning application stage.

8.0 Telecommunications

- 8.1 Telecommunications form a vital component of economic competitiveness, emergency response and recovery and quality of life. Demand for telecommunications infrastructure is expected to grow in line with housing and employment growth over the Local Plan period.

Mobile Operators

- 8.2 It is recognised that telecommunications plays a vital role in both the economic and social fabric of communities. The Mobile Operators Association (MOA) represents the four UK mobile network operators – 3, Telefonica (O2), EE (formerly Orange & T-Mobile) and Vodafone – on radio frequency, health and safety and associated town planning issues.
- 8.3 The mobile operators understand the Council's desire to plan for future infrastructure requirements to support future development in the Local Plan. The MOA have stated that it is not possible for any operator to give a clear indication of what their infrastructure requirements are likely to be in 5, 10, 15 or 20 years time. The

technology is continually evolving and ways of improving quality of coverage and/or network capacity may change in the future.

Superfast Broadband

- 8.4 Cumbria County Council and BT are rolling-out Superfast Broadband across the County between 2013 and 2018 as part of the Connecting Cumbria project. Superfast Broadband is defined as access to speeds of at least 25 megabits per second (Mbps). Superfast Broadband brings many benefits, including easier and more efficient ways to do business, better communications, different ways of receiving public services, being able to work from home or access education, and more online shopping and entertainment options. In order to address the barriers to isolation, a robust broadband system is recognised by the LEP and local partners as the most important intervention required to improve connectivity. The aspiration is that 95% of homes and businesses in the County will be able to access superfast broadband by mid-2018.

Delivery

- 8.5 The value of the contract between Cumbria County Council and BT is £51m. BT is contributing £15m to the Connecting Cumbria project with £17.1m coming from Broadband Development UK (BDUK), £13.7m from the European Regional Development Fund (ERDF) and £5m through the Performance Reward Grant (PRG) from all councils in Cumbria. On top of this, additional ERDF and PRG funding will contribute to the roll-out and marketing of fibre broadband in Cumbria.¹⁷

9.0 Renewable and Low Carbon Energy

- 9.1 The Cumbria Renewable Energy Capacity and Deployment Study (2011) provides a comprehensive evidence base for renewable energy in Cumbria and its districts. The study shows that Barrow has the deployable resource potential of 191.9 MW by 2030, the equivalent of 4% of Cumbria's deployable potential. In terms of wind energy, the study shows that Barrow has a total deployable potential of 20.9 MW by 2030, which is 10.9% of the Borough's total renewable potential.
- 9.2 There are no specific requirements for renewable and low carbon energy generation to support the delivery of the Local Plan. However, in order to contribute towards the government's energy targets the Local Plan will have an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable. The Cumbria Wind Energy SPG (2007) and the Cumbria Renewable Energy Capacity and Deployment Study (2011) are important

¹⁷ Source: Cumbria County Council

evidence documents to inform renewable energy policies and decisions in the Borough.

- 9.3 The Local Plan Submission Draft includes a policy that would assess renewable energy proposals against specific criteria that would include mitigating negative impacts on local amenity and ensuring that proposals can be accommodated within the landscape and do not have an unacceptable impact on nature conservation and biodiversity.
- 9.4 There is demand for land at the Port of Barrow for further development, particularly land with direct access to Walney Channel to accommodate operation and maintenance bases for offshore windfarms. See Section 5 for further information.

10.0 Wastewater, Drainage and Water Supply

- 10.1 United Utilities PLC (UU) has a statutory duty to ensure that adequate water treatment infrastructure is provided to meet the requirements of new development, and also to develop and maintain an efficient and economical system of water supply.
- 10.2 Cumbria County Council as the Lead Local Flood Authority (LLFA) has responsibilities under the Flood and Water Management Act 2010 to manage risk from localised flooding. The Environment Agency has regulatory powers to manage flood risk from Main Rivers whilst similar powers are afforded to LLFAs to manage flood risk from surface water, Ordinary Watercourses (Non-Main River) and groundwater.

Wastewater

Bathing Water Quality

- 10.3 The quality of the bathing waters in the County is regularly monitored by the Environment Agency. There are three bathing waters along the Barrow coastline, and the quality of these waters is a significant factor in improving the visitor economy. If bathing waters at the beaches do not meet the minimum standards set by the Directive, the Environment Agency will investigate the source of pollution and recommend remedial measures.
- 10.4 Since 2015, bathing waters have needed to meet the standards set out in the revised Bathing Water Directive (2006). These standards are approximately twice as strict as those set out previously. There are certain scenarios where the risk of failing the standards is increased, such as after a surge of heavy rainfall when, for example, surface water run off from agricultural land or overflows from sewer outfalls can pollute the bathing waters. It should be noted that there are also other factors that can contribute towards a decline in bathing water quality.

10.5 Barrow’s three designated bathing waters are situated along the west coast of Walney Island. These bathing waters met the higher bathing water standards in 2013, 2014, 2015 and 2016 (i.e. the quality was “sufficient” or better). However, Fig 1 shows that in 2012, the bathing waters did not meet the higher standards.

Fig 1: Bathing water quality in Barrow over five years
(Source: Environment Agency)

	2012	2013	2014	2015	2016
Walney West Shore	●	●	●	●	●
Walney Sandy Gap	●	●	●	●	●
Walney Biggar Bank	●	●	●	●	●



10.6 UU sewer outfalls are not located on the west coast of Walney, therefore there are no direct impacts from UU’s assets on bathing water in this area. In the wider area, UU have been undertaking major works to improve water quality in the Kent Channel Estuary, Duddon Estuary and for bathing waters in Morecambe Bay, and this work will subsequently have positive effects for the quality of the bathing waters at Walney. The works include:

- New underground storm tanks and pumping stations at Grange and Arnside
- Four new storage tanks at the WwTW at Roose, Barrow
- Installation of ultra-violet bacteria-killing equipment at Millom’s wastewater treatment works, in addition to a new 1.25km pipeline and new pumps.¹⁸

¹⁸ Source: United Utilities

- 10.7 Also, United Utilities have recently completed the Walney Channel Pipeline. This work involved replacement and re-alignment of the existing sewage outfall pipe so that rare eelgrass beds in the channel are protected. The new pipe is longer so that storm spills do not empty onto eelgrass habitats, which were considered to be adversely affected by the discharge. The Environment Agency estimates that 1-2 km² of habitat will be improved.

United Utilities' Assets and Future Development

- 10.8 Every five years water sewerage companies assemble and submit a business case for capital investment to the regulator Ofwat for approval. The outcome defines what, where and when capital investment is undertaken over those five years. The current five year capital investment programme, known as the Asset Management Plan, runs from 1 April 2015 to 31 March 2020. Therefore, any major infrastructure works required to deliver the Local Plan will need to be included in the Business Plan for 2020-2025 or beyond.
- 10.9 To inform the business case for the next Asset Management Plan (AMP7), UU will assemble a business case to submit to Ofwat by identifying future supply and demand needs across the North West in relation to water supply and wastewater. However, UU cannot guarantee Ofwat will support and / or approve UU's business case.
- 10.10 UU have stated that new development proposed in the Local Plan is unlikely to significantly impact on UU assets if development takes place according to the surface water hierarchy set out in the National Planning Practice Guidance. UU have also drawn the Council to the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) which provides further guidance on sustainable drainage. It is essential that there are suitable connections to the sewer network, and pre-application dialogue with UU and the LLFA will be needed for all sites.
- 10.11 UU have stated that a fuller understanding of the impact on water and wastewater infrastructure can only be achieved once more details are known, such as the timescales for development, the approach to surface water management and the chosen points of connection. Therefore, it is not possible to fully understand the impact of development on UU's infrastructure at the development plan stage as there is an absence of information that would normally only be available at the application stage and in some circumstances even later. As a result, investment usually follows development, which can cause operational issues with UU's assets.
- 10.12 As the Asset Management Plan is set over a five year period and the development plan covers a 15 year period, it is a challenge for UU to determine the priorities for investment arising from growth in each five year period. For example, UU have stated that it would not be appropriate to make early commitments to all the investment required as a result the growth identified in all development plans which are currently being brought forward in every local authority area in the North West.

- 10.13 It may be necessary to coordinate the delivery of development with the timing for delivery of infrastructure improvements. UU suggest that this should be included as a detailed development management policy and have advised on an appropriate wording for the Local Plan. Also, UU have stated that it can be a challenge to deliver infrastructure to support new development when multiple landowners are involved. UU would prefer to see a mechanism in the Local Plan which would require developers to work together to enable the co-ordinated delivery on infrastructure on sites in fragmented ownership to ensure coordinated delivery of the most sustainable form of development. If there are any sites in multiple ownership, UU recommend that the Council seeks to secure a clear agreement with landowners in such circumstances before allocation.
- 10.14 UU have stated that there is unlikely to be a need for major infrastructure upgrades to support the level of growth proposed in the Local Plan. On site infrastructure, such as new pumping stations, would normally be provided by the developer. UU request that the system at a new development is a separate system, which means that there is a separate sewer system for wastewater and another for surface water. This would then connect to the main system, which for most of the Borough is a combined system.
- 10.15 The sections below review the key issues with the wastewater system and future proposed development in the Local Plan by settlement.

Barrow

- 10.16 Barrow WwTW is close to capacity and investment could take place during AMP7 (2020-2025). The largest housing site in Barrow is site SHL001 (Marina Village) and developers here may expect to connect to the system along Salthouse Road. There are occasional issues at the storm pumping station at Frederick Street, adjacent to Salthouse Road, and UU have stated that development on the proposed Marina Village site could put more pressure on this pumping station. UU would prefer the Marina Village development to connect into the rising main combined sewer from Walney, although this would need to be investigated further by UU. There will also be a need for a new pumping station at Marina Village. The Council are advised to work closely with UU at an early stage in the planning process, from when developer interest is shown in the Marina Village site.
- 10.17 The sewer network at Walney was implemented in the late 1990s, and is mostly a combined system. There is a sewer outfall at The Ferry (public house) on Walney, however there is no outfall at Mill Lane and this sometimes results in surface water flooding in this area. The running track at Park Vale is a primary source of excessive flows into the system.

Dalton

- 10.18 Dalton was re-sewered in the mid-1980s and is mainly a combined system. Wastewater is treated at Barrow WwTW. There are some issues with pipe size and condition in parts of south Dalton.

10.19 In 2012, the sewers flooded in south Dalton during sudden a period of exceptional heavy rainfall. The flooding was due to the volume of surface entering the system rather than the condition of the sewers. The sewers are not designed for this level of extreme flood event.

Askam WwTW

10.20 Much of the system at Askam and Ireleth is combined. This area also benefits from a wastewater treatment works (WwTW), which is situated north of Askam. UU are aware of coastal erosion taking place in this area, however they have concluded that there is no immediate threat to the WwTW. Therefore, there are no works currently planned by UU to address this issue. UU stated that any works that they would undertake to protect the WwTW from coastal erosion in the future would solely be limited to the WwTW and associated infrastructure, as coastal erosion is the responsibility of the Environment Agency.

10.21 The WwTW is in a poor condition and is susceptible to surface water and coastal flooding. There is also some concern about the threat of infrastructure collapsing into Blea Beck, which could potentially make flooding worse. Works to improve the condition of the WwTW and to mitigate against flood risk will form part of a maintenance programme by UU. The timescale and details of works required are yet to be confirmed. Again, works undertaken by UU will be limited to the WwTW and associated infrastructure.

10.22 The WwTW is close to capacity and will require upgrading to accommodate the development of the housing site allocations proposed in the Barrow Local Plan Submission Draft. UU have stated that until developer interest is shown in the sites, they will not assess what enhancement works are required to the WwTW to accommodate development. This is so that UU do not upgrade the WwTW to accommodate development that does not take place. This issue will not prevent development from taking place, as there is some spare capacity in the system.

Other Areas

10.23 The other villages in the Borough are mainly served by combined systems. UU is aware of the rural nature of some parts of the Borough and would prefer growth to take place which is proportional to the size of the settlements. The infrastructure in small villages, in particular, can be sensitive.

10.24 UU's infrastructure is in place on Barrow Island to support BAE expansion, including development at Waterfront Business Park. When development takes place, UU will be able to adopt the sewers in this location.

Odour

10.25 The proposed Opportunity Site at Salthouse Mills (ref OPP3) is situated adjacent to Barrow Wastewater Treatment Works (WwTW). The Barrow Port AAP highlights the

issue of odour in this area and requires an extensive landscaped area to act as a buffer to the WwTW. UU highlight the importance of ensuring that the redevelopment of this site is brought forward in a manner which minimises the potential for future residents to be impacted by odour.

Surface Water and Drainage

- 10.26 Most of the larger roads in the County and those in urban areas have drainage systems, with road gullies catching the water and pipes carrying the water away to watercourses or soakaways. On most minor rural roads there is little formal drainage, and the water is allowed to run onto the verges, or sometimes into roadside ditches through channels. These drainage systems are intended to provide a drainage facility for public highway areas and not for adjacent private land.
- 10.27 Flooding is a problem at certain locations, often where there is no formal drainage system in place. However, there can also be other sources of flooding, such as when gully gratings get blocked with refuse such as plastic bags. Surface water flooding can also occur after heavy rainfall, where the drainage systems become overwhelmed by the sudden volume of water and / or the ground cannot soak up the rainwater quickly enough due to the intensity of the rainfall.
- 10.28 Surface water run-off can pollute water bodies, particularly where the run-off is from agricultural or contaminated land. In addition, the amount of surface water that enters the sewer network during sudden heavy rainfall can potentially cause wastewater spillages into the estuaries and the sea.

Surface Water and the Sewerage System

- 10.29 UU have requested that the Local Plan includes a policy that sets out the surface water hierarchy, with connection to a public sewer being the last resort. If surface water discharge to a sewer is necessary, attenuation is critically important. The first preference would be an infiltration system, although on the basis that the Borough is largely clay, UU state that it would be helpful to identify sites situated near to watercourses so that surface water from new development can be discharged directly into watercourses. This is particularly important in Barrow as many of the foul and surface water sewers drain into the wastewater treatment works.
- 10.30 UU encourage the Council to consider the availability of alternatives to the public sewerage system for surface water discharges when identifying the preferred sites for development. For example, sites with land drains or near to watercourses are a more sustainable alternative to the public sewer. Building Regulation H3 clearly outlines the hierarchy to be investigated by the developer when considering a surface water drainage strategy.
- 10.31 New developments should be designed so as not to have any detrimental impacts upon UU's assets and the environment. UU have limited powers under the Water Industry Act, therefore the Council must carefully consider the foul and surface water

proposals within new schemes. Where a developer is unable to provide prior details the Planning Authority has the option of imposing effective conditions to ensure that these elements are managed effectively.

10.32 In consultation with UU and the LLFA, policy C3a of the Local Plan Submission Draft requires new development to discharge surface water in the following order of priority:

- i. An adequate soak away or some other adequate infiltration system.
- ii. An attenuated discharge to a surface water body such as a watercourse.
- iii. An attenuated discharge to a public surface water sewer, highway drain or another drainage system.
- iv. An attenuated discharge to public combined sewer.

Local Plan Sites at Risk of Surface Water Flooding

10.33 Some of the sites proposed in the Local Plan Submission Draft are susceptible to surface water flooding. The key issues are summarised below, by settlement. Although much of the Borough is underlain by boulder clay, sustainable drainage is still possible such as through storing water then slowly releasing it. Effective sustainable drainage at each site should be considered on a site by site basis, as the method used will depend on several circumstances including ground conditions and the topography of the site.

Barrow

- 10.34 Larger areas of surface water flood risk in Barrow tend to be along corridors e.g. along Rating Lane and Flass Lane southwards toward Broadway. There are occasional issues at the storm pumping station at Frederick Street, adjacent to Salthouse Road, and this area has a particular surface water flooding problem. UU have stated that development on the proposed Marina Village site (SHL001) could put more pressure on this pumping station.
- 10.35 Some of the proposed sites in the forthcoming Local Plan contain areas that are at risk of surface water flooding. For example, there are some surface water concerns at the proposed Marina Village site. The obvious drainage outlet would be into the docks, although there are questions over whether the Council has the right to do this. A linear surface water feature runs through SHL068 to the West of Stoneleigh Close and the County Council advise that development should restore and enhance any such waterbody to reduce flood risk. There is a known flooding problem at Rating Lane which may be linked to this surface water feature.
- 10.36 Near the town centre, a corridor of risk runs through site SHL017 at Arthur Street and another corridor runs through site OPP5 at the former Kwik Save premises on Holker Street. In other areas, a watercourse runs through the South Eastern corner of site

SHL082, part of which runs parallel to Glenridding Drive. There are subsequent flooding issues in the vicinity of this watercourse.

Walney

10.37 The surface water dataset included in the SFRA does not include Walney Island. However, it is known that Park Vale has a history of surface water flooding and there is a high infiltration of surface water into the sewer network in this area. Other areas at risk include the area around the junction of Cows Tarn Lane (East of) / Solway Drive.

Dalton

10.38 There are surface water flooding issues in Dalton. In particular, part of the town centre is susceptible to surface water flooding. In terms of the development sites, there is an area of susceptibility to the West of Newton Road from Green Lane through to the South of Barnes Avenue. This then drains through site REC34 onto the field South of Long Lane. There is an area susceptible to surface water flooding along Greystone Lane close to site REC25a. A corridor of surface water flood risk passes through site REC10 into Dalton before heading South West through Lord Street.

Askam

10.39 There are significant surface water flooding problems at Askam. Much of the open land North of Askam is susceptible to surface water flooding. This risk continues into Askam, with part of site REC01 at Saves Lane being at risk, most of site REC02 on Duke Street and part of site REC03 on Lots Road. Part of site SHL017 at the Urofoam factory is also at risk, although this is already a brownfield site.

Newton

10.40 A large area across and to the south of Newton Cross Road is susceptible to surface water flooding and Newton Village Hall has a history of flooding.

Role of the Lead Local Flood Authority

10.41 The County Council works closely with Barrow Borough Council to ensure a strategic approach is adopted for considering local flood risk at all stages of development of the Local Plan. There is a considerable amount of detailed and sophisticated information available to Flood Risk Management Authorities (RMAs) to assist with steering development away from areas of high flood risk.

10.42 In addition to consultation at a strategic level, since April 2015, Cumbria Lead Local Flood Authority (LLFA) has become a Statutory Consultee on planning applications for major development. Under these arrangements, in considering planning applications, Barrow Borough Council as local planning authority is required to consult Cumbria LLFA on the management of surface water; satisfy themselves that the proposed minimum standards of operation are appropriate and ensure through

the use of planning conditions or planning obligations that there are clear arrangements in place for ongoing maintenance over the lifetime of the development.

- 10.43 Where localised flooding occurs and results in the internal flooding of properties, the County Council as LLFA has responsibility to investigate the causes of flooding. Working with other RMAs such as United Utilities, the Environment Agency, Barrow Borough Council and the County Council's Area Highways Team, local flood risk officers from the County Council manage the Barrow Making Space for Water Group (MSfWG). This shared operational input seeks to resolve localised flooding as expediently as possible by the resources available from the partners on the Group. Persistent flooding in any location is identified as a flood 'hotspot' and options for resolving it and funding pathways are developed by the MSfWG. Flood investigation reports produced by the LLFA are useful tools to gain community support for flood defence options and raise awareness for opportunities for flood resilience.
- 10.44 Flood defence schemes proposed by the MSfWG are managed by the Cumbria LLFA Working Group. Senior managers from all of the RMAs working in Cumbria participate in this group which prioritises viable local flood risk schemes identified by the six MSfWGs in Cumbria. Barrow Borough Council Environmental Health officers participate in this Group which recommends programmes of work to be promoted by the Cumbria LLFA Strategic Partnership. Schemes demonstrating a strong business case position are entered on to the Environment Agency 6-year Investment Programme.
- 10.45 The County Council as LLFA is responsible for developing a Local Flood Risk Management Strategy to set-out how it will carry out its duties under the FWMA 2010. The Council's Strategy was published in March 2010 and can be found on the County Council's website.¹⁹ Annex A of the Strategy gives more details on the role of the Making Space for Water Groups and Annex D provides a Strategy Action Plan which summarises the Environment Agency 6-year Investment Programme for Cumbria, listing the schemes in the Barrow area.

Water Supply

- 10.46 UU has a statutory duty to develop and maintain an efficient and economical system of water supply in the North West. It also has a statutory duty to ensure that adequate water treatment infrastructure is provided to meet the requirements of new development. The source of water supply in Barrow is principally from local reservoirs and is treated at Ulpha water treatment works. There is currently considered to be sufficient capacity to accommodate new development as proposed in the Local Plan in the Borough and United Utilities have stated that there are no known issues.
- 10.47 UU produce a Water Resources Management Plan, which is updated every five years. Work is taking place at Ulpha treatment works under the current plan. This

¹⁹ http://www.cumbria.gov.uk/planning-environment/flooding/Local_Flood_Risk_Management_Strategy.asp

document is currently being revised and this will consider the sites proposed in the Local Plan as part of the update.

Delivery

- 10.48 UU usually invest in their infrastructure after development takes place, so as to prevent investment taking place to support a proposed development that never comes to fruition. On site infrastructure, such as new pumping stations, would normally be provided by the developer. Connection to the wastewater and water supply network would also normally undertaken by the developer, in consultation with UU. However, specific requirements will not be known until the planning application stage at which point more details will be known e.g. number of properties and points of connection.
- 10.49 SuDS would be provided by the developer. The Council is required to consult the LLFA on the applicant's proposals for the management of surface water. The LLFA will inform the Council whether the proposed minimum standards of operation are appropriate and ensure through the use of planning conditions or planning obligations that there are clear arrangements in place for ongoing maintenance over the lifetime of the development.

11.0 Waste Management

Current Management of Municipal Waste

- 11.1 The information below is taken from the Draft Cumbria Minerals and Waste Local Plan (Aug 2016):

Draft Cumbria Minerals and Waste Local Plan, Submission Version, Aug 2016

The Cumbria District Councils collect two types of waste at the kerbside: firstly, the mixed household waste; and secondly, the source separated wastes for onward recycling. These wastes are managed under a Joint Municipal Waste Management Scheme, and a long term municipal waste management contract, between the County Council and Shanks Group PLC.

Shanks operate two Mechanical and Biological Treatment (MBT) plants, each with a capacity of 75,000 tonnes per annum (tpa), at Hespian Wood near Carlisle and at Sowerby Woods in Barrow-in-Furness; they commenced operation in 2012 and 2013 respectively. Household Waste Recycling Centres (HWRCs) are also managed within the contract. The management of wastes, sorted or otherwise treated at these facilities, is therefore now a commercial decision for the contract partner.

The MBT plants process the mixed household waste that is collected from the kerbside, plus the small amount of suitable trade waste collected by the District

Waste Collection Authorities. The metal content is recovered for recycling. A Refuse Derived Fuel (RDF) is produced by the MBT plants as the final output. Some other residues can be processed further to recover additional value, and a further fraction is landfilled. A total of 116,093.81 tonnes of household waste was processed in the two MBT plants in 2014. The RDF that is produced, is exported out of the county under current contract arrangements.

The table below shows the management mix for all household waste in 2014, including the respective tonnages from the MBT plants and the HWRCs:

Management of Cumbria Household Waste 2013

(Source: Waste Disposal Authority)

Landfill	Material Recovery	Transfer	Treatment	Use of Waste
14%	2%	37%	46%	0%

Recycling and composting source separated waste collected at the roadside remains the responsibility of the six Cumbrian District Waste Collection Authorities, who continue to develop waste minimisation initiatives and improvements in separation of wastes by households. In Barrow, this is the responsibility of Barrow Borough Council. In calendar year 2013, 49% of all LACW and 47% of household wastes were recycled or composted, well on the way to meeting the European Waste Framework Directive target of 50% by 2020, but also to the JMWMS target of 55%.

Need for additional Waste Management Infrastructure

11.2 The 2014 Waste Needs Assessment, commissioned by the County Council, provides a summary of total capacity required 2013-2030 for the principal types of waste management functions, a summary of additional built waste facilities that may be required and estimates of landfill void capacity throughout the plan period. It provides predictions under the “Best” case and “Pragmatic” case scenarios at 2015, 2020, 2025 and 2030. The capacity gaps estimated for the principal waste management functions are also detailed for both the Best and Pragmatic cases. The key conclusions from these tables in the 2014 Waste Needs Assessment are as follows:

- There is sufficient non-inert (i.e. biodegradable) landfill void capacity for the plan period under both scenarios if all current consents were granted time extensions at the end of their current expiry dates.
- The low inert (i.e. non-biodegradable) landfill capacity remaining by 2030 under the “Pragmatic case” would be even lower if no time extensions were granted to existing sites.
- A need for a single additional mixed recycling facility for commercial and industrial waste is identified, but the model shows this as an existing need

required immediately. The capacity gap, however, disappears when commercial and industrial waste and local authority collected waste are considered together, so no need would arise during the plan period if the existing facilities are utilised flexibly for both waste streams.

- A need for additional composting facilities for commercial and industrial waste and local authority collected waste would arise in 2020 if a time extension were not to be granted for an existing facility. The existing consent would, however, automatically be extended if the adjacent landfill were to be granted a time extension.
- There is a current requirement for thermal waste treatment capacity in the County, which is likely to reach a maximum of almost 120,000 tonnes per annum in 2020 and diminish thereafter.

11.3 The Cumbria Minerals and Waste Local Plan Submission Version identifies sites in Cumbria to meet waste management needs to 2030. The Plan proposes waste treatment and management facilities at or near Workington, Carlisle and Egremont, with no sites identified at Barrow. However, the Plan states that proposals on sites that have not been allocated are likely, particularly where opportunities arise that were not anticipated. The County Council considers that the Sowerby Woods and Park Road Estates in Barrow have potential to support further waste provision and can be considered as a Broad Area where any of a number of individual sites would be suitable for waste management if the proposals conform to the other policies of the Minerals and Waste Local Plan.

12.0 Flood and Erosion Defences

Coastal Defences

12.1 Coastal communities in England face threats to homes, businesses, infrastructure and natural habitats through flooding and erosion. Around 22km of the coastline of Barrow is defended against either erosion or flooding, with Barrow Borough Council responsible for maintaining about 7km with the remainder divided between various other bodies and private companies. The remaining 41km of undefended coastline consists of shingle beaches, clay cliffs, sand dunes and salt marsh.

North West Shoreline Management Plan 2

12.2 The primary function of coastal defences is to reduce the risk of flooding and erosion to people, homes, businesses and infrastructure, as well as low-lying coastal habitats. The North West England and North Wales Shoreline Management Plan 2 (SMP) (2010) provides a large-scale assessment of the risks associated with erosion and flooding at the coast. It also contains policies to help manage these risks to people and to the developed, historic and natural environment in a sustainable manner. The SMP is an important strategy for managing risks due to flooding and

coastal erosion. The table 14 summarises the plan in the SMP for the coastal defences in the Borough:

Table 14: Barrow's Coastal Defences

(Source: North West England and North Wales Shoreline Management Plan 2 (2010))

Location	SMP Plan
Piel Island	Limited defences are present on Piel Island. The Plan for this location is to allow natural processes to continue, although localised defences may be permitted to protect Piel Castle which is a Scheduled Ancient Monument.
Walney Island	The long term plan is to manage flood and erosion risk to residential areas and landfill sites and maintain the overall integrity of the island.
Duddon Estuary	At the Duddon estuary, the plan is to continue to allow the dune systems to evolve naturally, providing important natural defence features. In terms of the low-lying land at the estuary, the long term plan is to set back defences where opportunities exist, in order to mitigate potential impacts of expected sea level rise, while continuing to protect necessary infrastructure and residential properties in villages and towns.

12.3 More detail from the SMP is provided below:

North West England and North Wales Shoreline Management Plan 2 (2010)

Leven Estuary to Piel Island

The general plan here in the SMP is to allow natural functioning of the shoreline without intervention, although local protection could be justified where the road or property is at risk. Between Newbiggin and Rampside, maintaining the present defence line will be dependent upon the economic case for maintaining the coast road on its present alignment. In the event it is deemed uneconomical to maintain the road in this location, then the SMP states that a policy of no active intervention or realignment of defences in a set back position should be adopted. Limited defences are present on Piel Island and the plan for this location is to allow natural processes to continue, although localised defences may be permitted to protect the scheduled monument subject to consent.

Walney Island

Walney is characterised by large environmentally designated sand and shingle spits

to the north and south which extend into the Duddon estuary and Morecambe Bay respectively. Significant areas of Walney are low lying and at coastal flood risk, including the village of Biggar, while other parts of the island, including the settlements at Vickerstown and North Walney are on higher land.

There are also a number of historical landfill sites on the eroding west coast of the island which constitute a risk of pollution if allowed to erode. East of the Walney Channel, the town and Port of Barrow benefits from the protection provided by Walney. The long term plan for Walney is to manage flood and erosion risk to residential areas and landfill sites and maintain the overall integrity of the island, even though it is predicted that the integrity of Walney as a whole can be maintained naturally over the next century.

Managed realignment was assessed as an alternative policy for SMP2 in a number of locations along the Walney frontage. As a result of these assessments, SMP2 recommends managed realignment in two locations. Local realignment together with a review of beach management is recommended at West Shore Park where limited intervention needs to continue to allow time to develop coastal change adaptation that would realign the beach access track and properties at risk.

[Note: In November 2014 new rock defence work was completed at West Shore Park, to reduce the risk of erosion for up to 20 years, whilst a managed realignment property roll-back / relocation scheme is developed for the longer term. The Walney Island Flood and Coastal Erosion Strategy Review (September 2014) states that the 20 year timeframe allows time for the West Shore Park owners and the Council to produce a strategy for moving or replacing the chalets and pumping station].

Duddon Estuary

Most of the Duddon Estuary comprises extensive areas of environmentally designated saltmarsh and intertidal sandflats with only a narrow channel of water remaining at low tide. Two naturally evolving dune systems are present at the mouth of the estuary: Haverigg Dunes on the northern bank and Sandscale Dunes on the southern bank. The plan in the SMP is to continue to allow these dune systems to evolve naturally, providing important natural defence features. Askam, the railway, and also areas along the coast within neighbouring South Lakeland, are also partly located within the coastal flood risk zone. Consequently, a number of substantial realignment opportunities have been considered throughout the estuary, seaward of the railway line and these could be exploited to mitigate potential impacts of expected sea level rise in the long term. The long term plan in the SMP therefore is to set back defences where opportunities exist, while continuing to protect necessary infrastructure and residential / commercial property in main villages and towns at the Duddon Estuary.

Cumbria Coastal Strategy

- 12.4 Cumbria County Council, on behalf of the Cumbria Coastal Protection Authorities (CPAs) and the Cumbria LLFA Strategic Partnership, has secured funding from the North-West Regional Flood and Coastal Committee to enable the production of a comprehensive coastal strategy to cover the whole of the Cumbrian coast (whilst aligning with the DEFRA approved strategy for Walney Island, Barrow).
- 12.5 The objective of the Cumbria Coastal Strategy is to have a single strategy covering the entire Cumbrian coast which will take a holistic approach to assess the risk of coastal flooding and erosion and allow for the comprehensive assessment of the existing conditions of land and defences along the coast. This will enable the Cumbria Authorities to have a robust and objective evidence base to help define the issues for the development of suitable long term practical and sustainable approaches to manage the coastline.
- 12.6 The Cumbria Coastal Strategy will:
1. Evaluate the risk of flooding and erosion along the Cumbrian coastline to form a robust and objective evidence base.
 2. Define issues associated with flood risk along the Cumbrian coast and identify properties and infrastructure at risk of coastal flooding and erosion.
 3. Identify and thoroughly appraise interventions and recommend long term sustainable solutions which will provide an integrated response to the key issues.
 4. Engage with infrastructure providers and potential developers (align with proposed developments outlined in the Local Enterprise Partnership (LEP) Cumbria Infrastructure Plan) to identify where opportunities exist to promote joint projects.
 5. Be a strategic document to be used to access opportunities for external funding.
 6. Identify potential environmental mitigation that could be implemented to comply with current legislation and Defra Policy and highlight opportunities for environmental enhancements pertaining to coastal flooding and erosion.
- 12.7 Cumbria County Council have appointed a dedicated project manager who will be supported by a Project Review Group (made up of representatives of all the relevant Coastal Protection Authorities – including Barrow Borough Council; Environment Agency; Historic England; United Utilities; Network Rail; Marine Management Organisation) who will offer technical support and be their organisations' representatives. The Project Review Group will meet regularly throughout the project's commission to review and make decisions in respect of the direction of the production of the strategy. Reports from the group will be sent to the LLFA Working Group and LLFA Strategic Partnership. The Strategy is expected to be delivered in 2019.

River Defences

- 12.8 There are several Main Rivers in the Borough and the highest risk of flooding is where these rivers pass through the built-up areas. The Barrow Strategic Flood Risk Assessment (2015) states that flooding has occurred from Poaka Beck in Dalton in the area behind Ulverston Road and Market Street adjacent to the cricket ground. Also in Dalton, Hagg Gill has flooded in the area around Goose Green and Underwood Terrace. In Barrow, Mill Beck has flooded adjacent to Longway, and there has also been flooding in the area of Dalton Road and Dale Street in Askam, from Blea Beck. The South West Lakes Catchment Flood Management Plan states that the main source of flood risk in Barrow is from sewers. However, there are fluvial flood risk issues in Dalton, and this is summarised in the Plan as set out below:

South West Lakes Catchment Flood Management Plan, Environment Agency, Dec 2009

There is a fluvial flood risk to over 200 properties in Dalton from the 1% annual probability flood. In the future, by 2100, the EA estimate no increase in the number of properties at risk (1% APE), however, it is expected the frequency of flooding will increase. The cause of flooding is from Poaka Beck overtopping its banks and culvert blockages through the town. This is made worse as Hagg Gill joins Poaka Beck in Dalton. Flooding is less frequent and the consequences of fluvial flooding are much lower in the south of the sub-area on the east side of Barrow.

There are some local defences in Dalton that offer limited protection in the main flood risk areas. The current maintenance programme involves clearing debris, vegetation clearance and regular inspections of culverts. In addition, a cricket pitch and playing fields are used as natural storage areas.

The EA's vision is to take further action to ensure that Dalton is a safe environment for people. There should be a balanced use of raised defences, in combination with flood storage, to sustain the landscape value of the area.

Cumbria Flood Action Plan

- 12.9 The Cumbria Flood Action Plan (2016) states that recent floods in Cumbria resulted in 6,300 homes and businesses flooded in Kendal, Carlisle, Appleby, Keswick and Cockermouth and also affected dozens of villages. Significant infrastructure was either damaged or destroyed. In the immediate aftermath of Storm Desmond and the December 2015 floods, the Secretary of State announced the formation of the Cumbria Floods Partnership, and government agreed to invest more money in flood risk management across Cumbria. The storms had little impact on Barrow Borough. The Plan states that over £11.6 million of government funding has been allocated to projects over the next five years in Ulverston, Dalton, Barrow, Whitehaven and Egremont to better protect over 1,600 homes.

Flood and Erosion Defence Projects

- 12.10 In May 2011, the Secretary of State for the Environment introduced a Flood and Coastal Erosion Resilience Partnership Funding policy. This describes a new approach to funding projects in England that will reduce flood and coastal erosion risks. The new policy allows flood and coastal erosion risk management (FCERM) projects to apply for FCERM Grant-in-Aid (FCERMGiA), and encourages funding from other sources to be secured. The proportion of central funding that a project receives will depend on the benefits it will bring.
- 12.11 The Flood and Coastal Erosion Risk Management (FCERM) Investment Programme will involve £2.3 billion capital investment to reduce the risk of flooding and coastal erosion in England between 2015 and 2021. Over this period, £650k is planned to be spent in Barrow at Mill Beck. This is classed as a 'Project in Development' expected to start construction in future years, subject to approval of a full business case and securing other funding contributions. The full list of schemes is set out in Table 15 and further details are included in the Infrastructure Schedule (see Appendix 3).
- 12.12 The schemes set out are required for flood protection in general and are not required specifically to protect the sites proposed in the Local Plan. Therefore, although a funding gap is identified, it is not considered essential that the Infrastructure Delivery Plan identifies how the deficit can be met as such infrastructure works are not essential for the delivery of the Local Plan sites. Nevertheless, some flood risk schemes may be suitable to be included as part of a CIL, if the Council decides to adopt a CIL.

Delivery

- 12.13 The Environment Agency has identified several flood defence projects in the Borough. There are funding gaps on three schemes, with an unconfirmed total funding gap of £3.54m. Delivery of these schemes will therefore be dependent upon the receipt of external contributions towards costs from other sources.
- 12.14 Connection to United Utilities' infrastructure is the role of the developer. The implementation of SuDS is also the role of the developer and may need to be negotiated as part of a Section 106 agreement on a site by site basis. Policy C3 of the Local Plan Submission Draft sets out the water management requirements for new development.
- 12.15 The Council will maintain its membership and influence at all levels of the Cumbria LLFA Strategic Partnership to ensure flood defence investment continues in the Borough via the Environment Agency 6-year Investment Programme. This is particularly important at Making Space for Water Group and Cumbria LLFA Working Group level to ensure progress is maintained to reduce flood risk at localised 'hotspots'. Some flood risk schemes may be suitable to be included as part of a CIL, if the Council decides to adopt a CIL.

Table 15: Proposed Flood Defence Projects in the Borough
(Environment Agency, Nov 2014 (updated 2015))

Description	Funding	Cost	Available	Gap	Timeframe
Improved defences at Blea Beck, Askam	FCRM GIA	£120,000	£120,000 (unconfirmed)	£0 (unconfirmed)	Uncertain
Improved defences at Hagg Gill, Dalton	FCRM GIA	This scheme is to be combined with the Poaka Beck scheme with an estimated cost of £2.5m	£300,000 (unconfirmed)	£0 (unconfirmed)	Works would likely take place over 2016/17
Improved defences at Mill Beck, Barrow	FCRM GIA	£50,000	£50,000 (unconfirmed)	£0 (unconfirmed)	Works would likely take place over 2022/23
Improved defences at Mill Beck, Barrow (2)	FCRM GIA	£650,000	£150,000 (unconfirmed)	£500,000 (unconfirmed)	Works would likely take place over 2022/23
Poaka Beck, Dalton	FCRM GIA	£1.5m	£300,000 (unconfirmed)	£1.2m (unconfirmed)	Works would likely take place over 2016/17
Roa Island, Barrow	There is insufficient flood risk or erosion risk justification for a scheme to be fully funded through DEFRA grant. There is some DEFRA grant available for the Project but delivery is dependent on receipt of external contributions towards costs from other sources.	£3.74m	£1.9m (unconfirmed)	£1.84m (unconfirmed)	Works would likely take place over 2015/16

Community Infrastructure

13.0 Schools

Note

The assessment of the effects of development undertaken by the County Council (set out below) takes into account the proposed housing sites and yields set out in the Local Plan Publication Draft, where 105 dwellings per annum was proposed over the plan period.

After this, the Local Plan Pre-Submission Draft was produced which proposed 133 dwellings per annum and there were some changes to some of the proposed sites and yields. The results of the assessment of the revised sites and yields as set out in the Local Plan Pre-Submission Draft are provided at the end of this section (after paragraph 13.22).

It should be noted that the Local Plan Submission Draft now proposes 119 dwellings per annum, although no further changes have been made to the sites and yields.

- 13.1 Education services in Barrow are managed by Cumbria County Council, which has a statutory responsibility for the provision of sufficient school places in the County. Pressure for additional school places can be created by an increase in birth rate, new housing developments, greater inward migration and parental choice. A new housing development can have an adverse impact on the educational infrastructure of its local community if local schools are close to capacity and unable to meet this demand.
- 13.2 Good quality and accessible education is an essential element in the creation of sustainable communities. This principle is reflected in the National Planning Policy Framework (NPPF), paragraph 72, 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”.*
- 13.3 How the education requirements of housing proposals can be met must therefore be considered during the development and implementation of the Local Plan. Cumbria County Council has a Planning Obligation Policy (currently under review) which sets out a methodology and approach to assessing the effects of new development upon County Council infrastructure.

Education Responsibilities

- 13.4 Cumbria County Council, as required by Section 14 of the Education Act 1996, must ensure it has secured the provision of sufficient primary and secondary school places for its area. The provision of these places can be in Education Authority maintained schools or, with their support, academies.
- 13.5 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.
- 13.6 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.

Assessment of the Effects of Development

- 13.7 The County Council have assessed the effects of development on local schools. Within the Barrow Borough Council area there are 32 primary, 4 secondary and 1 all-through schools. The Borough is divided into catchment areas which are used in the event that a school is oversubscribed in order to prioritise applications for school places. They are also used as part of Cumbria County Council's Home to School Transport Policy.
- 13.8 Each year the County Council provides to the Department for Education (DfE) an assessment of surplus capacity in each school it maintains. The latest, agreed 'net capacity' figure (based on standard formulae provided by DfE) would be the capacity figure used by the County Council to decide whether the pupil yield from housing development can be accommodated.
- 13.9 New housing development can place additional pressure on school places, either through inward migration from outside the County, or by redistributing the existing population into areas where the schools are full to capacity. This section considers, at a strategic level, some of the effects of housing growth in Barrow Borough and seeks to highlight the various mitigation measures that may be needed to ensure new development takes place in a sustainable manner.
- 13.10 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.

- 13.11 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 detailed 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.
- 13.12 Using the identified housing sites, an assessment has been made on the basis of allocation of land for over 1,918 new homes over the period of the Plan. The majority of these sites do not yet benefit from planning permission. As set out in Fig 2, the net estimated yield for this level of development using the population led model is 386 primary pupils and 276 secondary aged pupils.

Fig 2: Calculation of pupil yield using a population led model

1,918 Dwellings
 Pupil yield (1,918 x 0.345) = 662
 Of which the number of primary children would be (662 / 12 total year groups x 7 primary year groups) = 386
 And the number of secondary children would be (662 / 12 total year groups x 5 secondary year groups) = 276

- 13.13 Opportunity sites could potentially add a further 498 houses (based on 30 dwellings per ha) to the housing total detailed above over the longer term, if the sites were entirely developed for housing. Using the population led model this number of additional houses would yield a further 99 primary and 72 secondary pupils across the areas where the sites are located.
- 13.14 Extant sites, those with planning approval that are either currently under construction or not yet started, cover a potential additional 666 houses (2016). Using the population led model these houses would yield an additional 132 primary and 95 secondary pupils in various locations across the area.
- 13.15 When the yields of development are compared with the capacity of local schools, it is possible to highlight those locations where additional school places may be needed to ensure the sustainability of developments.
- 13.16 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. Trends in parental preference for school places can alter over time and pupil projections will change to reflect this, thereby affecting the projected availability of places in any particular area. Equally, schools may decide to reduce or increase their intakes

depending on their individual circumstances, further affecting the availability of places. 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.

- 13.17 It should also be noted that the assessment below is underpinned by the baseline primary projections (i.e. before the effects of housing growth are factored in). These are based on the September 2015 pupil census and projected pupil numbers for 2016-2019. All baseline secondary projections are based on the September 2015 pupil census and projected pupil numbers for 2016-2026. Projections are updated annually. It should also be noted that during the plan period there may be changes in school capacities without the control of Cumbria County Council (e.g. at academies) which may alter the availability of school places.

Barrow

- 13.18 Sites were identified for approximately 1,200 houses in Barrow. Using the population-led model this would yield approximately 240 primary and 170 secondary pupils. Opportunity sites identified in the area could potential add a further 500 houses to this total, yielding around a further 100 primary and 70 secondary pupils. Extant sites in the area provide for up to another 600 houses yielding around 120 primary and 90 secondary pupils. This number of additional pupils will take up many of the currently available spaces in schools, however, Barrow town has a concentration of schools in a relatively small area and movement of pupils between those schools is a feature of the primary schooling picture, this flexibility means that it is unlikely that strategic capacity issues would emerge, this is not to say some localised issues may arise. Current data shows that there is likely to be sufficient secondary school places available between Furness Academy, St Bernard's RC High School and Chetwynde School.

Walney

- 13.19 Sites were identified for around 230 houses in the area. Using the population led model, this would yield 45 primary and 30 secondary pupils. There are no Opportunity sites in the area. There are extant sites on the island for approximately 45 houses which would yield a further 9 primary and 6 secondary children. Given current data it is likely that there will be sufficient places to accommodate the primary pupils from the additional housing. Walney School has sufficient places to accommodate the additional pupils.

Dalton

- 13.20 Sites were identified for approximately 340²⁰ houses in the area. Using the population led model, this would yield around 70 primary and 50 secondary children. There are currently no opportunities or extant sites in the area. Between the four

²⁰ Note that the September 2016 draft of the IDP referred to 240 houses in the area. The County Council have confirmed that this figure was an error and that the assessment was based on 340 houses in Dalton.

schools in the town there are likely to be sufficient spaces available to accommodate the potential increase in primary pupil numbers.

- 13.21 Dalton lies in the secondary catchment area of Dowdales School. It is likely that there will be pressure on places in the future at Dowdales School given the cumulative effect of housing development in the area.

Askam

- 13.22 Sites were identified for approximately 120 houses in the area. Using the population led model, this would yield around 25 primary and 20 secondary children. There are extant sites in the area for about a further 110 houses, yielding approximately 20 primary and 15 secondary pupils. Given current data, it is likely that there will be sufficient primary school places in the area to accommodate this increase in housing. Askam lies within the secondary catchment area of Dowdales School. It is likely that there will be pressure on places in the future at Dowdales School given the cumulative effect of housing development in the area.

Update from Cumbria County Council – Local Plan Pre-Submission Draft

The proposed housing sites allocations in the Local Plan Pre-Submission Draft have anticipated yields of 1,928 new homes over the plan period. The net estimated pupil yield for this level of development is 388 primary-age pupils and 277 secondary-age pupils. This represents a small increase in the pupil yield when compared to the Local Plan Publication Draft. The potential effects of windfall, opportunity and extant sites in each area have not been included in the assessment as it is not possible to allocate them to an individual school catchment area. Should sites come forward in the future, this would reduce the number of available school places in the relevant area.

It should be noted that the Local Plan Submission Draft now proposes 119 dwellings per annum, although no further changes have been made to the sites and yields.

Delivery of School Places

- 13.23 During the detailed assessment of the effects of development, close working between Barrow Borough Council, Cumbria County Council, schools and the development industry will be important.
- 13.24 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. Where new housing developments, singularly or cumulatively, give rise to the need for the delivery of new schools or the extension, refurbishment and/or remodelling of existing schools, then 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 £4,025,180 (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).

- 13.25 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.
- 13.26 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.

Development at Schools and Academies

Furness Academy

- 13.27 Furness Academy was formed in Barrow in 2009, and is sponsored by the University of Cumbria and Furness College. The decision was made to establish an Academy to replace Alfred Barrow School, Parkview Community College of Technology and Thorncliffe School after a public consultation by Cumbria County Council following concerns over the falling number of pupils, educational standards and performance and out of date school facilities in Barrow. The Academy is its own admissions authority and has an agreed published admission number of 240 students per year.²¹ There are currently approximately 1,200 pupils on roll at the Academy.²²
- 13.28 In September 2013 a new £22.5m site campus was built on the site which provides an indoor sports hall, multi-use games area and an all weather 3G sports pitch. The new campus is managed by Cumbria County Council and was built in partnership with Kier Construction Ltd with a £22.5 million grant, which was given to Cumbria County Council from central government as part of the County Council's reorganisation of secondary education in Barrow.²³

Secondary Schools

- 13.29 Walney School has recently benefitted from extensive modernisation, including a new extension which includes new facilities for music and art. The school has 700 students.²⁴

²¹ Source: Admissions Policy, (Furness Academy), 2013

²² Source: Furness Academy Ofsted Report, May 2013

²³ Source: Press Release, (Kier Construction), 2013

²⁴ Source: <http://www.walneyschool.co.uk/about-the-school>, 2013

13.30 Secondary education is provided at three other schools in the Borough. Chetwynde School is a state funded free school for children from the ages of 3 through to 18, with 450 pupils.²⁵ St Bernard's Catholic High School has approximately 950 pupils on roll.²⁶ Dowdales School is a community comprehensive school in Dalton that has approximately 1,000 pupils on roll.²⁷

Primary Schools

13.31 Three primary schools in Barrow have recently been rebuilt or refurbished under a £12.8m scheme by Cumbria County Council, funded by the Primary Capital Programme. This forms part of a £150m scheme to improve primary schools in Cumbria over 15 years. Schools picked for the first round of money needed to fit criteria including:

- Standards need to be raised;
- There are relatively high levels of deprivation; and
- The existing buildings are poor and not conducive to 21st Century learning and teaching methods.

13.32 Cumbria County Council's Cabinet recommended that the first pot of money should be spent in Barrow. Subsequently, Vickerstown School was recommended to be rebuilt and Barrow Island and St George's schools were recommended to be remodelled. The rebuilding of Vickerstown School cost £6.5m, whilst the remodelling of Barrow Island and St George's schools cost £3.5m and £3m respectively.

13.33 In a separate scheme, St James' CE Junior School was demolished and rebuilt to create a new school on the same site. Funding was obtained by the Diocese of Carlisle from the Priority School Building Programme. The school was one of eight schools in the North West who shared £47m for building works.

14.0 Higher and Further Education

Furness College

14.1 Furness College offers degrees, A-levels and vocational courses for over 5,000 students aged 16 and over. A recent £40m investment has modernised college facilities, including a new multi-storey building allowing full and part-time courses to be expanded. The project was funded by £32m from the Skills Funding Agency, £3.5m from the North West Development Agency via the University of Cumbria and £5.3m invested by Furness College. A key principle behind the project was to ensure the expansion of higher education at Furness College. The expansion is expected to particularly benefit students studying business and construction, Early Years

²⁵ Source: <http://www.chetwynde.co.uk/>, 2013

²⁶ Source: St Bernard's Catholic High School Ofsted Report, Dec 2013

²⁷ Source: Dowdales School Ofsted Report, Nov 2013

education, health and social care, sport and teacher training. This will enable many local students to study in the Furness area rather than travelling long distances.²⁸

- 14.2 A new manufacturing technology centre has been built at the college. This was one of the projects included in the Cumbria Local Economic Partnership's 'Strategic Economic Plan', which was used to bid for Local Growth Funding for various economic development projects in Cumbria. The training facility will service the demand for skills training, supporting the advanced manufacturing centre linked to the BAE Systems and GSK growth plans. The majority of the funding was provided by Furness College, with an additional £1.2m from the Local Growth Fund over two years.²⁹

Barrow Sixth Form College

- 14.3 Barrow Sixth Form College is the only sixth form college in Cumbria.³⁰ In 2014 the college provided information to the Council regarding the capacity of the college to accommodate an increase in students. This showed that the current roll of the college is around 570 students (November 2014) and has previously been as high as 900. This means that the space in the building is sufficient to accommodate a significant number of additional students. However, as the college has adapted to the demographic decline in numbers, spaces have subsequently been designed differently. Therefore, it is unlikely that the college could expand to 900 again without investment in the estate. However, a more modest rise to 750 or more would not be problematic in this regard.
- 14.4 The campus has room for further development and as the 5A*-C rates rise in local schools, the college anticipates that there will be more students wishing to come to the sixth form college to study A levels. A potential issue with further development at the college would be increased volumes of transport on Rating Lane, an already busy thoroughfare, particularly around school starting and end times in the vicinity of Chetwynde School, St Bernard's School and the college.

Merger of Barrow Sixth Form College and Furness College

- 14.5 Since the information above was provided by Barrow Sixth Form College, both the Sixth Form College and Furness College have merged. This took place in August 2016, creating a single, larger and more financially resilient college. The Merger Proposal Consultation Document states that this reflects a positive and deliberate strategy to maintain and extend a broad curriculum in a climate when government funding is not sufficient for the Sixth Form College in its current form to be financially viable. The document states that the board and senior teams have recognised the strengths and opportunities created by a single, larger and more financially resilient college with one vision, a broad curriculum offer to meet both national needs through

²⁸ Source: www.furness.ac.uk

²⁹ Source: Cumbria County Council

³⁰ Source: www.barrow6fc.ac.uk

progression to Higher Education, including university, and the skills needs of local young people and businesses.

15.0 GP Provision

- 15.1 The vast majority of GP provision in Britain has been through the NHS. Up until the 31st March 2013, NHS Cumbria was the Primary Care Trust (PCT) responsible for commissioning health services for residents of Cumbria. Since 1st April 2013, Cumbria County Council has been responsible for public health and the NHS Cumbria Clinical Commissioning Group has been responsible for primary health care (GP surgeries, health centres, clinics and dental surgeries).
- 15.2 A meeting between the Council and the Lead Commissioning GP for Furness has revealed that there are serious concerns over the capacity of GP surgeries in Barrow. In consideration of the economic investment that is taking place in the Furness area in connection with BAE, the offshore windfarms and supply chain firms, the NHS (including NHS England) is aware of the potential for population growth. Such population growth would create a demand for additional GP services. However, the system usually only provides extra funding for services when the population increases. Therefore, it is only after pressure is put onto services that NHS England funding increases retrospectively. This would create a significant strain on GP services that are already at capacity.
- 15.3 The new Primary Care Centre at the site of the former Alfred Barrow School is due to be completed in 2018³¹. The services that it will provide will meet current needs in terms of volume and is expected to allow all the services to work in a modern and integrated environment to achieve better outcomes for the current volume of patients. However, it has no built in capacity for extra patients that might be required due to population growth. Whilst there is room on the site for future expansion, such expansion would take place after pressure is put on services.
- 15.4 None of the GP surgeries in Barrow have spare capacity and there are additional issues with recruitment and several GPs being close to retirement. The development of the Alfred Barrow site will likely help to improve GP recruitment, as it will provide a better standard of accommodation and facilities. The new Primary Care Centre at Alfred Barrow could potentially become the only health centre in the town in the future, or at the very least be one of only a few GP Premises. The site is large enough to accommodate such growth. There is little logic for maintaining several independent sites that have developed for historical reasons, and in many other larger towns and cities there are now just one or two major surgeries. Dalton, Walney and Askam will continue to need separate surgeries.

³¹ See paragraphs 15.9 to 15.11 for further information

- 15.5 There are no national standards in terms of number of GPs per number of people. Although there are averages, actual need varies greatly across the country and it is this that drives demand. All GPs currently have boundaries which patients must live within in order to register with the surgery and none of the boundaries are co-terminus with each other or have any natural communities within the Borough or surrounding region. However, this is set to change so that patients will be able to register with a GP anywhere. This could put further pressure on Barrow surgeries, with the possibility that patients outside of Barrow could register at Barrow surgeries. It should be noted that this is not currently being pursued by the government as fast as previously anticipated.
- 15.6 There is a good supply of pharmacies in the Borough who provide a range of extended services compared to elsewhere.

Delivery

- 15.7 The Lead Commissioning GP for Furness has stated that there are three ways in which new health services can be developed:
1. The GP surgery could undertake development themselves if such development takes place on the premises of the surgery. NHS England would pay the rent, whilst the GPs will own the building. All GPs in Barrow, except Atkinson Health Centre, developed in this way.
 2. A property arm of the NHS and / or a private company could build the premises, whilst NHS England would pay the rent. This is how Alfred Barrow is being developed.
 3. A private developer could build the premises and the business. This could be funded by NHS England.
- 15.8 The development of health services is dependent on funding being available, however it is anticipated that new funding will continue to be in short supply for the foreseeable future.

New NHS Health Centre – former Alfred Barrow School Site

- 15.9 A new £12 million NHS health centre is being developed at the former Alfred Barrow School site. The redevelopment of the grade II listed former school building will preserve and enhance a key heritage asset on a gateway into Barrow town centre. The health centre will support wider economic regeneration in Barrow and provide the local community with easy access to a wide range of health and wellbeing facilities delivered from modern, high quality premises. The health centre will become the main 'hub' in Barrow for patients and professionals in delivering care to achieve better health outcomes.
- 15.10 A number of organisations will be working together from one central base:

- Three GP practices (These will move from Abbey Road Surgery, Atkinson Health Centre and Risedale Surgery).
- A response base for North West Ambulance Service.
- NHS Cumbria Clinical Commissioning Group.
- Community Services (e.g. Community and specialist nursing, mental health, physiotherapy, podiatry, diabetes, retinal screening).
- Integrated Children's Services.
- A pharmacy.
- Occupational Health services for BAE Systems.
- An information point for Third Sector organisations.

15.11 The centre is being developed by eLIFT Cumbria, a public private partnership formed under the Department of Health's Express LIFT initiative. The new build will see the original listed school building incorporated into the development, with the remaining buildings already demolished to make way for the health centre and free car parking for patients on the site. The significant remaining space will be kept for any future potential expansion, ensuring the site is future-proofed for any additional services. The centre is expected to be ready to receive patients before the end of 2018.

16.0 Hospital Provision

- 16.1 Furness General Hospital is situated on the outskirts of Barrow and has around 268 beds. It is the second largest hospital in the South Cumbria / North Lancashire region and is operated by University Hospitals of Morecambe Bay NHS Foundation Trust. It provides a wide range of services including A&E, surgery, maternity, outpatients, critical care, oncology and a special care baby unit.
- 16.2 The "Better Care Together Plan" is a plan that is designed to address health care issues across the whole health economy, including the hospital community and general practices. The Lead Commissioning GP for Furness considered that the size of Furness General Hospital will be more than adequate for the town and future growth and it is likely that the hospital will reduce in size in the future in line with the plan for more care in the community. No comments have been received from the University Hospitals of Morecambe Bay NHS Foundation Trust. Currently a new maternity and special care baby unit is being developed on site with its own purpose built theatres.

17.0 Social Care Provision

- 17.1 Cumbria County Council, via its Health and Care Directorate, is responsible for adult social care within the Borough. The information in this section has been provided by the County Council. The Care Act 2014 sets out and governs the way in which the County Council meets its adult care and support obligations. 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.

17.2 Under the Care Act the County 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 County Council's help to meet them, then the County Council will discuss the person's care and support plan with them. In all cases, the County Council must give people advice and information about what support is available in the community to help them.

17.3 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.

Extra Care Housing

17.4 The County Council have provided information of extra care housing requirements in Barrow and this is summarised in this section. 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. They comprise self-contained homes with design features, communal facilities and on-site support services to enable people to self-care and continue to live independently. 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.

17.5 Under the Care Act, the County Council has a duty to ensure people who live in their areas receive services that prevent their care needs from becoming more serious, or delay the impact of their needs. The provision of extra care housing and the associated care service aims to address both suitability of living accommodation and care need issues.

17.6 The County Council is committed to supporting older and vulnerable people to live independent and healthy lives, by investing in extra care housing to enable people to live independently for as long as possible.

Extra Care Housing Shortfall

17.7 The County Council's Commissioning Strategy for Care and Support 2016-2020 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 met through extra care housing.

- 17.8 The County Council's Extra Care Strategy 2016-2025 makes projection of need for additional Extra Care housing in Barrow Borough based upon an independent analysis of need provided by "Social Care Strategies" (independent consultant) and in line with the methodology used by "Planning 4Care" (2009). This projects 340 Extra Care units would be needed in Barrow Borough by 2025 to meet need.
- 17.9 Table 16 shows the projected overall requirement versus current supply for extra care housing in Key Service Centres within Barrow Borough.

Table 16: Barrow – Extra Care Housing Shortfall
(Source: Cumbria County Council)

Town	Projected Demand 2025	ECH Supply 2016	ECH shortfall
Barrow	340	41	299

- 17.10 When current supply is removed from this total, this results in the need for 299 additional units by 2025. The expectation is that Extra Care Schemes are best developed in locations that enable the elderly to access services but also to help retain access to other social networks.
- 17.11 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.
- 17.12 Proposals for new extra care home schemes will likely continue to come forward throughout the Plan period of the emerging Local Plan 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.

Delivery

- 17.13 The cost of building an Extra Care housing scheme with around 40 units costs around £5.5million to build although the cost 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.

- 17.14 There are several ways in which the local authorities in Cumbria can support the development of extra care housing. Finding a suitable site and location is a key stage in any new housing development and many of the extra care housing schemes built in Cumbria in recent years have got off the ground due to local authorities at the district level selling or leasing their land to Housing Associations at a discounted rate. Plots of land for possible development will continue to be identified and considered for the development of extra care housing. Countywide, the County Council has allocated £4.24 million to its Capital Budget to support the development of new schemes.
- 17.15 Bidding for public subsidy to support the delivery of extra care housing schemes is often unsuccessful and has led to very slow growth in the number of extra care housing properties available. New housing development will create increased requirement which in the context described will heighten the levels of shortfall in provision.
- 17.16 While the County Council is working with partners to bring forward suitable sites, the current funding climate does present challenges for the delivery of Extra Care Housing. Therefore, while the County Council is not formally seeking the allocation of a site for Extra Care Housing it is considered that as part of larger suitable sites an element of any housing provided could be in the form of Extra Care Housing. This can also apply to the affordable housing element of any scheme. Moving forward, the County Council and Barrow Borough Council will wish work closely to explore such delivery opportunities with developers.
- 17.17 The Council should continue to seek developer contributions towards extra care housing where it is agreed, in consultation with Cumbria County Council, that it is appropriate to do so.

Housing Design

- 17.18 Housing is a vital component of community care and the key to independent living. Partners across Cumbria prepare regular revisions to the Cumbria Joint Strategic Needs Assessment. To help ensure the sustainability of development, the County Council will be expecting designs to be more easily adopted to meet through life needs of occupiers and in some cases, developer contributions may be used to ensure this.
- 17.19 Should the requirements of an occupier change, homes that have the right design features are easier to adapt to enable people with disabilities to continue to live there. Adaptations to properties that are not designed with a view to accessibility often fall short of achieving their full impact. Poorly adapted properties can contribute to increased levels of dependence, which impact on the wellbeing of the individual, their carers and families and ultimately the provision of social care support.

17.20 Policy H12 of the Barrow Local Plan Submission Draft states that the Council will encourage the provision of specialist housing for older people across all tenures in sustainable locations.

Recent Developments

17.21 A new 60-bed residential care home has been delivered on the site of the former George Basterfield care home at the junction of Greengate Street and Risedale Road. The £7.2m scheme provides modern care solutions for older adults, especially those with dementia. During the life of the build project this scheme will bring many other additional community benefits including the creation of apprenticeships, short-term work placements and training opportunities for local students.³²

17.22 The new home replaces four older Cumbria Care homes in the area. West Point House closed in March 2011 and George Basterfield House closed in December 2011. Rock Lea and Bevan House have also recently closed. The new care home is part of a wider modernisation programme of care for older people in the Barrow area which as well as providing the home also offers a wide range of other choices for older adults, including receiving more help to live independently in their own homes. The scheme was funded by Cumbria County Council.

18.0 Emergency Services

Fire and Rescue

18.1 Cumbria Fire & Rescue Service provides fire and rescue services for the County. There are 38 fire stations, five regular and 33 retained, serving the County. Within the Borough there are two fire stations as follows:

- **Barrow Fire Station** – Located on Phoenix Road, this station is the headquarters for Barrow & South Lakeland Area of Cumbria Fire & Rescue Service. As well as providing first attendance to incidents in the station area, it also provides response to back up other stations throughout the area.
- **Walney Fire Station** – Located on Mill Lane, Walney Island.

18.2 New development may generate a need for fire fighting infrastructure. The County Council's Planning Obligations Policy states that it will be important that development incorporates or provides the necessary fire fighting facilities and infrastructure, in order to ensure infrastructure is in place to meet the needs of new development.

³² Source: Cumbria County Council

Planning Obligations Policy, Cumbria County Council, September 2013

When consulted on a planning application, the Cumbria Fire and Rescue Service (CFRS) will consider the quantity of water available from hydrants and main sizes. Where it is considered that proposed facilities are not sufficient to meet the potential requirements of a development, the CFRS may request the provision of mains of a size over and above the minimum requirements of building regulations. The required flow rate will be based upon the guidance provided in 'The National Guidance Document on the Provision of Water for Firefighting, 7th Edition 2007' produced by the Local Government Association and Water UK.

The fire service may also request that further features relating to fire safety be included as part of the design of a scheme where considered appropriate. Such additions may include:

- Access to surface water collection areas (if available and appropriate);
- Requirements for static tanks; and
- Improved fire precautions and/or enhanced fire warning/suppression systems.

The Fire Service generally seeks features through the design process or condition. On some occasions, necessary mitigation measures may need to be secured through the use of a Section 106 secured planning obligation. This may occur in cases where there is a requirement for off-site infrastructure, due to the individual or cumulative effects of development or where it is considered that a planning condition would not suffice. Infrastructure that is sought would reflect the scale issues, and potential risks created by a development.

- 18.3 Cumbria Fire and Rescue Service have confirmed that they would have no comment to make in relation to the infrastructure requirements and the amount of housing proposed in the Local Plan at this stage.

Police

- 18.4 Cumbria Police Authority is the governing body of Cumbria Constabulary, and is responsible for making sure that Cumbria's police service is effective and provides value for money. Barrow falls within the South Cumbria policing area, where the Cumbria Constabulary is responsible for the delivery of operational policing services in the local authority areas of Barrow and South Lakeland. The South Area headquarters is Kendal Police Station.
- 18.5 A new £8.1m police station opened in late 2015 on Andrews Way, Barrow. The station is the hub of police operations in Barrow and Ulverston and replaced the ageing station on Market Street in Barrow, as well as some services from Ulverston.

The building provides a base for around 270 staff and offers a much expanded facility with an increase from 10 cells to 18.

- 18.6 The Council met with the Chief Superintendent of Territorial Policing from Cumbria Constabulary in December 2014 regarding the impact of the development proposed in the Local Plan on police services. It was found that the impact of the development proposed in the Local Plan on the Constabulary would depend on the design of development. The Constabulary would prefer new development to design out crime, therefore reducing the vulnerability of people, property and businesses to crime by removing opportunities that may be unintentionally provided by the surrounding environment. It also aims to reduce fear of crime and, in doing so, helps to improve people's quality of life. These benefits will also reduce pressure on the Constabulary. Secured by Design (SBD) is the official UK Police flagship initiative supporting the principles of 'designing out crime'. SBD is a holistic approach bringing together 'designing out crime' with physical security. Policy DS5 of the Local Plan Submission Draft sets out the design requirements for new development.
- 18.7 The Constabulary encourages the Council to work with partners, including the County Council and Highways England, to improve the A590. They note that a traffic incident can cause the route to be blocked and that this can sometimes be for a lengthy period. This again increases the pressure on emergency services.

Ambulance

- 18.8 The North West Ambulance Service NHS Trust (NWAS) provides emergency and patient transport services to the North West population. The Trust was formed in 2006 as part of a national realignment of County-based ambulance services.
- 18.9 The current NWAS estate is a mix of buildings that has evolved over the last 150 years. The vast majority of the operational ambulance station stock is over 25 years old. The stations are a mix of owned and leasehold premises in locations that were determined many years ago to meet the service needs of the second half of the 20th century. Barrow Ambulance Station is situated on Hindpool Road.
- 18.10 The proposed NHS Health Centre on the former Alfred Barrow School site will provide a new base for the North West Ambulance Service.

Coastguard

- 18.11 The Council Maritime and Coastguard Agency has not raised any issues over the level of development proposed in the Local Plan and infrastructure requirements.

19.0 Neighbourhood and Community Facilities

Libraries

19.1 There are six libraries in the Borough:

- Askam Library
- Barrow Library
- Barrow Island Library
- Dalton Library
- Roose Library
- Walney Library

19.2 In addition, there is a small public library link within Ormsgill Community Centre.

19.3 In response to the long term decline in the use of the County's libraries, the County Council are modernising the Library Service throughout Cumbria to make the Service more inclusive. Projects completed / in progress to date in the Borough are:

- The major refurbishment of Barrow Library which was completed in early 2014 at the cost of £160,000.
- The relocation of Barrow Island Library into the refurbished Barrow Island Primary School. This library complements the Community Development Centre, which has also been relocated within the school. This has created an opportunity to increase the opening hours and create a broader customer base.
- In Askam the County Council are working with the Parish Council to increase community use of the library, and the Parish Council is funding a post which will allow opening on Saturdays.

19.4 The 2014-17 Barrow Area Plan, agreed by the County Council's Barrow Local Committee in March 2014, shows that the County Council is committed to the continued delivery of the modernisation of the library service in the Borough. Such modernisation will continue to be primarily funded through the County Council.

19.5 Cumbria County Council closed Dalton library in October 2016 to reduce costs. The facility has been relocated and scaled-down into a mainly self-service facility within Dalton Community Centre on the same street. The County Council have stated that locating the library in the community centre will bring the library closer to other community activities taking place in the centre.

Community Centres and Village Halls

- 19.6 Whilst there are numerous community centres and village halls in the Borough, few of these are large, modern and of high quality. Barrow Island lacks a community centre, although there is a community venue in the form of The Porthole.

Table 17: Community Centres and Village Halls in the Borough

Community Centre / Village Hall	Location
Abbotsmead Community Centre, Abbots Vale	Risedale, Barrow
Askam and Ireleth Community Centre, Duke Street	Askam
Buccleuch Hall, The Green	Lindal
Drill Hall, Nelson Street	Dalton North
Griffin Community Hall, Cotswold Crescent	Ormsgill, Barrow
Hawcoat Community Centre, Skelwith Drive	Hawcoat, Barrow
Hindpool Community Centre, Nelson Street	Hindpool, Barrow
Holbeck Community Centre, Holbeck Park Avenue	Roosecote, Barrow
Newton Village Hall	Newton
North Scale Community Centre, Red Ley Lane, Barrow	North Scale, Walney
Ocean Wave Community Centre, Ocean Road, Barrow	Walney South
Ormsgill Community Centre, Millstone Avenue, Barrow	Ormsgill Barrow
The Porthole, Michaelson Road	Barrow Island
Rampside Village Hall	Rampside
Roosegate Community Centre, Longway, Barrow	Risedale, Barrow
Walney Community Centre, Central Drive, Barrow	Walney North

Cemeteries

- 19.7 There are three cemeteries in the Borough: at Barrow, Ireleth and Dalton. All three have sufficient space for new burials. Barrow Cemetery has recently extended by 2.2 hectares to give enough capacity for burials for approximately 120 years and has been subject to a £0.5m revamp to modernise the crematorium and to expand the capacity of the chapel by 55 seats.

Allotments

- 19.8 Barrow Borough Council has approximately 800 allotment plots located on 17 allotment sites around the Borough, including Walney Island, Barrow and Dalton. In some areas there is considerable waiting time for people wishing to obtain an allotment and there are issues with many existing allotments being poorly maintained.

20.0 Leisure Facilities

Leisure Centres

- 20.1 There are two leisure centres in the Borough:
- Park Leisure Centre, Barrow – Includes sports and gym facilities and two swimming pools.
 - Dalton Leisure Centre – Includes sports and gym facilities, a swimming pool and a solarium.
- 20.2 Park Leisure Centre is operated by Barrow Borough Council, whilst Dalton Leisure Centre is operated by Dalton Leisure Services Ltd.

Sports Facilities

Barrow Sport and Physical Activity Strategy 2011-2016

- 20.3 The above strategy, produced by Barrow Sports Council, set the direction for sport and physical activity in the Borough, but has now expired. Section 8 of the Sport and Recreational Facilities Assessment 2017 includes an update on the objectives in the strategy and a timescale for completing the objectives that Barrow Borough Council are carrying forward.

Sport and Recreational Facilities Assessment 2017

- 20.4 This document provides an assessment of the current and future need for sport and recreational facilities within the Borough.
- 20.5 The Sports Facilities and Playing Pitch Survey, carried out as part of the assessment, has identified that 3G/4G pitches are in high demand within the borough, due to weather conditions, funding and lack of provision. New facilities at Furness College and Furness Academy have been beneficial to the Borough, in particular the all weather playing facilities. There are, however, no artificial pitches outside of the town of Barrow.

- 20.6 Many clubs, facilities and schools have mentioned in the survey that lack of funds means they are unable to expand or improve sports provision. People are keen for more grants to be introduced to improve this. Some sports are also under represented within the Borough, such as hockey and it is felt that facilities for female sports teams could be improved.
- 20.7 The introduction of more all weather pitches could provide capacity for more sports to be played, for example hockey, and less cancellations of matches prearranged by clubs due to poor weather conditions. Increased availability of sports grants would also improve equipment for clubs and schools to encourage more young people to participate in sports. Ensuring that the local population can access sport and recreation facilities would provide significant health, social and economic benefits to the Borough, which would help to address the poor health statistics of the Borough. The age profile of the Borough shows there is a higher proportion of people over 60, which indicates that future demand for provision will be required for facilities to suit the older population. This could mean increasing sports facilities more suited to the older age category, such as bowls.

Delivery

- 20.8 It is hoped that development of some of the allocated housing sites in the Local Plan would, through developer contributions, provide funds to improve the remaining area and enhance sports facilities. For example, Furness Rugby Union Football Club stated that they have drainage problems on their pitches and have had to cancel games in the past. A section of the pitches in question are included in the housing site allocations of the emerging Local Plan (REC54), therefore development could raise funds to improve the remaining pitches and facilities and fewer games would need to be cancelled. The same could be said for the land east of Rakesmoor Lane (SHL082). When speaking to Holker Old Boys Football Club, who neighbour this site, it came to light that all games from November to March had to be rearranged due to drainage problems with the pitches. It is possible that development of the land adjacent could help to reduce the drainage issues. Development of new areas such as Park Vale at Walney (SHL010) may also be beneficial, as developer contributions could help to improve the area for the wider neighbourhood.
- 20.9 Development of site REC19B (Thornccliffe South) will result in the loss of tennis courts, however these are currently disused. The Council is keen to retain as many sporting facilities as possible and there are tennis courts available to the public at Hawcoat Park and West Mount Tennis Club. The tennis courts at Thornccliffe School were used by pupils of the school and new tennis courts have been built at Furness College and Furness Academy, which will be of a higher quality due to their age.
- 20.10 Further information on individual sites can be found in the Proposed Housing Site Allocations Document, including the impact of each site on open space and sport provision. Sport England are also a statutory consultee for all developments that affect playing fields and would lodge a statutory objection if there is unjustified loss of playing fields without the appropriate mitigation. They are therefore a key partner in decision making. It is hoped that the design of new developments throughout the

Borough will play a vital role in keeping the local population active and will become an intrinsic part of resident's daily life.

21.0 Public Realm

21.1 There has been extensive public realm works in and around Barrow town centre in recent years, and this has improved the image of the town centre and enhanced its historic character. There continues to be a lack of open and green space within the town centre, and there are areas still where the quality of the public realm is poor. Potential future public realm schemes will be set out in the forthcoming Central Barrow Masterplan. Away from the town centre, £1.15m investment is talking place on Barrow Island with the Maritime Streets project, to improve the public realm around the Barrow Island flats.

Barrow BID

21.2 Businesses in Barrow voted in favour of the proposal to establish a Business Improvement District (BID) for the town centre. The BID is a five-year programme that provides the means for local businesses to act collectively, to pool their resources and develop projects and services that will benefit the town centre and to ensure that it remains competitive and vibrant.

21.3 One of the priorities for the delivery of the BID is “Brighter Streets and Buildings.” One of the proposed initiatives to achieve this is to establish a new ‘Pride in Barrow’ initiative between businesses and the community, sponsoring projects and activities that contribute to “brightening up” the town centre.

Barrow Parking and Movement Study

21.4 The Barrow Parking and Movement Study proposes a number of schemes that would contribute towards the improvement of the public realm in Barrow town centre. For example, one of the schemes is to improve the public realm on Duke Street. Whilst the study acknowledges that the public realm of the street is of a good standard, the wideness of the carriageway offers the opportunity to widen the space for pedestrians. The area has many listed buildings and is within a Conservation Area and it is anticipated that more space for pedestrians would provide a high quality gateway to the town centre and the opportunity for more active frontages along Duke Street.

21.5 Another proposed scheme is to sign Abbey Road as “tourist” or “historic” route from the A590. This route is lined with trees, green spaces and a number of historic buildings, therefore helping to create a better first impression of Barrow to visitors rather than via the industrialised A590 route.

21.6 These and other schemes are set out in the Infrastructure Schedule in Appendix 3 and further details can be found in the Barrow Parking and Movement Study (July 2016).

Delivery

21.7 The Barrow BID Proposal states that most of the funding required to deliver the BID is drawn from the BID Levy and is collected by Barrow Borough Council as the local billing authority. The BID Levy applies to all properties within the defined BID area with the exception of properties with a rateable value of less than £4,000. In Barrow, the levy can raise £161,572 gross per annum or £807,859 over the five-year term of the Barrow BID.

21.8 The Barrow BID will not be limited to income derived from the BID Levy and can expect to raise further funds from:

- Voluntary contributions.
- Grants.
- Sponsorship and advertising revenue.

21.9 The Barrow BID can attract these other funds towards specific items or activities identified within the programme of projects as part of the delivery of the Business Plan. In particular, businesses within the town and surrounding borough will be encouraged to support the implementation of the Barrow BID and its considerable potential to deliver wider benefits both to the town and to the Furness peninsula. Voluntary contributions can help to ensure that the benefits of activities such as marketing extend to areas beyond the defined BID area.

21.10 The Proposal states that the BID creates a significant fund that has the potential to draw in further investment, including grant assistance from government as well as other sources such as the National Lottery and other grant distributing bodies. Some of the projects can also expect to attract sponsorship, again for specific items or activities that bring corporate benefits e.g. the sponsorship of the town's marketing campaign or online applications.

21.11 In terms of the delivery of the schemes proposed in the Barrow Parking and Movement Study, there are a number of potential funding mechanisms. See section 1 of this document and the Parking and Movement Study for details.

Green Infrastructure

22.0 Green Infrastructure Evidence Base

- 22.1 Green Infrastructure has been defined in North West England as the region's life support system – the network of natural environmental components and green and blue spaces that lie within and between our cities, towns and villages and provide multiple social, economic and environmental benefits.³³ These spaces provide varied opportunities to reduce the impacts of localised flooding through making space for water and the consideration of introducing SuDS features. Development in these areas is often promoted by a number of organisations working together which could open pathways to partnership funding using FCERM GiA. The Council has produced a Green Infrastructure Strategy which sets out the background information and analysis of Barrow's green infrastructure, leading to recommendations and actions to support the strategy. This will be adopted as an SPD in 2018, following consultation.
- 22.2 The sections below outline general background information and key infrastructure standards for green infrastructure. More detailed information on green infrastructure requirements can be found in the Green Infrastructure Strategy.

23.0 Parks and Play Areas

Quantity and Accessibility of Play Areas

- 23.1 'Planning and Design for Outdoor Sport and Play' (2008), published by Fields in Trust, recommends Benchmark Standards as a tool for assisting in the development of local standards. The 'Planning and Design for Outdoor Sport and Play' standards for play areas, published by Fields in Trust is set out in the tables below.

Table 18: Quantity – All Playing Space
(Planning and Design for Outdoor Sport and Play, Field in Trust, 2008)

Children's Playing Space	Benchmark Standard (hectares per 1,000 population)
Equipped Playing Space	0.25
Informal Playing Space	0.55
Children's Playing Space	0.80

³³ Natural Economy Northwest, Green Infrastructure Prospectus (2010)

Table 19: Accessibility Standards for Children's Playing Space
(Planning and Design for Outdoor Sport and Play, Field in Trust, 2008)

Type of Space	Distance Criteria (metres)	
	Walking Distance	Straight Line Distance
Local areas for play and informal recreation (LAP)	100	60
Local equipped areas for play and informal recreation (LEAPs)	400	240
Neighbourhood equipped areas for play (NEAP)	1000	600

- 23.2 The Local Plan Submission Draft contains a policy (HC10) which states that proposals for residential development will be assessed on a site by site basis, and where deemed appropriate through lack of provision or other limiting factor such as access, will be required to provide well designed and located children's play space, within close proximity to the development, that is safe and accessible for users. It adds that developers will be expected to provide a commuted sum for a minimum of five years maintenance, or contributions for off site provision within suitable, safe walking distance. The policy states that where a Development Brief has been produced for a site, the brief will set out the requirement for the playspace. On windfall sites, the requirement will be agreed with the Local Planning Authority.

Quality of Parks and Play Areas

- 23.3 Barrow Public Park lies 0.5km north-east of Barrow town centre, just beyond the railway line which marked the limit of the town's expansion until the end of the 19th century. It is surrounded by residential areas, though schools face the Park across Greengate Street and Park Drive, two of the roads which front the Park's boundaries. Furness Academy is situated on higher ground to the north and has extensive playing fields running down towards Park Drive. The school thus combines with the Park to create a large area of open green space, which is the only significant area of open space close to the town centre and the main residential areas.
- 23.4 The Park covers an area of approximately 20 hectares and is divided into five distinct character areas contained within a strong landscape structure of topography, circulation routes and planting. The first part of the Park was opened in 1902, and most of the laying out works took place between 1908 and 1915, with major subsequent additions between 1919 and 1923. In the early 2000's the Park benefitted from a £5m HLF investment which funded a significant refurbishment programme. The park has Green Flag status and is designated by Historic England as Grade II on the Register of Historic Parks and Gardens.

23.5 The five character areas are:

A – North Western Area: An extensive area covering the highest ground in the Park, which slopes down to the Abbey Road boundary on which the two main park entrances are situated. This Area contains the Cenotaph, on the highest ground, and Piel View House, a former farmhouse until the 1980's used as a residence for the Parks Superintendent, now currently let as offices.

B – West Central Area: The historic core of the Park, on land sloping down from the Cenotaph towards the level, lower lying ground to the east. Much of the land in this Area forms a shallow semi-circular bowl focused on the bandstand.

C – East Central Area: Lying on fairly level ground to the east of the bandstand, this Area contains active recreational facilities including bowling greens, a children's play area and a putting area (formerly tennis courts), as well as the Pavilion.

D – Lake Area: Lying to the east of the East Central Area on slightly lower ground, this Area is mostly occupied by the lake which is divided into two halves. Around the north western end of the lake are the Boathouse, the Old Pals Club and one of the original park shelters.

E – East Corner: Wrapping around the north-eastern and south-eastern sides of the Lake Area and fronting Park Drive and Greengate Street, this Area contains the Model Railway, the Park Leisure Centre and the Soccer Centre Complex.

Playgrounds

- 23.6 There are currently 41 equipped play areas across the Borough. Most play areas are dog proof, accessible to wheelchairs and pushchairs and provide for children up to 11 years. A small number of play areas have facilities for teenagers, e.g. skate/bike ramps.
- 23.7 Barrow Borough Council maintains and cleans these sites with weekly or daily inspections. This is managed by the Streetcare Department. The cleaning and maintenance of grounds is carried out by the playground team coordinated by a playground supervisor.
- 23.8 There are plans to decommission a small number of play areas as part of a rolling programme to improve the play provision in the Borough by concentrating play provision in fewer, but better equipped areas.
- 23.9 In addition to the equipped play areas there are also unequipped facilities e.g. kick-about areas at Stanley Road, Ormsgill Community Centre, Holbeck Park Avenue and Albert Street and Skateboard areas at Askam Community Field, Lawson Street and Vickerstown Park, Multi Use Games Areas (MUGAs) at Ormsgill, Mill Lane and Vickerstown.

24.0 Biodiversity

- 24.1 Although the Borough falls outside the Lake District National Park, it contains a range of important areas for biodiversity, from extensive sand dunes and mudflats to disused iron ore mines and dockland. The majority of the habitats along the Borough's coastline are protected under European legislation, whilst other habitats are of local significance. The designations include four SSSIs, two NNRs and twenty County Wildlife sites. The 'Natural Environment' chapter of the Local Plan Submission Draft contains further details.
- 24.2 Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (2012) was published by the government to guide conservation efforts in England, including setting the ambition to halt overall loss of England's biodiversity by 2020. In the longer term, the government's ambition is to move progressively from a position of net biodiversity loss to net gain.
- 24.3 The strategy included the creation of Local Nature Partnerships to work strategically to help their local area manage the natural environment. There are two local nature partnerships (LNPs) that operate in the Borough: The Cumbria LNP; and the Morecambe Bay LNP. They aim to make sure that its value, and the value of the services it provides to the economy and the people who live there, is taken into account in local decisions, including planning and development.
- 24.4 The Morecambe Bay LNP is already coordinating a series of projects that will bring environmental, social and economic benefits to the area. This includes the Dunes of Barrow project, means the Morecambe Bay Partnership, working closely in partnership with Cumbria Wildlife Trust and Natural England, can improve, restore and conserve wildlife habitats in the coastal sand dunes around Barrow, focusing on the rare habitats on Walney Island and Foulney Island.
- 24.5 The Local Plan Submission Draft includes a policy that requires proposals for new development to be submitted with landscaping proposals which show how existing trees, hedgerows, ponds and other wildlife features will be integrated into the development. The Green Infrastructure chapter of the Plan also promotes green infrastructure and biodiversity linkages and connectivity. In particular, it suggests that the Council will, through the preparation and adoption of a Green Infrastructure Strategy, Masterplans, Development Briefs and Design Codes identify and promote the creation, enhancement and protection of a range of green infrastructure assets that contribute to a diverse network of natural and man-made green and blue spaces, links, habitats and landscapes and the mechanisms and funding to secure their delivery. The Green Infrastructure Strategy has now been published and can be viewed on the Council's website.
- 24.6 Development sites should not be viewed as sterile spaces with limited opportunity for biodiversity. Introducing SuDS features into development should strive to deliver green space that receives a regular supply of clean water, thus providing potential for biodiversity. It is noted that many of the biodiversity drivers are entirely compatible

with flood resilience design. Providing a green corridor for example would also deal with managing exceedance flows through the site. Barrow Borough Council as the local planning authority will give further consideration on the biodiversity aspects of SuDS within the development through the application of the green infrastructure policies in the Local Plan Submission Draft.

Biodiversity SPD

- 24.7 The Council is preparing a Supplementary Planning Document (SPD) to help guide sustainable development and to ensure that biodiversity is taken into consideration early in the planning process. The SPD will support the Council's Development Plan and sit alongside the Green Infrastructure Strategy SPD. Consultation will take place in early 2018 with adoption anticipated in late Spring 2018.

25.0 Trees and Woodlands

- 25.1 The Woodland Trust's Woodland Access Standard aspires that no person should live more than 500 metres from at least one area of accessible woodland at no less than two hectares in size. However, "Space for People – Targeting Action for Woodland Access" (Woodland Trust 2010) shows that only 16.4% of the population of the Borough have such access.
- 25.2 Policy GI8 of the Local Plan Submission Draft encourages new woodland providing that a coherent landscape structure and setting can be demonstrated.

26.0 Funding and Management of Green Infrastructure

- 26.1 Funding is essential to the delivery of green infrastructure and can be secured through a variety of local and national mechanisms and sources.
- 26.2 The advantage of funding through developer contributions is that is that the green infrastructure can be designed into and around the development, complementing SuDS requirements from the outset, helping to mitigate the additional pressures that development places on the natural environment and existing infrastructure. Where projects can demonstrate that they contribute to reducing local flood risk, use of FCERM GIA funding and entry on to the Environment Agency 6-year Programme should be explored.
- 26.3 Proposed green infrastructure has a number of clear benefits, such as for biodiversity, heritage assets or reducing flood risk. In such cases, some funding may be able to be obtained from Natural England, Historic England, Cumbria LLFA or some other organisation that would benefit from green infrastructure. Other revenue

could be generated directly, including income from renewable energy, food production, agricultural grazing, silage or events. Some green infrastructure assets may provide opportunities to incorporate entry fees.

- 26.4 In addition to funding the provision of green infrastructure, there also needs to be a funding plan for on going management and maintenance, and this needs to be in place from the start. Some green infrastructure assets can provide income to support management costs – for example woodlands managed for fuel, renewable energy resources, local flood risk management and sustainable local food production.

27.0 Moving Forward – Plan Delivery

- 27.1 The Infrastructure Delivery Plan is a live document and the Council will continue to work with infrastructure and service providers to determine any additional infrastructure and services that may be required to deliver the Local Plan along with how such infrastructure can be delivered. The paragraphs below summarise the key requirements that are known at the current time to deliver the Local Plan, along with other projects that will support the delivery of the plan.
- 27.2 The Infrastructure Schedule (see Appendix 3) identifies all the significant infrastructure known schemes that are required to deliver the Local Plan. It also identifies other schemes that would contribute towards the delivery of the plan or that would impact upon the Borough over the plan period. The schedule identifies (where known) who will deliver the scheme, how it is proposed to be funded, the cost of the scheme, any funding gap and the timeframe for delivery.

Appendices

Appendix 1 – Correspondence with Infrastructure and Service Providers

Reg 18 Consultation

Responses from infrastructure and service providers during the Reg 18 consultation were received from:

- Associated British Ports
- Centrica
- Cumbria County Council
- Environment Agency
- Mobile Operators Association
- Natural England
- Sport England
- Theatres Trust
- United Utilities
- Woodland Trust

Issues and Options Consultation

Responses from infrastructure and service providers during the Local Plan Issues and Options Draft consultation were received from:

- Associated British Ports
- Centrica
- Cumbria Constabulary
- Cumbria County Council:
 - Adult Social Care
 - Local Highway Authority
 - Local Education Authority
 - Lead Local Flood Authority
 - Property
 - Rights of Way
- Environment Agency
- Furness College
- Highways Agency
- Mobile Operators Association
- Natural England
- Sport England
- Theatres Trust
- United Utilities
- Woodland Trust

In November 2014, infrastructure and service providers were separately consulted on the capacity of infrastructure in the Borough and whether their infrastructure could cope with the level of growth proposed in the Local Plan. Written responses to this consultation were received from:

- Barrow Sixth Form College
- Electricity North West
- Mobile Operators Association
- National Grid Gas Distribution

Preferred Options Consultation

Responses from infrastructure and service providers during the Local Plan Preferred Options Draft consultation were received from:

- BNP Paribas (in behalf of Associated British Ports)
- Centrica
- Cumbria County Council:
 - Local Highway Authority
 - Lead Local Flood Authority
- Cumbria Wildlife Trust
- Environment Agency
- Furness College
- Highways England
- Mobile Operators Association
- Natural England
- Network Rail
- NHS Property Services
- Sport England
- Theatres Trust
- United Utilities

Further engagement took place with infrastructure providers after this consultation. Written responses were received from:

- Cumbria County Council:
 - Highways assessments
 - Further flood risk comments
 - Adult social care comments
 - Education comments
- National Grid Gas Distribution

The County Council Transport Modelling – Stage 1 Assessment and the subsequent Barrow Transport Improvement Assessment – Stage 2 Assessment was also undertaken during this time.

Publication Consultation

Responses from infrastructure and service providers during the Local Plan Publication Draft consultation were received from:

- BNP Paribas (on behalf of Associated British Ports)
- Cumbria County Council
- DONG Energy
- Environment Agency
- Highways England
- National Grid
- Natural England
- Sport England
- United Utilities

Further engagement took place with infrastructure providers after this consultation. Written responses were received from:

- Action with Communities in Cumbria
- National Grid Gas Distribution
- Cumbria Clinical Commissioning Group

Pre-Submission Consultation

Responses from infrastructure and service providers during the Local Plan Pre-Submission Draft consultation were received from:

- Abbeyfield Furness Extra Care Society
- BNP Paribas (on behalf of Associated British Ports)
- Centrica
- Cumbria County Council
- DONG Energy
- Environment Agency
- Furness Rugby Union Football Club
- Highways England
- Natural England

Meetings with Infrastructure and Service Providers

In total, meetings have been held with representatives from the following bodies:

- Cumbria Constabulary (Dec 2014)
- Environment Agency (Dec 2014)
- Highways Agency (Dec 2014)
- CCC Lead Local Flood Authority (April 2014, Dec 2014)
- CCC Local Highway Authority (June 2014)

- NHS Cumbria Clinical Commissioning Group (April 2015)
- United Utilities (Nov 2014, Jan 2016, Dec 2016)
- CCC Infrastructure Lead / Local Highway Authority (Oct 2015)
- United Utilities (Jan 2016)
- Associated British Ports (April 2016)
- Mouchel, in behalf of Highways England (Jan 2017)

Several meetings were also held during the development of the Stage 1 and 2 Highways Assessments. There has also been regular dialogue with Cumbria County Council throughout the process.

Appendix 2 – Infrastructure Delivery Agencies

The following tables identify the agencies that are responsible for infrastructure and service delivery.

Physical Infrastructure

Infrastructure Type	Delivery Agencies
Transport	
Highways	Cumbria County Council Highways England
Bus services	Cumbria County Council Private sector operators
Rail services	Cumbria County Council Network Rail Private sector operators Rail franchises
Cycle lanes and footpaths	Barrow Borough Council Cumbria County Council Morecambe Bay Partnership Natural England
Utilities	
Electricity	National Grid Electricity North West Private utility providers
Gas	National Grid National Grid Gas Distribution Private utility companies
Telecommunications	Mobile Operators Association Private telecommunication providers
Renewable and low carbon energy	Private developers and consultants
Water supply	United Utilities

Wastewater	United Utilities
Drainage	Cumbria County Council United Utilities
Minerals and Waste	
Waste	Barrow Borough Council Cumbria County Council Private sector companies
Flood Risk and Coastal Defence	
Flood risk management	Barrow Borough Council Cumbria County Council Environment Agency

Community Infrastructure

Infrastructure Type	Delivery Agencies
Education	
Schools	Cumbria County Council
Higher and Further Education	Barrow Sixth Form College Cumbria County Council Furness College University of Central Lancashire
Health and Social Care	
GP Provision	NHS Cumbria Clinical Commissioning Group
Hospital Provision	University Hospitals of Morecambe Bay NHS Foundation Trust
Social Care	Cumbria County Council
Emergency Services	
Police	Cumbria Constabulary Cumbria Police Authority
Fire and Rescue	Cumbria County Council

	Cumbria Fire and Rescue Service
Ambulance	North West Ambulance Service NHS Trust
Coastguard	Maritime and Coastguard Agency
Neighbourhood and Community Facilities	
Libraries	Cumbria County Council
Community Centres	Barrow Borough Council Private community centres Town Councils
Leisure Centres	Barrow Borough Council Dalton Leisure Services
Sports facilities	Barrow Borough Council Private sports clubs Sport England
Cemeteries	Barrow Borough Council
Allotments	Barrow Borough Council
Public realm	Barrow Borough Council Cumbria County Council

Green Infrastructure

Infrastructure Type	Delivery Agencies
Parks and play areas	Barrow Borough Council
Biodiversity	Barrow Borough Council Cumbria County Council Cumbria Wildlife Trust Natural England
Trees and woodlands	Barrow Borough Council Cumbria County Council Woodland Trust

Appendix 3 – Barrow Infrastructure Schedule

Committed capital programmes, or those that are secure or ongoing developments
Uncertain capital available, or uncertain timescales
Projects that have had funding removed, but are still required, or are longer term aspirations

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes	
1	Highways	Abbey Road / Hollow Lane – junction widening all arms	Cumbria County Council	Barrow Borough Council	Developer contributions	£460,987	None	£460,987	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
2	Highways	Abbey Road / Rawlinson Street – new staggered pedestrian crossing on Rawlinson Street arm	Cumbria County Council	Barrow Borough Council	Developer contributions	£140,124	None	£140,124	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
3	Highways	A590 Park Road / Bank Lane	New roundabout layout	Cumbria County Council	Barrow Borough Council	Developer contributions	£1,210,293	None	£1,210,293	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).
			New pedestrian crossing only	Cumbria County Council	Barrow Borough Council	Developer contributions	£91,743	None	£91,743	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).
4	Highways	A590 Park Road / Ormsgill – new roundabout layout	Cumbria County Council	Barrow Borough Council	Developer contributions	£1,119,002	None	£1,119,002	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
5	Highways	New gyratory layout comprising A590 Walney Road, A590 Ironworks Road and Phoenix Road, including left in left out priority junctions	Cumbria County Council	Barrow Borough Council	Developer contributions	£253,078 (resurfacing at junctions only)	None	£253,078	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
			Cumbria County Council	Barrow Borough Council	Developer contributions	£445,346 (full resurfacing)	None	£445,346	Uncertain		
6	Highways	A5087 Roose Road / Risedale Road – junction widening and staggered pedestrian crossings	Cumbria County Council	Barrow Borough Council	Developer contributions	£334,309	None	£334,309	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
7	Highways	Holbeck Road / Leece Lane – change of priority	Cumbria County Council	Barrow Borough Council	Developer contributions	£30,687	None	£30,687	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	
8	Highways	Park Drive / Bridgewater Avenue and Risedale Road / Greengate Street – signal crossroad layout	Cumbria County Council	Barrow Borough Council	Developer contributions	£901,621	None	£901,621	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).	

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
9	Highways	A590 North Road / Bridge Road – junction improvement	Cumbria County Council	Barrow Borough Council	Developer contributions	£725k - £1.25m	None	£725k - £1.25m	Unknown	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).
10	Highways	Abbey Road / Market Street – change of priority	Cumbria County Council	Barrow Borough Council	Developer contributions	£48,928	None	£48,928	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).
11	Highways	Long Lane / Newton Road – new roundabout layout	Cumbria County Council	Barrow Borough Council	Developer contributions	£1,241,186	None	£1,241,186	Uncertain	Highway improvements to address the cumulative effects of development over the Plan period (see Barrow Transport Improvement Study August 2016).
12	Highways	Grizebeck Bypass	Cumbria County Council		Unknown	£5-10m	None	£5-10m	3-7 years	Listed in the West of M6 Strategic Connectivity Study.
13	Highways	A590 Geotechnical issue at Greenodd	Highways England		Highways England	Unknown	Unknown	Unknown	In progress	Works are in progress
14	Highways	A590 Junction Improvements in Ulverston	Highways England		Unknown	£2.5-5m	None	£2.5-5m	<3 years	Listed in the West of M6 Strategic Connectivity Study.
15	Highways	A590 Junction Improvements at Swarthmoor	Highways England		Unknown	£5-10m	None	£5-10m	<3 years	Listed in the West of M6 Strategic Connectivity Study.
16	Highways	Lindal-in-Furness Resilience	Highways England	Cumbria County Council	Highways England	£1m	£1m	£1m	Works completed	Listed in the West of M6 Strategic Connectivity Study. Highways works completed re moving the carriageway and raising it up, and implementation of drainage works to reduce flood risk.
17	Highways	Offline scheme between Ulverston and Dalton	Highways England		Unknown	£10-50m	None	£10-50m	>7 years	Listed in the West of M6 Strategic Connectivity Study.
18	Highways	Ulverston Bypass connecting in with A590 near Swarthmoor (Southern bypass)	Highways England		Unknown	£50-100m	None	£50-100m	>7 years	Listed in the West of M6 Strategic Connectivity Study.
19	Highways	A590 Dualling – Greenodd to Ulverston	Highways England		Unknown	£10-50m	None	£10-50m	3-7 years	Listed in the West of M6 Strategic Connectivity Study.
20	Highways	1) Dualling – Greenodd to Haverthwaite & 2) 2+1 – Haverthwaite to Newby Bridge & 3) 2+1 – Newby Bridge to Ayside	Highways England		Unknown	£50-100m	None	£50-100m	>7 years	Listed in the West of M6 Strategic Connectivity Study.
21	Highways	A590 Dualling – Town End to Levens	Highways England		Unknown	£5-10m	None	£5-10m	3-7 years	Listed in the West of M6 Strategic Connectivity Study.
22	Highways	Newby Bridge Flooding Alleviation	Highways England		Unknown	Unknown	Unknown	Unknown	<3 years	Listed in the West of M6 Strategic Connectivity Study.
23	Rail	Line speed improvements	Network Rail		Unknown	Unknown	Unknown	Unknown	Long-term aspiration	Line speed improvements between Sellafeld and Barrow / Barrow and Grange-over-Sands.

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
24	Cycling	Lesh Lane / Harrel Lane (on-road route)	Cumbria County Council	Barrow Borough Council	Developer contributions	£21,600 (est)	None	£21,600	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
25	Cycling	Ainslie Street (on road route)	Cumbria County Council	Barrow Borough Council	Developer contributions	£10,800 (est)	None	£10,800	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
26	Cycling	Park Road (East) (off-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£360,000 (est)	None	£360,000	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
27	Cycling	Bank Lane / Rakesmoor Lane (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£37,440 (est)	None	£37,440	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
28	Cycling	Salthouse Road (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£9,360 (est)	None	£9,360	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
29	Cycling	Greystone Lane / Station Road (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£16,560 (est)	None	£16,560	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
30	Cycling	Roose Road (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£21,600 (est)	None	£21,600	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
31	Cycling	Walney Island (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£21,600 (est)	None	£21,600	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
		Walney Island (off-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£140,000 (est)	None	£140,000		
32	Cycling	Dalton Lane / Ormsgill Lane (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£36,000 (est)	None	£36,000	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
33	Cycling	Barrow Road (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£35,280 (est)	None	£35,280	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
34	Cycling	Askam to Thwaite Flat (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£72,000 (est)	None	£72,000	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
35	Cycling	Leece Lane (on-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£7,200 (est)	None	£7,200	Uncertain	To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
		Leece Lane (off-road)	Cumbria County Council	Barrow Borough Council	Developer contributions	£100,000 (est)	None	£100,000		To connect new Local Plan development sites to the cycle network (see Barrow Transport Improvement Study August 2016).
36	Footpaths	England Coastal Path (Cumbria Coastal Way)	Natural England	Cumbria CC	EU, national, regional and local scale funding				Uncertain	To be completed by 2018 in Furness..

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
37	Footpaths	North West Coastal Trail	North West Coastal Trail steering Group	NW local authorities Natural England	EU, national, regional and local scale funding				Uncertain	
38	Barrow Town Centre Parking and Movement	Pedestrian wayfinding signage	Cumbria County Council	Barrow Borough Council	Unknown	£27,122 (est)	Unknown	£27,122	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
39	Barrow Town Centre Parking and Movement	Town centre interpretive boards	Barrow Borough Council		Unknown	£54,243	Unknown	£54,243	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
40	Barrow Town Centre Parking and Movement	Coordinated vehicle direction signage	Cumbria County Council	Barrow Borough Council	Unknown	£40,682	Unknown	£40,682	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
41	Barrow Town Centre Parking and Movement	Improved walking routes to edge of town retail parks	Cumbria County Council	Barrow Borough Council	Unknown	£231,618	Unknown	£231,618	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
42	Barrow Town Centre Parking and Movement	Town centre storage facilities	Cumbria County Council	Barrow Borough Council	Unknown	£8,679	Unknown	£8,679	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
43	Barrow Town Centre Parking and Movement	Improved lighting through Portland Walk	Barrow Borough Council		Unknown	£18,081	Unknown	£18,081	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
44	Barrow Town Centre Parking and Movement	Installation of dropped crossings on Michaelson Road Bridge	Cumbria County Council	Barrow Borough Council	Unknown	£5,424	Unknown	£5,424	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
45	Barrow Town Centre Parking and Movement	Dropped kerbs in Barrow town centre and tactile paving in town centre	Cumbria County Council	Barrow Borough Council	Unknown	£54,243	Unknown	£54,243	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
46	Barrow Town Centre Parking and Movement	Maximisation of on-street parking on key commercial streets	Cumbria County Council	Barrow Borough Council	Unknown	£50,627	Unknown	£50,627	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
47	Barrow Town Centre Parking and Movement	Rationalisation of on-street loading bays	Cumbria County Council	Barrow Borough Council	Unknown	£25,313	Unknown	£25,313	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
48	Barrow Town Centre	Residents and visitor on-street parking strategy	Cumbria County Council	Barrow Borough Council	Unknown	£210,309	Unknown	£210,309	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
	Parking and Movement									
49	Barrow Town Centre Parking and Movement	Oldham Street disabled parking	Barrow Borough Council		Unknown	£155,316	Unknown	£155,316	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
50	Barrow Town Centre Parking and Movement	Refurbishment of car park lighting and CCTV coverage of car parking	Barrow Borough Council		Unknown	£135,608 (Lighting), £266,013 (CCTV)	Unknown	£135,608 (Lighting), £266,013 (CCTV)	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
51	Barrow Town Centre Parking and Movement	Differential car park charging and increased number of charging periods	Barrow Borough Council		Unknown	£9,041	Unknown	£9,041	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
52	Barrow Town Centre Parking and Movement	Bus stop timetable information	Cumbria County Council	Barrow Borough Council	Unknown	£13,561	Unknown	£13,561	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
53	Barrow Town Centre Parking and Movement	Cavendish Street Bus Stops and Route	Cumbria County Council	Barrow Borough Council	Unknown	£412,708	Unknown	£412,708	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
54	Barrow Town Centre Parking and Movement	Duke Street / Cornwallis Street bus stop improvements	Cumbria County Council	Barrow Borough Council	Unknown	£223,510	Unknown	£223,510	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
55	Barrow Town Centre Parking and Movement	Bus stop infrastructure and access kerbs	Cumbria County Council	Barrow Borough Council	Unknown	£162,729	Unknown	£162,729	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
56	Barrow Town Centre Parking and Movement	Hindpool Road Crossing Point	Cumbria County Council	Barrow Borough Council	Unknown	£392,986	Unknown	£392,986	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
57	Barrow Town Centre Parking and Movement	Sign Abbey Road as tourist route from A590	Cumbria County Council	Barrow Borough Council	Unknown	£10,849	Unknown	£10,849	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
58	Barrow Town Centre Parking and Movement	Pedestrian wayfinding at Barrow Railway Station	Cumbria County Council	Barrow Borough Council	Unknown	£12,657	Unknown	£12,657	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016
59	Barrow Town Centre Parking and Movement	Improved tourist information offer	Cumbria County Council	Barrow Borough Council	Unknown	£20,550	Unknown	£20,550	Short term (0-5 years)	Proposed in the Barrow Parking and Movement Study 2016

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
60	Barrow Town Centre Parking and Movement	Improved cycle network	Cumbria County Council	Barrow Borough Council	Unknown	£87,150	Unknown	£87,150	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
61	Barrow Town Centre Parking and Movement	Town centre circulation	Cumbria County Council	Barrow Borough Council	Unknown	£196,965	Unknown	£196,965	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
62	Barrow Town Centre Parking and Movement	Duke Street public realm improvements	Cumbria County Council	Barrow Borough Council	Unknown	£624,062	Unknown	£624,062	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
63	Barrow Town Centre Parking and Movement	Contraflow cycle lanes on one-way streets	Cumbria County Council	Barrow Borough Council	Unknown	£15,097	Unknown	£15,097	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
64	Barrow Town Centre Parking and Movement	Street furniture rationalisation	Cumbria County Council	Barrow Borough Council	Unknown	£30,738	Unknown	£30,738	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
65	Barrow Town Centre Parking and Movement	Refurbish public lavatories, Hall Street Car Park	Barrow Borough Council		Unknown	£97,637	Unknown	£97,637	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
66	Barrow Town Centre Parking and Movement	Portland Walk pedestrian space	Barrow Borough Council / Cumbria County Council		Unknown	£471,243	Unknown	£471,243	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
67	Barrow Town Centre Parking and Movement	Town centre gateway car park	Barrow Borough Council / Cumbria County Council		Unknown	£596,673	Unknown	£596,673	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
68	Barrow Town Centre Parking and Movement	Pay on foot at Portland Walk Multi-Storey Car Park	Barrow Borough Council		Unknown	£83,172	Unknown	£83,172	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
69	Barrow Town Centre Parking and Movement	Decking of Hall Street Car Park	Cumbria County Council / Barrow Borough Council		Unknown	£1,437,439	Unknown	£1,437,439	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
70	Barrow Town Centre Parking and Movement	Additional facilities at Ramsden Square Bus Station	Cumbria County Council	Barrow Borough Council	Unknown	£33,810	Unknown	£33,810	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
71	Barrow Town Centre	Town Hall bus only link between Cornwallis Street	Cumbria County Council	Barrow Borough	Unknown	£356,666	Unknown	£356,666	Medium term (6-	Proposed in the Barrow Parking and Movement Study

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
	Parking and Movement	and Market Street		Council					10 years)	2016
72	Barrow Town Centre Parking and Movement	Promotion of Barrow to coach operators / tour guides and in other towns in Cumbria and further afield	Barrow Borough Council		Unknown	£20,550	Unknown	£20,550	Medium term (6-10 years)	Proposed in the Barrow Parking and Movement Study 2016
73	Barrow Town Centre Parking and Movement	Green space infrastructure	Cumbria County Council	Barrow Borough Council	Unknown	£565,031	Unknown	£565,031	Long term (11-15 years)	Proposed in the Barrow Parking and Movement Study 2016
74	Barrow Town Centre Parking and Movement	Refurbishment and improved security of Portland Walk Multi-Storey Car Park	Barrow Borough Council		Unknown	Unknown	Unknown	Unknown	Long term (11-15 years)	Proposed in the Barrow Parking and Movement Study 2016
75	Barrow Town Centre Parking and Movement	Town centre transport interchange	Cumbria County Council / Barrow Borough Council		Unknown	£5,000,000	Unknown	£5,000,000	Long term (16 years +)	Proposed in the Barrow Parking and Movement Study 2016
76	Port	Marina Link	Unknown	Barrow Borough Council ABP	Unknown	Unknown	Unknown	Unknown	Unknown	Marina link to provide access for small leisure vessels into and out of the dock system. The development of a marina link would be subject to funding sources being identified and a scheme being viable.
77	Electricity	North West Coast Connections	National Grid	Britain's Energy Coast; NuGen; Electricity NW' Local Authorities; SLR; Hetherington Nuclear Consulting	National Grid	Capital cost at least £461m; Lifetime cost at least £500m	£500m	£0	Work to be completed c.2020	Will connect the proposed nuclear power station at Moorside, along with renewable energy projects in the Irish Sea, to the electricity transmission network.
78	Telecoms	Superfast broadband	Cumbria County Council BT		BT £15m Broadband Development UK £17.1m European Regional Development Fund £13.7m Performance Reward Grant £5m	£51m	£51m	£0	Work to be completed by mid-2018 in Cumbria	This forms part of the Connecting Cumbria project that will enable 95% of properties in Cumbria to be connected to Superfast Broadband.
79	Flood defences	Improved defences at Blea Beck, Askam	Environment Agency		FCRM GIA	£120,000	£0	£0	Uncertain	Defences to protect from river flooding. There's currently no funding but the project is still required to increase the Standard of Protection at this location.
80	Flood defences	Improved defences at Hagg Gill, Dalton	Environment Agency		FCRM GIA	£2.5m (combined with the Poaka Beck scheme)	£2.5m	£0 (unconfirmed)	Works likely to take place 2016/17. Project Appraisal is currently	Defences to protect from river flooding. This scheme is to be combined with the Poaka Beck scheme with an estimated cost of £2.5m. Project Appraisal is currently underway.

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
									underway.	
81	Flood defences	Improved defences at Mill Beck, Barrow	Environment Agency		FCRM GIA	£50,000	£50,000 (unconfirmed)	£0 (unconfirmed)	Works would likely take place over 2022/23	Defences to protect from sea flooding
82	Flood defences	Improved defences at Mill Beck, Barrow (2)	Environment Agency		FCRM GIA	£650,000	£150,000 (unconfirmed)	£500,000 (unconfirmed)	Works would likely take place over 2022/23	Defences to protect from river flooding
83	Flood defences	Poaka Beck, Dalton	Environment Agency		FCRM GIA	£2.5m (combined with the Hagg Gill scheme)	£300,000 (unconfirmed)	£1.2m (unconfirmed)	Works would likely take place over 2016/17	Defences to protect from river flooding
84	Erosion protection	Roa Island, Barrow	Environment Agency		FCRM GIA	£3.74m	£1.9m (unconfirmed)	£1.84m (unconfirmed)	Works would likely take place over 2015/16	Defences to protect from coastal erosion. There is insufficient flood risk or erosion risk justification for a scheme to be fully funded through DEFRA grant. There is some DEFRA grant available for the Project but delivery is dependent on receipt of external contributions towards costs from other sources.
85	Health	NHS Health Centre	NHS England	Cumbria CC eLIFT Cumbria	NHS England £12m	£12m	£12m	£0	Expected to receive patients in 2018	
86	Police	Police Station	Cumbria Police Authority	Cumbria Constabulary	Office of the Police and Crime Commissioner	£8.1m	£8.1m	£0	Completed	
87	Sports facilities	Modernisation, pitch and drainage improvements, new playing pitches and new floodlit multi-use games areas	Barrow Borough Sports Council	Barrow Borough Council Cumbria CC Furness Academy					Ongoing	Several playing pitch projects at existing pitches.
88	Sports facilities	Floodlit Multi-Use Games Sites	Barrow Borough Sports Council	Barrow Borough Council Cumbria CC Furness Academy					Ongoing	The Barrow Sport and Physical Activity Strategy 2011-2016 identified a need for three sites in the Borough. It should be noted that a new multi-use games area will be provided as part of the replacement of St James CE Junior School in Barrow, and also as part of the new Furness Academy site.
89	Sports facilities	Squash facility	Barrow Borough Sports Council	Barrow Borough Council Cumbria CC Furness Academy					Ongoing	The Barrow Sport and Physical Activity Strategy 2011-2016 recommends a squash facility to replace Barrow Members Squash Club.
90	Sports facilities	Water Sports Centre	Barrow Borough Sports Council	Barrow Borough Council					Ongoing	The Barrow Sport and Physical Activity Strategy 2011-2016 states that a number of water sports are in need

	Topic	Description	Lead	Partners	Funding	Cost	Available	Gap	Timeframe	Notes
				Cumbria CC						of suitable facilities.

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Working together to support sustainable development within the Borough of Barrow-in-Furness

